

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

**FORM 10-K**

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number: 001-38492

**Kiniksa Pharmaceuticals, Ltd.**

(Exact name of registrant as specified in its charter)

Bermuda  
(State or other jurisdiction of  
incorporation or organization)

98-1327726  
(I.R.S. Employer  
Identification Number)

Kiniksa Pharmaceuticals, Ltd.  
Clarendon House  
2 Church Street  
Hamilton HM11, Bermuda  
+ (44) 808-189-6257

(Address, zip code and telephone number, including area code of principal executive offices)

Kiniksa Pharmaceuticals Corp.  
100 Hayden Avenue  
Lexington, MA, 02421  
(781) 431-9100

(Address, zip code and telephone number, including area code of agent for service)

N/A

(Former name, former address and former fiscal year, if changed since last report)

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Shares	KNSA	The Nasdaq Global Select Market

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No   
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

Accelerated Filer

Non-accelerated Filer

Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the common shares on The Nasdaq Global Select Market on June 30, 2020, was approximately \$712.6 million.

As of January 31, 2021, there were 68,232,304 common shares outstanding in aggregate, comprised of:

31,922,546 Class A common shares, par value \$0.000273235 per share

2,227,614 Class B common shares, par value \$0.000273235 per share

18,024,526 Class A1 common shares, par value \$0.000273235 per share

16,057,618 Class B1 common shares, par value \$0.000273235 per share

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement for its 2021 Annual Meeting of Shareholders, which the registrant intends to file with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after the end of the registrant's fiscal year ended December 31, 2020, are incorporated by reference into Part III of this Annual Report on Form 10-K.

**Kiniksa Pharmaceuticals, Ltd.**  
**FORM 10-K**  
**FOR THE YEAR ENDED DECEMBER 31, 2020**  
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### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, or Annual Report, contains forward-looking statements. All statements other than statements of historical facts contained in this Annual Report including statements regarding our future results of operations and financial position, expected timeline for our cash, cash equivalents and short-term investments, business strategy, product development, prospective products and product candidates, their expected properties, performance, market opportunity and competition, drug product supply, collaborators, license and other strategic arrangements, the expected timeline for achievement of our clinical milestones, the timing of, and potential results from, clinical and other trials, potential marketing authorization from the FDA or regulatory authorities in other jurisdictions, potential coverage and reimbursement for our product candidates, if approved, commercial strategy and pre-commercial activities, research and development costs, timing of regulatory filings and feedback, timing and likelihood of success, plans and objectives of management for future operations and funding requirements and future results of anticipated products are forward-looking statements.

These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “goal,” “design,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential” or “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these identifying words. The forward-looking statements in this Annual Report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Annual Report and are subject to a number of risks, uncertainties and assumptions described under the sections in this Annual Report entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this Annual Report. These forward-looking statements are subject to numerous risks and uncertainties, including, without limitation, the following:

- the impact of the coronavirus disease 2019, or COVID-19, pandemic on our business, including our clinical trials and operations;
- our status as a clinical-stage biopharmaceutical company and our expectation to incur losses in the future;
- our future capital needs and our need to raise additional funds;
- the lengthy and expensive clinical development process with its uncertain outcome and potential for clinical failure or delay, including due to the COVID-19 pandemic;
- the decision by any applicable regulatory authority whether to clear our product candidates for clinical development and, ultimately, whether to approve them for marketing and sale;
- our ability to anticipate and prevent adverse events caused by our product candidates;
- our ability to identify, in-license, acquire, discover or develop additional product candidates;
- our ability to have our product candidates manufactured in accordance with regulatory requirements;
- the market acceptance of our product candidates;
- our ability to timely and successfully develop and commercialize our existing and future product candidates, if approved;
- competitive and potentially competitive products and technologies;

- physician awareness and adoption of our product candidates;
- the size of the market for our product candidates;
- our ability to meet the quality expectations of physicians or patients;
- our ability to improve our product candidates;
- the decision of third-party payors not to cover our product candidates or to require extensive or independently performed clinical trials prior to covering or maintaining coverage of our product candidates;
- our ability to successfully manage our growth;
- our ability to avoid product liability claims and maintain adequate product liability insurance;
- our ability to obtain regulatory exclusivity;
- our ability to obtain, maintain, protect and enforce our intellectual property rights related to our product candidates;
- federal, state and foreign regulatory requirements applicable to our product candidates;
- ownership concentration of our executive officers and certain members of senior management may prevent our shareholders from influencing significant corporate decisions;
- our ability to attract and retain skilled personnel; and
- our ability to execute on our strategy.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. As a result of these factors, we cannot assure you that the forward-looking statements in this Annual Report will prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this Annual Report and the documents that we reference in this Annual Report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

#### **SUMMARY RISK FACTORS**

Our business is subject to numerous risks and uncertainties, including those described in Part I, Item 1A. "Risk Factors" in this Annual Report. You should carefully consider these risks and uncertainties when investing in our Class A common shares. The principal risks and uncertainties affecting our business include the following:

- the COVID-19 pandemic, and related measures taken in response or the easing of such measures, could have an adverse impact on our business and operations as well as those of our manufacturers, contract research organizations and other third parties with whom we conduct business or otherwise engage, including regulatory authorities, and has impacted and could continue to impact the global economy, which may have a material adverse effect on our business, operations and financial position;

- we have never generated any product revenue, have incurred significant operating losses since our inception, and expect to incur significant operating losses for the foreseeable future and may never achieve or maintain profitability;
- we will require significant additional funding to complete the development and commercialization of our product candidates, if approved, and to identify, discover, develop or acquire additional product candidates, and if we are unable to raise capital on acceptable terms when needed, or at all, we could be forced to delay, reduce or cease one or more of our product development plans, research and development programs or other operations or commercialization efforts;
- we depend heavily on the success of one or more of our product candidates, which are in various stages of product developments, and cannot give any assurance that we will be able to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize one or more of our product candidates on a timely basis, if at all;
- clinical development of our product candidates is a lengthy and expensive process with uncertain timelines, costs and outcomes;
- we may encounter substantial delays in our current or planned pre-clinical and clinical trials, including as a result of delays in obtaining regulatory approvals for indications, site activation, enrollment, and conduct of the trials, which could delay or prevent our product development activities;
- we rely on third parties, including independent contract resource organizations, or CROs, to activate our sites, conduct or otherwise support our research activities, preclinical and clinical trials for our product candidates, and these third parties may not perform satisfactorily, which could delay, prevent or impair our product development activities;
- we contract with third parties, including independent contract manufacturing organizations, or CMOs, to manufacture our product candidates for preclinical and clinical development and expect to do so for our commercial supply as well as for supply of drug substance and drug product for each of our product candidates, and these third parties may not perform satisfactorily, which could delay, prevent or impair our product development activities, regulatory approval, and commercialization efforts for our product candidates;
- we have not obtained marketing approvals for any of our product candidates nor, as a company have we commercialized a therapeutic, and have limited experience establishing sales, marketing, distribution and general infrastructure either directly and/or through agreements with third parties and have never sold, marketed or distributed any therapeutic products; as a result we may not be successful in commercializing riloncept in recurrent pericarditis, if approved, or any future approved product candidates, thus potentially impairing the commercial potential of riloncept and our other product candidates to generate any revenue;
- our current or future product candidates may not gain market acceptance by physicians, patients, or third-party payors, in which case our ability to generate product revenues will be impaired;
- successful commercialization of our product candidates will depend in part on the extent to which third-party payors provide funding, establish favorable coverage and pricing policies and set adequate reimbursement levels for our product candidates, and failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue;
- the incidence and prevalence for target patient populations of our product candidates have not been established with precision, and if the market opportunities for our product candidates are smaller than we estimate, or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability may be materially adversely affected;

- all of our product candidates have been licensed or acquired from other parties; if we are unable to adequately protect our product candidates, or to secure and maintain freedom to operate, others could preclude us from commercializing our product candidates or compete against us more directly;
- we face significant competition from other biotechnology and pharmaceutical companies, which may result in others discovering, developing or commercializing drugs before or more successfully than us;
- we may not be successful in executing our growth strategy to identify, discover, develop, license or acquire additional product candidates or technologies, and our strategy may not deliver anticipated results or we may refine or otherwise alter our growth strategy;
- we may seek to acquire businesses or undertake business combinations, collaborations or other strategic transactions which may not be successful or on favorable terms, if at all, and we may not realize the intended benefits of such transactions;
- concentration of ownership of the voting power of our common shares may prevent new investors in from influencing significant corporate decisions and may have an adverse effect on the price of our Class A common shares; and
- we believe we may be classified as a passive foreign investment company for the current taxable year ended December 31, 2020 and will likely be a controlled foreign corporation for the same period, which may result in adverse U.S. federal income tax consequences to U.S. holders of our Class A common shares.

#### INDUSTRY AND OTHER DATA

Unless otherwise indicated, certain industry data and market data included in this Annual Report 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 data used in this Annual Report involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We believe that the information from these industry publications and surveys included in this Annual Report is reliable.

ARCALYST® is a registered trademark of Regeneron Pharmaceuticals, Inc. and Yescarta® is a registered trademark of Gilead Sciences, Inc., or its related companies.

#### PART I

##### ITEM 1. BUSINESS.

###### Overview

We are a biopharmaceutical company focused on discovering, acquiring, developing and commercializing therapeutic medicines for patients with significant unmet medical need. Our product candidates, riloncept, mavrilimumab, vixarelimab and KPL-404, are based on strong biologic rationale or validated mechanisms, target underserved conditions and offer the potential for differentiation. This pipeline of product candidates are designed to modulate immunological pathways across a spectrum of diseases.

**Riloncept** is a protein cytokine trap for inhibiting interleukin-1alpha, or IL-1 $\alpha$ , and interleukin-1beta, or IL-1 $\beta$ . Cytokines are small proteins that play a role in cell signaling. Riloncept was discovered and developed by Regeneron Pharmaceuticals, Inc., or Regeneron, and is approved by the U.S. Food and Drug Administration, or FDA, under the brand name ARCALYST for the treatment of cryopyrin-associated periodic syndrome, or CAPS, specifically familial cold autoinflammatory syndrome and muckle-wells syndrome, and for the treatment of deficiency of IL-1 receptor antagonist, or DIRA. We licensed riloncept from Regeneron in 2017.

We are initially developing riloncept for the potential treatment of recurrent pericarditis, a painful inflammatory cardiovascular disease with an estimated U.S. prevalent population of approximately 40,000 patients

seeking and receiving medical treatment. Currently there is no FDA-approved therapy for the treatment of recurrent pericarditis. We received Breakthrough Therapy designation from the FDA for rilonacept for the treatment of recurrent pericarditis in 2019 and Orphan Drug designation from the FDA for rilonacept for the treatment of pericarditis, which includes the treatment of recurrent pericarditis, in 2020. In June 2020, we reported final results from RHAPSODY, our pivotal Phase 3 clinical trial of rilonacept in subjects with recurrent pericarditis. RHAPSODY met its prescribed primary and all major secondary efficacy endpoints with statistical significance, showing that rilonacept improved clinically meaningful outcomes associated with unmet medical need in recurrent pericarditis. RHAPSODY data were also published in *The New England Journal of Medicine* simultaneously with a late-breaking scientific presentation at the American Heart Association's Scientific Sessions 2020.

The FDA accepted the supplemental Biologics License Application, or sBLA, for rilonacept in recurrent pericarditis with priority review and assigned a Prescription Drug User Fee Act, or PDUFA, goal date of March 21, 2021. If approved by the FDA for recurrent pericarditis, we expect the potential commercial launch of rilonacept in recurrent pericarditis in the first half of 2021 and consequently would take responsibility for sales and distribution of rilonacept for all approved indications in the United States and evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits.

**Mavrilimumab** is a fully-human monoclonal antibody that antagonizes granulocyte-macrophage colony stimulating factor, or GM-CSF. We licensed mavrilimumab from MedImmune Limited, or MedImmune, in 2017.

We are evaluating mavrilimumab for the potential treatment of giant cell arteritis, or GCA, a chronic inflammatory disease of the medium-to-large arteries with an estimated U.S. prevalence of approximately 75,000 to 150,000 patients. There is only one FDA-approved therapy for GCA, which is an adjunct to corticosteroid therapy, and we believe that an unmet need persists. We received Orphan Drug designation from the FDA for mavrilimumab for the treatment of GCA in 2020. In November 2020, we presented results from our Phase 2 proof-of-concept trial of mavrilimumab in subjects with GCA at the late-breaking abstracts session during the American College of Rheumatology, or ACR, Convergence 2020. The Phase 2 trial met both its prescribed primary efficacy endpoint of time-to-first adjudicated GCA flare by Week 26 in all treated patients and the secondary efficacy endpoint of sustained remission at Week 26 in all treated patients with statistical significance. In addition, while the trial was not powered for individual disease cohorts, there was a consistent trend of efficacy across the new onset and relapsing/refractory cohorts. We expect to provide next steps for mavrilimumab, including in GCA, in the first half of 2021.

We are also evaluating mavrilimumab for the potential treatment of severe coronavirus 2019 disease, or COVID-19, pneumonia and hyperinflammation. In June 2020, we announced 28-day clinical outcomes from an open-label investigator-initiated treatment protocol with mavrilimumab conducted in Italy in 13 non-mechanically ventilated patients with severe COVID-19 pneumonia and hyperinflammation. Mavrilimumab-treated patients experienced earlier and improved clinical outcomes compared to control-group patients, including earlier weaning from supplemental oxygen, shorter hospitalizations, and no deaths. These data were published in *The Lancet Rheumatology*. In December 2020, we reported results from a placebo-controlled investigator-initiated study in the same patient population across a consortium of academic sites in the United States showing encouraging trends of reduced mortality and duration of mechanical ventilation in patients treated with mavrilimumab on top of standard of care therapy. We are conducting a placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation. We expect to provide data from the Phase 2 portion of the Phase 2/3 trial in the first half of 2021.

**Vixarelimab** is a fully-human monoclonal antibody that simultaneously inhibits the signaling of the cytokines interleukin 31, or IL-31, and oncostatin M, or OSM, by targeting their common receptor subunit, oncostatin M receptor beta, or OSMR $\beta$ . We believe vixarelimab is the only monoclonal antibody in development that simultaneously targets both pathways. We licensed vixarelimab from Biogen MA, Inc., or Biogen, in 2016.

We are evaluating vixarelimab for the potential treatment of prurigo nodularis, a chronic inflammatory skin condition with an estimated U.S. prevalence of approximately 300,000 patients. We received Breakthrough Therapy designation for vixarelimab for the treatment of pruritus associated with prurigo nodularis in 2020. In April 2020, we reported results from our Phase 2a trial of vixarelimab in prurigo nodularis. The Phase 2a trial met its primary efficacy endpoint, as there was a statistically significant reduction in weekly-average Worst-Itch Numeric Rating Scale, or WI-

NRS, from baseline at Week 8 in vixarelimab recipients compared to placebo recipients. In addition, the majority of vixarelimab recipients showed a clinically meaningful greater-than-or-equal-to 4-point weekly-average WL-NRS reduction at Week 8 and a statistically significant percentage of vixarelimab recipients achieved a prurigo nodularis-investigator's global assessment, or PN-IGA score of 0/1 at Week 8 compared to placebo recipients. We are conducting a Phase 2b dose ranging study of vixarelimab in patients with prurigo nodularis.

**KPL-404** is a humanized monoclonal antibody that is designed to inhibit the CD40-CD40 ligand, or CD40L, interaction, a central control node of T-cell-dependent, B-cell-mediated humoral adaptive immunity. We believe that disrupting the CD40-CD40L interaction is an attractive approach for multiple autoimmune disease pathologies such as rheumatoid arthritis, Sjogren's syndrome, Graves' disease, systemic lupus erythematosus and solid organ transplant graft rejection. We acquired all of the outstanding securities of Primatope Therapeutics, Inc., or Primatope, the company that owned or controlled the intellectual property related to KPL-404 in 2019.

We are conducting a single-ascending-dose Phase 1 clinical trial of KPL-404 in healthy volunteers to evaluate the safety and tolerability of KPL-404 as well as pharmacokinetics, CD40 receptor occupancy, or RO, the immune response to the novel test antigen keyhole limpet hemocyanin, or KLH, in clinically relevant dose cohorts, and T-cell dependent antibody response, or TDAR, in these subjects. The study is divided into two parts: a single dose of KPL-404 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg, 3 mg/kg or 10 mg/kg intravenously, or IV, and a single dose of KPL-404 1 mg/kg or 5 mg/kg subcutaneously, or SC. In November 2020, we reported preliminary data from the Phase 1 trial. All dose escalations occurred as per protocol with no dose limiting safety findings. All six subjects dosed with KPL-404 3 mg/kg IV showed full receptor occupancy through Day 29, which corresponded with complete suppression of TDAR to KLH through Day 29. Consistent dose relatedness was shown in the lower dose level cohorts, including 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg IV and 1 mg/kg SC. We believe that the data support further evaluation in patients, including potential IV or SC monthly administration. Further, we expect final data and safety follow-up from all cohorts of the Phase 1 trial in the first half of 2021.

The following table summarizes our current pipeline of product candidates:

Program & Target	Preclinical	Phase 1	Phase 2	Phase 3	Regulatory <sup>2</sup>	Commercial Rights
Rilonacept <sup>1</sup> IL-1α & IL-1β	Recurrent Pericarditis				FDUFA-03/21/21; Orphan Drug Designation & Breakthrough Therapy Designation	Worldwide (Excluding MENA)
Mavrilimumab GM-CSFRα	Giant Cell Arteritis				Orphan Drug Designation	Worldwide
	COVID-19 Pneumonia & Hyperinflammation					Worldwide
Vixarelimab OSMRβ	Prurigo Nodularis				Breakthrough Therapy Designation	Worldwide
KPL-404 CD40	Severe Autoimmune Diseases					Worldwide

<sup>(1)</sup> Rilonacept (ARCALYST®) is approved and marketed for cryopyrin-associated periodic syndrome (CAPS) and maintenance of remission of Deficiency of Interleukin-1 Receptor Antagonist (DIRA) in the United States by Regeneron Pharmaceuticals, Inc.

<sup>(2)</sup> The FDA granted Breakthrough Therapy designation to rilonacept for recurrent pericarditis in 2019 and Orphan Drug designation to rilonacept for pericarditis in 2020. The FDA granted Orphan Drug designation to mavrilimumab for giant cell arteritis in 2020. The FDA granted Breakthrough Therapy designation to vixarelimab for the treatment of pruritus associated with prurigo nodularis in 2020.

<sup>(3)</sup> IL-1α = interleukin-1α ; IL-1β = interleukin-1β; GM-CSFRα = granulocyte macrophage colony stimulating factor receptor alpha; OSMRβ = oncostatin M receptor beta; PDUFA = Prescription Drug User Fee Act ; MENA = Middle East North Africa.

We evaluate options across our portfolio in an effort to maximize value and improve capital allocation based on data, including potential additional indications for rilonacept, mavrilimumab and vixarelimab, being opportunistic in our business development activities, considering appropriate opportunities to partner or out-license our programs, as well as conducting internal research to discover and develop molecules to expand our portfolio.

### Our Strategy

We are a biopharmaceutical company focused on discovering, acquiring, developing and commercializing therapeutic medicines for patients suffering from debilitating diseases with significant unmet medical need. Our product candidates, rilonacept, mavrilimumab, vixarelimab and KPL-404, are based on strong biologic rationale or validated mechanisms, target underserved conditions, and offer the potential for differentiation. These pipeline assets are designed to modulate immunological pathways across a spectrum of diseases.

Critical components of our business strategy include the following:

- **Advance Our Product Candidates Through the Development Process.** We are pursuing multiple product candidates in parallel and have advanced these programs with the goal of delivering differentiated therapies to patients. We believe that each of our product candidates have the potential to address significant unmet medical needs and intend to develop them efficiently in a data-driven manner.
- **Commercialize Our Product Candidates to Bring Therapies to Patients.** We intend to market and commercialize our product candidates, if approved, in the United States and potentially in select international markets by developing sales, marketing, medical affairs, access and reimbursement capabilities as well as implementing disease awareness campaigns, among other things, as appropriate for the potential commercial opportunity – starting with the potential commercial launch of rilonacept in recurrent pericarditis if approved by the FDA. We believe this approach will enable us to effectively reach

patients and prescribers that our product candidates target and leverage the commercial potential of our product candidates.

- **Explore Opportunities to Drive Value and Maximize the Potential of Our Existing Portfolio.** We believe that our product candidates have potential in multiple indications. Our assets are designed to modulate immunological signaling pathways that are implicated across a spectrum of diseases. We may also seek collaborations, licenses and other strategic relationships to assist in advancing and expanding our current programs, as appropriate to drive value.
- **Work to Identify, Discover, Acquire and Develop New Therapies.** We aim to leverage our internal discovery efforts and business development capabilities to complement our existing portfolio. We evaluate a variety of factors for potential product candidates, technologies and discovery targets, including biologic rationale for addressing the disease, potential for regulatory approval, commercial viability, intellectual property position, prospects for favorable pricing and reimbursement and the impact of competition. We also look at assets that could potentially address multiple indications. We intend to continue to be opportunistic in our business development activities.

## Our Product Candidates

### Rilonacept

#### Overview

Rilonacept was approved by the FDA for the treatment of CAPS, which includes cold auto-inflammatory syndrome and Muckle-Wells syndrome, and DIRA and has been commercially sold as ARCALYST in the United States by Regeneron for CAPS since 2008. We licensed rilonacept in 2017 from Regeneron. We believe that rilonacept has potential to treat certain diseases mediated by both IL-1 $\alpha$  and IL-1 $\beta$ . Our lead indication for rilonacept is recurrent pericarditis, a painful autoinflammatory cardiovascular disease with an estimated U.S. prevalent population of approximately 40,000 patients seeking and receiving medical treatment. We received Breakthrough Therapy designation from the FDA for rilonacept for the treatment of recurrent pericarditis in 2019 and Orphan Drug designation from the FDA for rilonacept for the treatment of pericarditis, which includes the treatment of recurrent pericarditis, in 2020.

In June 2020, we reported final results from RHAPSODY, our global, double-blind, placebo-controlled, randomized-withdrawal design, pivotal Phase 3 clinical trial of rilonacept in subjects with recurrent pericarditis. RHAPSODY met its prescribed primary and all major secondary efficacy endpoints with statistical significance, showing that rilonacept improved clinically meaningful outcomes associated with unmet medical need in recurrent pericarditis. RHAPSODY data were also published in The New England Journal of Medicine simultaneously with a late-breaking scientific presentation at the American Heart Association's Scientific Sessions 2020.

The FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. If approved by the FDA for recurrent pericarditis, we expect the potential commercial launch of rilonacept in recurrent pericarditis in the first half of 2021 and consequently would take responsibility for sales and distribution of rilonacept for all approved indications in the United States and evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits.

There is currently no FDA-approved therapy for the treatment of recurrent pericarditis. There is currently one other FDA-approved agent that blocks both IL-1 $\alpha$  and IL-1 $\beta$  signaling, anakinra (KINERET), produced by Sobi, Inc, or Sobi, is approved for other indications, and one that blocks only IL-1 $\beta$ , canakinumab (ILARIS), produced by Novartis Pharmaceuticals Corporation, or Novartis, is approved for other indications. We believe both therapies have limitations. Anakinra requires once-daily injections, and canakinumab blocks only IL-1 $\beta$ , making it less effective or potentially ineffective in diseases driven by IL-1 $\alpha$  pathology. We believe that rilonacept with its more moderate, once-weekly dosing schedule and its ability to inhibit both IL-1 $\alpha$  and IL-1 $\beta$  could provide an improved therapeutic option for a variety of diseases mediated by both IL-1 $\alpha$  and IL-1 $\beta$ .

### **Mechanism of Action**

Rilonacept is an inhibitor of IL-1 $\alpha$  and IL-1 $\beta$ . IL-1 $\alpha$  and IL-1 $\beta$  have been demonstrated to play a key role in inflammatory diseases. IL-1 $\alpha$  and IL-1 $\beta$  provoke potent, pro-inflammatory events by engaging the IL-1 $\alpha$  and IL-1 $\beta$  receptor. Following tissue insult, the release of IL-1 $\alpha$  acts as the primary initiating signal to coordinate the mobilization of immune cells to the damaged area, while IL-1 $\beta$  is secreted mostly by macrophages and is a prototypical cytokine of the canonical NLRB-3 inflammasome. IL-1 $\alpha$  and IL-1 $\beta$  signaling results in a dramatic increase in the production of cytokines that orchestrate the proliferation and recruitment of phagocytes to the site of damage, resulting in inflammation. Moreover, IL-1 $\alpha$  and IL-1 $\beta$  signaling also affect other immune-system cells, such as T-cells and B-cells.

IL-1 $\beta$ 's role in the inflammation process has been extensively studied, while in comparison, much is still unknown about the independent function of IL-1 $\alpha$  in disease pathology. Despite driving similar immunological outcomes, IL-1 $\alpha$  and IL-1 $\beta$  differ substantially in their expression and regulation, and non-redundant roles for IL-1 $\alpha$  or IL-1 $\beta$  have been demonstrated in multiple inflammatory diseases. There are disease states in which IL-1 $\beta$  inhibition alone does not appear to be sufficient for disease remission in the absence of IL-1 $\alpha$  inhibition. Published studies suggest certain autoinflammatory diseases may, in fact, be pathologically driven primarily by IL-1 $\alpha$ .

An investigator-initiated study of anakinra successfully demonstrated mechanistic proof-of-concept for inhibiting both IL-1 $\alpha$  and IL-1 $\beta$  in the treatment of recurrent pericarditis. In a published case study, a patient with a refractory form of recurrent pericarditis, who was well-controlled on anakinra, was switched from anakinra to canakinumab, which inhibits only IL-1 $\beta$ , for tolerability reasons. The patient's disease returned despite further dose escalation of canakinumab. When the patient was switched back to anakinra, which inhibits IL- $\alpha$  and IL- $\beta$ , the disease promptly went back into remission. These data, together with clinical data from our open-label Phase 2 proof-of-concept study and confirmatory market research, may indicate that IL-1 $\alpha$  and IL-1 $\beta$  play unique roles in recurrent pericarditis and other autoinflammatory diseases in which the pathology may be driven primarily by IL-1 $\alpha$ .

### **Background and Market Opportunity for Recurrent Pericarditis**

Pericarditis is the most common disorder involving the pericardium, the two-layered sac that surrounds the heart. Pericarditis is an inflammation of this sac and is typically characterized by significant chest pain, shortness of breath, coughing and fatigue and is often misconstrued by patients as a heart attack. In addition, typical signs of pericarditis include pericardial friction rub, electrocardiogram changes or pericardial effusion, which is a build-up of fluid around the heart. Pericarditis is described as recurrent if, following an initial occurrence of pericarditis, it recurs after a symptom-free period of about four to six weeks. Pericarditis is considered chronic if symptoms of any one episode last longer than three months, typically causing significant pain and frustration. If pericarditis is left untreated, patients can develop thickening and scarring of the pericardium, potentially requiring invasive surgical stripping. Pericardial effusion, if large enough, can compress the heart externally, requiring emergent drainage.

We intend to focus our development of rilonacept for the treatment of recurrent pericarditis initially in the United States, and we are exploring opportunities for potential expansion into other countries. Claims analysis, cross validated with published estimates, support a prevalent population of patients with recurrent pericarditis seeking and receiving medical treatment to be approximately 40,000 patients in the United States per year. Within this estimated diagnosed and treated recurrent pericarditis patient population, there are certain subgroups of patients totaling approximately 14,000 with particularly high unmet medical needs consisting of:

- patients who are refractory to all conventional treatments (approximately 3,000);
- patients who are refractory to nonsteroidal anti-inflammatory drugs, or NSAIDs and/or colchicine but where steroid usage is not appropriate (approximately 5,000);
- patients otherwise not well-managed and have multiple recurrences despite previously responding to NSAIDs, colchicine and/or steroids (approximately 5,000); and
- patients who are dependent on steroids (approximately 1,000).

There may be other thoracic inflammatory syndromes where rilonacept may prove beneficial, such as pericarditis associated with post-pericardiotomy syndrome, an inflammatory reaction of the pericardium in patients who have undergone surgery that involves opening the pericardium. Post-pericardiotomy syndrome occurs in up to 30% of the 300,000 patients in the United States undergoing post-cardiac injury, and we believe rilonacept may be a therapeutic option for a subset of these patients.

#### **Current Treatment Landscape for Recurrent Pericarditis**

We are not aware of any current therapies approved by the FDA for the treatment of recurrent pericarditis. A patient's initial acute episode of pericarditis is typically treated with over-the-counter or prescription NSAIDs or colchicine, both of which are used off-label. Recurrent episodes are treated in a similar manner or by adding systemic corticosteroids which are also used off-label. Both colchicine and corticosteroids often have deleterious effects when used at high doses or for long periods of time, including, for colchicine, gastrointestinal distress and neutropenia and, for corticosteroids, glaucoma, fluid retention, hypertension, mood changes, memory changes, other psychological effects, weight gain and diabetes. Fourth-line treatment for these patients may include other immunosuppressants such as methotrexate and azathioprine, as well as anakinra.

#### **Our Solution**

Rilonacept is a weekly, subcutaneously-injected, recombinant fusion protein that blocks IL-1 $\alpha$  and IL-1 $\beta$  signaling. Beyond recurrent pericarditis, we believe there is significant potential for rilonacept to address additional indications, including other pericarditis populations. More broadly, we believe diseases characterized by painful serosal inflammation may be driven by IL-1 $\alpha$ , and we intend to consider development of rilonacept in these indications and in others where we believe IL-1 $\alpha$  or IL-1 $\beta$  play a key role in disease pathophysiology.

#### *Phase 3 Clinical Trial in Recurrent Pericarditis*

We conducted a global, randomized withdrawal design, pivotal Phase 3 clinical trial of rilonacept in recurrent pericarditis, named RHAPSODY. Eligible patients presented at screening with at least a third pericarditis episode, defined as at least 1 day with pericarditis pain of  $\geq 4$  on the 11-point NRS and a CRP value  $\geq 1$  mg/dL within the 7-day period prior to first study drug administration. Patients could be receiving concomitant NSAIDs and/or colchicine and/or oral corticosteroid treatment in any combination. The study was comprised of 4 periods: a screening period; a single-blind run-in period during which patients received a loading dose of rilonacept 320 mg injected SC followed by 160 mg SC weekly while background pericarditis medications were tapered and discontinued; a double-blind, placebo-controlled randomized withdrawal period during which clinical responders to rilonacept were randomized 1:1 and received 160 mg SC weekly rilonacept or placebo; and a long-term extension treatment period with up to 24 months of open-label rilonacept 160 mg SC weekly. The primary efficacy endpoint was time-to-first pericarditis-recurrence in the randomized withdrawal period. The Clinical Endpoint Committee adjudicated all suspected pericarditis recurrences for inclusion in the primary efficacy endpoint analysis.

#### *Phase 3 Clinical Trial Results in Recurrent Pericarditis*

In June 2020, we announced RHAPSODY met its prespecified primary and all major secondary efficacy endpoints, showing that rilonacept improved clinically meaningful outcomes associated with the unmet medical need in recurrent pericarditis. RHAPSODY data were also published in The New England Journal of Medicine simultaneously with a late-breaking scientific presentation at the American Heart Association's Scientific Sessions in November 2020.

The primary efficacy endpoint of time-to-first adjudicated pericarditis recurrence in the randomized withdrawal period was highly statistically significant.

- Median [95% CI] time to pericarditis recurrence for rilonacept recipients in the randomized withdrawal period could not be estimated due to the low number of recurrences in the rilonacept treatment arm. The median time-to-recurrence for placebo recipients was 8.6 [4.0-11.7] weeks (Hazard Ratio = 0.04,  $p < 0.0001$ ).

- Rilonacept recipients experienced a 96% reduction in risk of recurrent pericarditis events.

All major secondary efficacy endpoints in the randomized withdrawal period were also highly statistically significant.

- 81% of rilonacept recipients maintained clinical response at Week 16 of the randomized withdrawal period, compared to 20% of placebo recipients ( $p=0.0002$ ). Consistent results were observed at Week 8 and Week 24 and were also highly statistically significant ( $p<0.0001$  and  $p=0.0022$ , respectively).

- The proportion of rilonacept recipients with absent or minimal pericarditis symptoms at Week 16 of the randomized withdrawal period was 81% compared to 25% for placebo recipients ( $p=0.0006$ ). Consistent results were observed at Week 8 and Week 24 and were also highly statistically significant ( $p<0.0001$  and  $p=0.0002$ , respectively).

Rilonacept was well-tolerated in the study, with adverse events consistent with the FDA-approved label for the treatment of CAPS. The most common adverse events were injection site reactions.

#### *Commercial Strategy for Rilonacept*

We intend to have a focused and targeted launch effort, with a specialty cardiology salesforce of approximately 30 representatives calling on high-volume accounts and high-volume specialists. The salesforce will be complemented by our current medical affairs, payor and patient services teams, as well as an efficient digital marketing effort. Through a data-driven market assessment, we have developed what we believe to be a highly efficient launch model built around four key strategic imperatives. The first of which is, establishing the unmet need and working to ensure recurrent pericarditis is viewed as a serious, debilitating disease, that is primarily driven by IL-1. The second is, working to ensure rilonacept is viewed as the product of choice for the treatment and prevention of recurrent pericarditis. The third strategic imperative relates to reimbursement and working to ensure broad patient access at a price that reflects rilonacept's value as a first-in-class IL-1 inhibitor of inflammation. The final strategic imperative is building robust patient support programs to optimize the patient and customer experience with rilonacept as well as with Kiniksa. Overall, our efforts are focused on developing a program and tactics to help with broad uptake and adoption of rilonacept as well as ensuring a positive patient experience.

#### *Commercial History of Rilonacept*

The FDA approved rilonacept under the brand name ARCALYST for the treatment of CAPS, specifically familial cold autoinflammatory syndrome and muckle-wells syndrome, in 2008, and subsequently approved it for the treatment of DIRA in 2020.

### **Mavrilimumab**

#### **Overview**

Mavrilimumab is a fully-human monoclonal antibody that antagonizes GM-CSF signaling by binding to the alpha subunit of the GM-CSF receptor. Our lead indication for mavrilimumab is GCA, a chronic inflammatory disease of medium-large blood vessels with an estimated U.S. prevalence of approximately 75,000 to 150,000 patients. We received Orphan Drug designation from the FDA for mavrilimumab for the treatment of GCA in 2020. In November 2020, we presented results from our randomized, double-blind, placebo-controlled, global Phase 2 proof-of-concept trial of mavrilimumab in subjects with GCA at the late-breaking abstracts session during the ACR Convergence 2020. Before we licensed mavrilimumab in 2017, MedImmune was developing mavrilimumab for the treatment of RA. MedImmune had received authorization to conduct clinical trials for RA in Europe and executed an extensive Phase 1 and Phase 2 clinical program where the company studied mavrilimumab in over 550 patients with RA through Phase 2b. All of MedImmune's European clinical trials achieved their prospectively defined primary endpoints of safety or efficacy.

We are also evaluating mavriliimumab for the potential treatment of COVID-19 pneumonia and hyperinflammation. In June 2020, we announced 28-day clinical outcomes from an open-label investigator-initiated treatment protocol with mavriliimumab conducted in Italy in 13 non-mechanically ventilated patients with severe COVID-19 pneumonia and hyperinflammation. Additionally, in December 2020, we reported results from a randomized, double-blind, placebo-controlled, investigator-initiated study in the same patient population across a consortium of academic sites in the United States. We are conducting a global, randomized, double-blind, placebo-controlled Phase 2/3 clinical trial of mavriliimumab in severe COVID-19 pneumonia and hyperinflammation. We expect to provide data from the Phase 2 portion of the Phase 2/3 trial in the first half of 2021.

#### ***Mechanism of Action***

Mavriliimumab is designed to inhibit the signaling of GM-CSF, a growth factor that stimulates the production of certain types of white blood cells. Studies have demonstrated that with GM-CSF overexpression, pathological changes almost always follow. Reported data suggest GM-CSF is a key player in the immune system, as follows:

- o GM-CSF enhanced trafficking of myeloid cells through activated endothelium of blood vessels and contributed to monocyte and macrophage accumulation in blood vessels during inflammation;
- o GM-CSF promoted activation, differentiation, survival and proliferation of monocytes and macrophages, as well as resident tissue macrophages in inflamed tissues;
- o GM-CSF production led to activation of the vasculature and bone marrow and also promoted the differentiation of effector T cells at inflamed sites and draining lymph nodes; and
- o GM-CSF regulated the phenotype of antigen-presenting cells in inflamed tissues by promoting the differentiation of infiltrating monocytes into M1 macrophages and monocyte-derived dendritic cells, or MoDCs.

Additionally, GM-CSF has been shown to be a confirmed mediator in RA based on the results from the Phase 2b clinical trial in RA conducted by MedImmune. In this trial, mavriliimumab achieved the co-primary endpoints of change from baseline in disease activity score, or DAS, at week 12 and a response of 20% or greater improvement in the American College of Rheumatology criteria, or ACR20, at week 24. Patients treated with mavriliimumab showed a statistically significant reduction in DAS scores at all dosages compared to placebo, and significantly more mavriliimumab-treated patients achieved ACR20 at all dosages compared to placebo.

#### ***Background and Market Opportunity for Giant Cell Arteritis***

GCA is an inflammatory disease of the medium-to-large arteries that strikes older adults and causes headaches, jaw and other muscle claudication, and possible ischemic visual loss. Many of the symptoms and signs of GCA result from involvement of the cranial branches of arteries that originate from the aortic arch, but the disease is systemic, and vascular involvement can be widespread. GCA is characterized by infiltration of monocytes, macrophages and the formation of giant cells (i.e., multinucleated fusions of macrophages). GCA generally occurs in adults over 50 years old with a 3:1 imbalance of women to men. We estimate there to be approximately 75,000 to 150,000 prevalent patients with GCA in the United States with similar prevalence rates for other major markets and believe that the incidence of GCA will increase over time as the population ages.

#### ***Current Treatment Landscape for Giant Cell Arteritis***

Glucocorticoids, a type of corticosteroid, are the mainstay for the treatment of GCA because they normalize inflammatory markers and resolve patient symptoms. Many patients receive long courses of this therapy to prevent disease flare-up, which are associated with significant and serious side effects, including glaucoma, fluid retention, hypertension, mood changes, memory changes, other psychological effects, weight gain and diabetes. Up to 80% of patients suffer from glucocorticoid toxicity as a result of GCA treatment.

Despite being effective for some patients, many are unable to wean off of corticosteroids because they continue to experience disease flares as the dose is reduced. In one study cohort published in the literature that followed 106 patients with GCA for 4.5 to 10.1 years, 68 patients (64%) experienced at least one relapse during or after weaning, and 38 patients (36%) experienced two or more. Experimental evidence in mice suggests that corticosteroid treatment does not adequately suppress tissue-infiltrating macrophage function, a key cell type generated and maintained by GM-CSF signaling, and may explain why many patients require long-term chronic treatment and are unable to wean off corticosteroids. We believe by blocking GM-CSF signaling, mavrilmumab may provide additional benefit to these patients by reducing long-term sequelae that results from chronic vessel inflammation.

In addition, tocilizumab, an inhibitor of interleukin-6, or IL-6, is approved in the United States in GCA for use on top of a concomitant corticosteroid taper. However, up to nearly half of the patients studied in the Phase 3 clinical trial for tocilizumab experienced disease flares during the 52 weeks treatment period that included a 26-week corticosteroid taper. We believe this indicates a persistent unmet medical need exists.

#### **Our Solution**

We chose GCA as our first indication for mavrilmumab due to the mechanistic rationale of inhibiting GM-CSF. GM-CSF is a key growth factor for many of these key inflammatory cell types and is found in high concentrations at the site of damage in the vessel wall. We believe that data provide a solid rationale for antagonizing this signaling with mavrilmumab.

#### *Phase 2 Clinical Trial for GCA*

We conducted a randomized, double-blind, placebo-controlled, global Phase 2 trial consisting of a 6-week screening period, a 26-week double-blind placebo-controlled treatment period, and a 12-week washout safety follow-up period. Patients age 50 to 85 years with active GCA, confirmed by temporal artery biopsy and/or imaging, with erythrocyte sedimentation rate, or ESR,  $\geq 30$  mm/hour or C-reactive protein, or CRP,  $\geq 1$  mg/dL, and symptoms of GCA within 6 weeks from randomization, were included. All patients were required to have achieved corticosteroid-induced remission (resolution of symptoms, ESR  $< 20$  mm/hour, CRP  $< 1$  mg/dL) prior to randomization. Seventy (70) patients were randomized 3:2 to mavrilmumab 150 mg or placebo biweekly injected SC, co-administered with a protocol-defined 26-week oral corticosteroid taper. Patients were stratified by new onset (n=35) or relapsing/refractory (n=35) disease. The primary efficacy endpoint was time-to-first adjudicated GCA flare by Week 26 in all treated patients and the secondary efficacy endpoint was sustained remission at Week 26 in all treated patients with statistical significance.

#### *Phase 2 Clinical Trial Results for GCA*

In November 2020, we announced that results from our randomized, double-blind, placebo-controlled, global Phase 2 proof-of-concept trial of mavrilmumab in subjects with GCA were presented at the late-breaking abstracts session during the ACR Convergence 2020. The Phase 2 trial met both its prescribed primary and efficacy endpoint of time-to-first adjudicated GCA flare by Week 26 in all treated patients and the secondary efficacy endpoint of sustained remission at Week 26 in all treated patients with statistical significance. In addition, while the trial was not powered for individual disease cohorts, there was a consistent trend of efficacy across the new onset and relapsing/refractory cohorts. Mavrilmumab was well-tolerated in the Phase 2 trial; there were no drug-related SAEs, and the rates of drug-related treatment-emergent adverse events between mavrilmumab recipients and placebo recipients were similar. We expect to provide next steps for the development of mavrilmumab, including in GCA, in the first half of 2021.

The primary efficacy endpoint of time-to-first adjudicated GCA flare by Week 26 in all treated patients was statistically significant (Hazard Ratio = 0.38,  $p=0.0263$ ).

- Median time-to-flare by Week 26 could not be estimated in mavrilmumab recipients due to the low number of flares in the mavrilmumab treatment arm. The median time-to-flare for placebo recipients was 25.1 weeks. There was a 62% lower risk of flare in mavrilmumab recipients compared to placebo recipients.

The secondary efficacy endpoint of sustained remission at Week 26 in all treated patients was also statistically significant.

- The sustained remission rate at Week 26 was 33.3 percentage points higher in mavrilmumab recipients (83.2%) compared to placebo recipients (49.9%) (p=0.0038).

Mavrilmumab was well-tolerated; there were no drug-related SAEs, and the rates of drug-related treatment-emergent adverse events between mavrilmumab recipients and placebo recipients were similar.

*Clinical Development for Mavrilmumab in COVID-19 Pneumonia and Hyperinflammation*

In June 2020, we announced 28-day clinical outcomes from an open-label investigator-initiated treatment protocol with mavrilmumab conducted in Italy in 13 non-mechanically ventilated patients with severe COVID-19 pneumonia and hyperinflammation. Mavrilmumab-treated patients experienced earlier and improved clinical outcomes compared to control-group patients, including earlier weaning from supplemental oxygen, shorter hospitalizations, and no deaths. These data were published in *The Lancet Rheumatology*.

In December 2020, we reported results from a randomized, double-blind, placebo-controlled investigator-initiated study in the same patient population across a consortium of academic sites in the United States showing encouraging trends of reduced mortality and duration of mechanical ventilation in patients treated with mavrilmumab on top of standard of care therapy. There was no difference in SAEs between the mavrilmumab arm and the placebo arm in the investigator-initiated study.

We are conducting a global, randomized, double-blind, placebo-controlled Phase 2/3 clinical trial of mavrilmumab in severe COVID-19 pneumonia and hyperinflammation. We expect to provide data from the Phase 2 portion of the Phase 2/3 trial in the first half of 2021.

*Clinical History in Rheumatoid Arthritis*

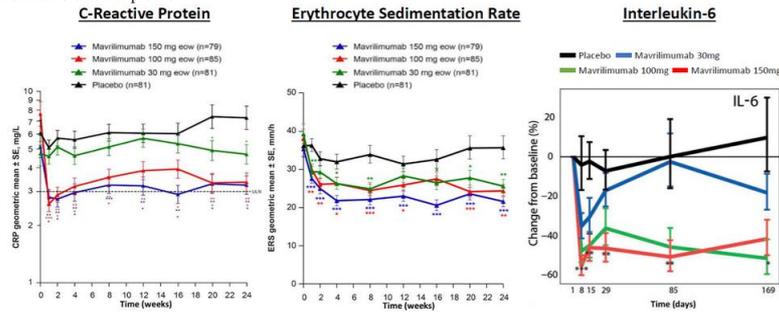
MedImmune had received authorization to conduct clinical trials for RA in Europe and executed an extensive Phase 1 and Phase 2 clinical program where the company studied mavrilmumab in over 550 patients with RA through Phase 2b. All of MedImmune's European clinical trials achieved their prospectively defined primary endpoints of safety or efficacy.

MedImmune's investigational new drug application, or IND, for the clinical development of mavrilmumab for the treatment of RA in the United States was initially put on clinical hold in 2010 before human data had been generated due to certain effects that were observed in non-clinical studies, which coincides with a theoretical risk of developing pulmonary alveolar proteinosis, or PAP, possibly in the setting of GM-CSF inhibition. Since then, in 2014, the FDA acknowledged that clinical studies in refractory RA may be appropriate based on MedImmune's clinical studies in Europe in which it dosed over 550 RA patients with mavrilmumab with no evidence of PAP attributable to mavrilmumab following long-term administration. MedImmune did not engage in further dialogue with the FDA and withdrew the IND for mavrilmumab for the treatment of RA.

We believe that the trials conducted by MedImmune provide substantial support for the potential of mavrilmumab in autoimmune diseases. In these trials, mavrilmumab was observed to be well-tolerated. The most common adverse event was infection, with all dose groups (30 mg, 100 mg, 150 mg) in a Phase 2b clinical trial reporting similar rates of infection compared to the placebo group. We believe that these safety results provide an accurate early representation of the safety profile of mavrilmumab, which we believe to be at least competitive with and potentially better than existing systemically administered agents for autoimmune diseases.

Mavrilmumab's results from MedImmune's European Phase 2b clinical trials in RA have provided important information about its safety and efficacy profile and helped solidify our choice for focusing our development efforts in GCA as a lead indication. In addition to the reductions to the primary endpoint demonstrated in MedImmune's European Phase 2b trials, other markers of inflammation, such as CRP, ESR, and IL-6, were similarly reduced, as shown in the

graphs below. CRP, ESR and IL-6 are key markers of disease activity for GCA. We believe that these results may also provide evidence for mavrilimumab's potential utility across a broad range of indications with a similar biomarker profile.



Source: Burmester GR, et al. Ann Rheum Dis 2017. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001 mavrilimumab versus placebo

## Vixarelimab

### Overview

Vixarelimab is a fully-human monoclonal antibody that targets OSMR $\beta$ , which mediates signaling of IL-31 and OSM, two key cytokines implicated in inflammation, pruritus and fibrosis. We believe vixarelimab to be the only monoclonal antibody in development that targets both pathways simultaneously. We acquired the assets relating to vixarelimab from Biogen, in 2016. We are evaluating vixarelimab for the potential treatment of prurigo nodularis, a chronic inflammatory skin condition with an estimated U.S. prevalence of approximately 300,000 patients. We received Breakthrough Therapy designation for vixarelimab for the treatment of pruritus associated with prurigo nodularis in 2020. In April 2020, we reported results from our randomized, double-blind, placebo-controlled Phase 2a trial of vixarelimab in prurigo nodularis. We are conducting a randomized, double-blind, placebo-controlled Phase 2b dose ranging study of vixarelimab in patients with prurigo nodularis designed to investigate the efficacy, safety, and pharmacokinetics.

### Mechanism of Action

The OSMR $\beta$  subunit is an IL-6 type receptor which combines with one of two other subunits to form two distinct cytokine receptors used for the signaling of two different cytokines: IL-31, and OSM. IL-31 binds to the IL-31 receptor on keratinocytes, epidermal cells, leading to a sensation of pruritus and further inflammatory responses in the skin. In addition to interacting with IL-31 receptors on keratinocytes, IL-31 also stimulates pruritus directly through IL-31 receptors expressed on unmyelinated C-fibers in the skin responsible for the sensation and transmission of pruritic signaling.

OSM is produced primarily under inflammatory conditions and stimulates dermal fibroblast proliferation and migration as well as synthesis of collagen and glycosaminoglycan in the skin, leading to fibrosis. In addition to these functions, OSM signaling through the type II OSM receptor upregulates interleukin-4, or IL-4, interleukin-13 receptor, or IL-13R $\alpha$ 1, and interleukin-4 receptor, or IL-4R $\alpha$ , in human skin equivalent cultures, upregulates IL-4R $\alpha$  in primary human keratinocytes and also impairs expression of filaggrin, loricrin and involucrin (classical "differentiation" markers of the epidermal differentiation complex cluster) in human skin equivalent cultures. These data implicate OSM signaling as important in many autoimmune diseases characterized by barrier dysfunction, fibrosis and inflammation.

Vixarelimab inhibits both IL-31 and OSM activities at their respective receptors, potentially disrupting the pruritus, inflammation and fibrosis mediated by these cytokine pathways.

#### **Background and Market Opportunity for Prurigo Nodularis**

Prurigo nodularis is a chronic inflammatory skin condition that affects primarily older adults and is characterized by multiple firm and extremely pruritic nodules typically located on the arms and legs. The etiology of prurigo nodularis is largely unknown, however, human biopsy studies have shown that the cytokines IL-31 and OSM and the receptor chains IL-31R $\alpha$  and OSMR $\beta$  are highly expressed in prurigo nodularis lesions. The pruritus is severe and distressing and can be sudden, sporadic or continuous, worsening with heat, sweating or irritation from clothing. The itching sensation in prurigo nodularis is extreme and often leads to scratching to the point of bleeding, infection or pain. Our market research to-date with physicians and patients highlights the severe and debilitating nature of this disease and the significant levels of unmet need. Multiple physicians have reported suicidal tendencies among their prurigo nodularis patients due to an overwhelming inability to control the unrelenting itch. The exact prevalence of prurigo nodularis is unknown, however, we estimate there to be approximately 300,000 prevalent cases in the United States.

#### **Current Treatment Landscape for Prurigo Nodularis**

##### *Prurigo Nodularis*

We are not aware of any FDA-approved therapies for treating prurigo nodularis, and the treatment approach ranges from topical corticosteroids and occlusive steroid containing bandages for more mild patients to systemic corticosteroid, ultraviolet phototherapy and systemic therapies such as thalidomide, methotrexate and cyclosporine for those patients who fail initial treatments. Patients have reported using opioid pain medications to attempt to control the disease in its most severe form.

#### **Our Solution**

Vixarelimab is a fully-human monoclonal antibody that targets two key pathways for the development of pruritus, inflammation and fibrosis through inhibition of OSMR $\beta$ . Chronic pruritic diseases are often characterized by a complex interplay among pruritus, inflammation and fibrosis. The pathogenesis of chronic pruritic diseases involves interlocking positive feedback loops in which pruritus causes scratch, and scratch causes reactive inflammation through mechanical disruption of the skin architecture. The decline in skin barrier function and resulting bacterial colonization or infection ultimately increase extracellular matrix formation and collagen deposition, leading to fibrosis. Fibrosis then begets more pruritus through disruption and dysregulation of sensory nerve fiber expression.

Current therapies target only one or two aspects of this complex pathophysiology and are inevitably limited in their effectiveness. Targeting only one pathway may address a single aspect of the symptomatology, e.g., pruritus, but not the full spectrum of the pathophysiologic components of the disease. This point is particularly relevant since OSM is upregulated in many chronic inflammatory skin diseases and synergistically interacts with pruritic and inflammatory pathways. Of particular relevance is the central role of OSM in inflammation and barrier function and its autocrine effects on type II OSM receptor in IL-31-dependent epidermal proliferation and remodeling as well as inflammation.

There is a relatively large body of literature linking inflammatory pruritic and inflammatory diseases to both IL-31 and OSM via signaling through OSMR $\beta$ . Vixarelimab has been specifically designed to target both pathways simultaneously and thus vixarelimab may disrupt this pathologic cycle in patients afflicted by prurigo nodularis and atopic dermatitis.

##### *OSMR $\beta$ Axis Identified in Prurigo Nodularis*

In 2019 at the Annual Meeting of the Society for Investigative Dermatology, we presented preclinical data identifying the OSMR $\beta$  axis in prurigo nodularis subjects. Data from our longitudinal observational study in prurigo nodularis, or LOTUS-PN suggest that the OSMR $\beta$  axis (IL-31, OSM, IL-31 receptor alpha (IL-31R $\alpha$ ) and OSMR $\beta$ ) may play a role in the pathogenesis of prurigo nodularis given its prevalent expression in lesional prurigo nodularis. IL-31

messenger ribonucleic acid was expressed in approximately two-thirds of lesional biopsies from prurigo nodularis patients with WI-NRS  $\geq 7$  compared to one-tenth in healthy volunteers. Additionally, lesional biopsies from prurigo nodularis patients contained mononuclear cells expressing OSM, OSMR $\beta$ , IL-31 and IL-31R $\alpha$  protein compared with non-lesional biopsies.

*Phase 2a Clinical Trial in Prurigo Nodularis*

We conducted a Phase 2a randomized, double blind, placebo-controlled clinical trial to evaluate the efficacy, safety, tolerability, PK and immunogenicity of vixarelimab administered SC in subjects with moderate-to-severe prurigo nodularis experiencing moderate-to-severe pruritus. The trial enrolled and treated 49 patients with moderate-to-severe prurigo nodularis (mean PN-IGA of 3.4) experiencing moderate-to-severe pruritus (mean WI-NRS score of 8.3). Patients were randomized 1:1 to receive a loading dose of vixarelimab 720 mg (n=23) or placebo (n=26) SC followed by vixarelimab 360 mg or placebo SC weekly. The primary efficacy endpoint was percent change versus baseline in weekly-average WI-NRS at Week 8 (using the last observation carried forward analysis).

*Phase 2a Clinical Trial Results in Prurigo Nodularis*

In April 2020, we reported results from our randomized, double-blind, placebo-controlled Phase 2a trial of vixarelimab in prurigo nodularis. The Phase 2a trial met its primary efficacy endpoint, as there was a statistically significant reduction in weekly-average WI-NRS from baseline at Week 8 in vixarelimab recipients compared to placebo recipients. In addition, the majority of vixarelimab recipients showed a clinically meaningful greater-than-or-equal-to 4-point weekly-average WI-NRS reduction at Week 8 and a statistically significant percentage of vixarelimab recipients achieved a prurigo nodularis-investigator's global assessment, or PN-IGA, score of 0/1 at Week 8 compared to placebo recipients.

- Least squares-mean change from baseline in weekly-average WI-NRS at Week 8 was -50.6% in vixarelimab recipients compared to -29.4% in placebo recipients (mean difference 21.1%; p=0.035).
- Median change from baseline in weekly-average WI-NRS at Week 8 was -69.8% in vixarelimab recipients compared to -36.1% in placebo recipients.
- 30.4% of vixarelimab recipients achieved a PN-IGA score of 0/1 at Week 8 compared to 7.7% of placebo recipients (p=0.032).
- 52.2% of vixarelimab recipients demonstrated a  $\geq 4$ -point reduction in weekly-average WI-NRS at Week 8 compared to 30.8% of placebo recipients (p=0.109).

In this Phase 2a trial, vixarelimab was well-tolerated by all subjects and no dose-limiting adverse experiences were observed. There were no SAEs or atopic dermatitis flares.

*Phase 2b Clinical Trial in Prurigo Nodularis*

In December 2020, we announced the commencement of dosing in the Phase 2b clinical trial of vixarelimab in prurigo nodularis. The Phase 2b trial is a randomized, double-blind, placebo-controlled study designed to investigate the efficacy, safety, and pharmacokinetics of vixarelimab in patients with prurigo nodularis. The trial is expected to enroll approximately 180 patients experiencing severe pruritus. Patients will be randomized 1:1:1:1 to receive vixarelimab 540 mg, 360 mg, 120 mg, or placebo as a once-monthly SC injection. The primary efficacy endpoint is the percent change from baseline in the weekly-average WI-NRS at Week 16. Key secondary endpoints include the proportion of patients achieving greater-than-or-equal-to 4-point weekly-average WI-NRS reduction at Week 16 and the proportion of patients achieving a 0/1 score (clear/almost clear) on the PN-IGA at Week 16.

**KPL-404**

## Overview

KPL-404 is a humanized monoclonal antibody that is designed to inhibit the CD40-CD40L interaction, a key T-cell co-stimulatory signal critical for B-cell maturation and immunoglobulin class switching. Since September 2017, we have had a license to conduct research and development on KPL-404 from Primatope, the company that owned or controlled the intellectual property related to KPL-404 and, in March 2019, we acquired the company. In connection with our acquisition of Primatope, we acquired an exclusive world-wide license with Beth Israel Deaconess Medical Center for certain patent applications and patents related to KPL-404.

## Mechanism of Action and External Clinical Proof of Concept

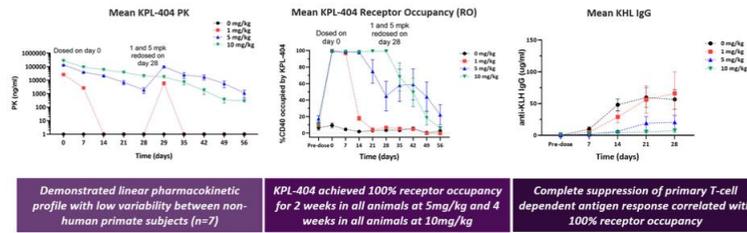
KPL-404 is designed to block the CD40/CD40L interaction by binding to and inhibiting signaling through the CD40 receptor. CD40 is a member of the Tumor Necrosis Factor Receptor superfamily which is constitutively or inducibly expressed on the surface of a variety of immune and non-immune cell types including B cells, macrophages, dendritic cells, microglia, endothelial cells, epithelial cells, and keratinocytes and can also be upregulated on other cell types in the context of autoimmune disease. Interactions between B cell-expressed CD40 and its binding partner, CD40L, mainly expressed on activated CD4+ T cells, play a critical role in promoting germinal center formation and the production of class-switched antibodies. The role of CD40 in B cells has been extensively characterized and has been shown to be essential for productive primary and secondary humoral immune responses to T dependent antigens. External clinical data that point to the broad potential power of the mechanism has been established in RA, systemic lupus erythematosus, primary Sjogren's syndrome, Graves' disease and prevention of kidney transplant rejection. Ongoing Phase 2 trials from competitors implicate additional indications for potential development, including type 1 diabetes, inflammatory bowel disease, prevention of liver transplant rejection, hidradenitis suppurativa, lupus nephritis and multiple sclerosis.

## Our Solution

KPL-404 inhibits the signaling of CD40 and CD40L with low-single digit nanomolar affinity *in vitro*. The presentation of KPL-404 is as a high-concentration, liquid formulation potentially suitable for SC administration at doses of up to 5mg/kg, which we believe may, allow for a higher delivered dose in one SC injection than all other competitors who are mainly limited to high dose IV formulations or SC formulations. We believe high-dose IV and SC formulations do not fully antagonize signaling as evidenced by the generation of anti-drug antibodies ever at maximum delivered dose levels.

## Preclinical Development

In preclinical development, KPL-404 has been observed to have a favorable pharmacokinetic and toxicology profile and has shown activity in multiple non-human primate models of organ transplant rejection, as well as in multiple TDAR models. The data in the graphs below show in a non-human primate TDAR model that KPL-404 had linear pharmacokinetics with low variability which translated into complete suppression of antibody responses to a novel antigen (KLH) at drug levels achieving 100% receptor occupancy.



**Phase 1 Program**

We are conducting a Phase 1 trial of KPL-404. The Phase 1 trial is a randomized, double-blind, placebo-controlled, single-ascending-dose, first-in-human study that is divided into two parts: a single dose of KPL-404 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg, 3 mg/kg or 10 mg/kg IV and a single dose of KPL-404 1 mg/kg or 5 mg/kg SC. The primary objective is to assess the safety and tolerability of KPL-404. Secondary endpoints include pharmacokinetics, CD40 receptor occupancy, the immune response to the novel test antigen KLH in clinically relevant dose cohorts, and the anti-drug antibody response.

In November 2020 we announced preliminary data from the Phase 1 clinical trial. All dose escalations occurred as per protocol with no dose limiting safety findings. All 6 subjects dosed with KPL-404 3 mg/kg IV showed full receptor occupancy through Day 29, which corresponded with complete suppression of the TDAR to KLH through Day 29. Consistent dose relatedness was shown in the lower dose level cohorts, including 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg IV and 1 mg/kg SC. Data collection for the higher dose level cohorts, 10 mg/kg IV and 5 mg/kg SC, is ongoing.

We believe the data support subsequent study in patients, including potential IV or SC monthly administration. We expect final data and safety follow-up from all cohorts in the first half of 2021.

**Discovery Activities**

We conduct internal discovery activities directed toward wholly owned molecules for the treatment of debilitating disease targets where we believe there to be a strong mechanistic rationale and potential for clear differentiation from existing approved agents or those in development.

**License and Acquisition Agreements**

**License Agreement with Regeneron**

In September 2017, we entered into a license agreement with Regeneron, or the Regeneron Agreement. Pursuant to the Regeneron Agreement, Regeneron granted us an exclusive license under certain intellectual property rights controlled by Regeneron to develop and commercialize rilonacept worldwide, aside from Israel, Egypt, Turkey and select countries in the Middle East and northern Africa, which we refer to collectively as the excluded territory, or the Excluded Territory. In the United States and Japan, our license is initially for all indications other than those involving local administration to the eye or ear, oncology, deficiency of the interleukin-1 receptor antagonist, or DIRA, and CAPS. If we are successful in receiving marketing approval for rilonacept in the United States for a new indication, the scope of the license granted to us will automatically expand to include DIRA and CAPS in the United States and Japan, and we will assume the sales and distribution of rilonacept in these additional indications. Outside the United States and Japan, our license is for all indications other than local application to the eye or ear, oncology, DIRA, CAPS and certain periodic fever syndromes set forth in the Regeneron Agreement, collectively the Excluded Indications. Under the Regeneron Agreement, we are obligated to use commercially reasonable efforts to develop and commercialize

rilonacept outside of the excluded indications, or the Excluded Indications, in our territory. Upon receiving positive data in a Phase 3 clinical trial, Regeneron transferred the biologics license application, or BLA, for rilonacept to us.

Under the Regeneron Agreement, we made an upfront payment of \$5.0 million. In addition, we made a \$7.5 million payment in the fourth quarter of 2020 in connection with the achievement of a specified regulatory milestone event. We are obligated to make a regulatory milestone payment of \$20.0 million, which may be met in the first quarter of 2021. If we are successful in receiving marketing approval for rilonacept in the United States for a new indication, such as recurrent pericarditis, we will assume the sales and distribution of rilonacept in DIRA and CAPS. Thereafter, we have agreed to evenly split profits on our sales of rilonacept with Regeneron after deducting certain commercialization expenses subject to specified limits.

Regeneron has a right of first negotiation over our engagement of third parties to support our promotional activities in excess of a specified level and over the assignment or sale of our rights to any product we develop under the Regeneron Agreement to a third-party. Furthermore, under certain circumstances, we will need Regeneron's prior consent to assign our rights under the Regeneron Agreement.

The Regeneron Agreement will expire on the date on which we, our affiliates or sublicensees are no longer developing or commercializing any product containing rilonacept. We may terminate the agreement for convenience at any time after the date that is eighteen months after the effective date of the agreement with 180 days' written notice or one year's written notice if we terminate the agreement following U.S. marketing approval of a rilonacept product developed by us. We may also terminate with three months' written notice if we reasonably determine that rilonacept is unsafe in the indications we are pursuing. Regeneron may terminate the agreement if there is a consecutive twelve month period during which we do not conduct any material development or commercialization activities or we do not grant a sublicense to a third-party to do so, or if we challenge Regeneron's patent rights in any country in our territory. Either party may terminate the agreement in the event of a material breach by the other party that remains uncured for 90 days (or 30 days for payment-related breaches), or by either party due to the insolvency or bankruptcy of the other party.

We have also entered into a clinical supply agreement with Regeneron, or the Supply Agreement. Pursuant to the Supply Agreement, Regeneron has the exclusive right to manufacture and supply all of our requirements of rilonacept for clinical development. If Regeneron determines to discontinue the supply of rilonacept to us, it must use its reasonable efforts to transfer all relevant documentation, materials and technology necessary for the manufacture of rilonacept to us or our designee. The Supply Agreement terminates upon the termination of the Regeneron Agreement or the transfer of technology related to the bulk manufacture of rilonacept.

#### ***License Agreement with MedImmune***

In December 2017, we entered into a license agreement with MedImmune, or the MedImmune Agreement. Pursuant to the MedImmune Agreement, MedImmune granted us an exclusive, worldwide license under certain intellectual property rights controlled by MedImmune to make, use, develop and commercialize mavrilimumab and any other product containing an antibody to the GM-CSF receptor alpha that is covered by certain MedImmune patent rights for all indications. We also acquired non-exclusive licenses to other MedImmune technology for use in exploiting licensed products. We may sublicense these rights subject to consent of MedImmune and any applicable licensors of rights under which we are licensed. We also acquired reference rights to relevant manufacturing and regulatory documents, and existing inventory of mavrilimumab drug substance. We must use commercially reasonable efforts to develop and commercialize the licensed products.

Under the MedImmune Agreement, we made an upfront payment of \$8.0 million. In addition, we made a \$5 million pass-through payment and a \$10 million milestone payment in year ended December 31, 2019 related to the achievement of specified clinical milestone events achieved during the year ended December 31, 2018. We are also obligated to make future clinical, regulatory and initial sales milestone payments of up to \$57.5 million in the aggregate for the first two indications. In addition, we are also obligated to make future clinical and regulatory milestone payments of up to \$15.0 million in the aggregate for each subsequent indication. In July 2020, we entered into an amendment to the MedImmune Agreement to establish a new coronavirus field and defer the payment of certain development and regulatory milestones as applied to the new coronavirus field. We are obligated to make milestone payments to

MedImmune of up to \$85.0 million upon the achievement of annual net sales thresholds up to, but excluding, \$1.0 billion in annual net sales as well as additional milestone payments aggregating up to \$1.1 billion upon the achievement of additional annual net sales thresholds starting at \$1.0 billion and higher. Commencing on the first commercial sale of licensed products, we are obligated to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the low double-digit percentages and ending at twenty percent. We must pay such royalties on a product-by-product and country-by-country basis until the latest to occur of the expiration of licensed patents, the expiration of regulatory exclusivity or the tenth anniversary of first commercial sale of such product in such country.

In countries where licensed patents have issued, the statutory expiration date is 2027, not including any patent term extensions or adjustments. While the current expected patent expiration dates are known in countries where licensed patents have issued, these expiration dates are subject to significant uncertainty. For example, the patents may be challenged, and accordingly, the relevant expiration dates could be shortened. In addition, as we continue to file and prosecute new patent applications related to mavrilimumab, the granting of such pending applications or future patent applications could extend the relevant statutory expiration dates beyond 2027. The expiration date of regulatory exclusivity is determined on a country-by-country basis if the applicable product is approved in such country and if any applicable regulatory exclusivity applies and is granted. The actual expiration date of any such regulatory exclusivity, however, is subject to significant uncertainty. For instance, the applicable regulatory exclusivity period is often triggered by the date a product candidate obtains regulatory approval, and we cannot predict with any certainty whether and if so, when, the applicable product would receive regulatory approval in any given jurisdiction. Furthermore, the type, scope and duration of such exclusivities will vary on a country-by-country basis depending on the jurisdictions in which a product candidate is approved and the particular regulatory exclusivity for which the product is eligible as of the time of approval. For example, in the United States, a reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, which means that the FDA cannot make effective the approval of a biosimilar product that references the biologic product until 12 years from the date on which the reference product was first licensed. In the EEA, new products authorized for marketing (i.e. reference products) may qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The two-year period may be extended to three years if during the first eight years the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Furthermore, if a product candidate that has received orphan designation is subsequently approved for the disease or condition for which it has such designation, the product may be entitled to orphan drug exclusivity, which generally grants seven years of market exclusivity in the United States and up to 10 years of market exclusivity in the EEA, and such period may run contemporaneously with the other exclusivities that may apply. In the EEA, the ten-year period of market exclusivity is extended by two years for drugs that also have complied with an agreed pediatric investigation plan, or PIP, granted at the time of review of the orphan drug designation. In the United States, an additional six-month period of pediatric exclusivity may be available as an extension to any existing non-patent regulatory exclusivity period if the sponsor has conducted and submitted pediatric studies in response to a written request from the FDA. Additionally, our eligibility for regulatory exclusivity may depend in part on the indications for which we seek regulatory approval of our product candidates, which may depend on the data we receive from our clinical studies, and accordingly, may change over time, and the laws and regulations governing regulatory exclusivity may change in various jurisdictions as the political focus on drug exclusivity increases. For risk related to regulatory exclusivity matters, see "Risk Factors—Risks related to product development and regulatory approval."

The MedImmune Agreement will remain in effect until the expiration of the royalty term in all countries for all licensed products. The MedImmune Agreement may be terminated earlier at any time by us with at least 90 days' prior notice, by either party in the event of material breach by the other party that remains uncured for 90 days, by either party for insolvency or bankruptcy of the other party, or immediately by MedImmune if we challenge the licensed patents.

#### ***Biogen Asset Purchase Agreement***

In September 2016, we completed the acquisition of certain assets of Biogen pursuant to an asset purchase agreement, or the Biogen Agreement. Pursuant to the Biogen Agreement, we acquired all of Biogen's right, title and interest in and to certain assets used in or relating to vixarelimab and other antibodies covered by certain patent rights, together the Acquired Assets, including patents and other intellectual property rights, clinical data, certain contracts,

know-how and inventory, which we refer to collectively as the acquired assets, or the Acquired Assets. In addition, Biogen granted us a non-exclusive, sublicensable, worldwide license to certain background patent rights related to the vixarelimab program. Under the Biogen Agreement, we are obligated to use commercially reasonable efforts to develop and commercialize the Acquired Assets.

Under the Biogen Agreement, we made an upfront payment of \$11.5 million and a technology transfer payment of \$0.5 million to Biogen. In addition, we made a milestone payment of \$4.0 million during the year ended December 31, 2017, associated with the achievement of a specified clinical milestone event. We made milestone payments of \$10.3 million during the year ended December 31, 2019, primarily associated with the achievement of a specified clinical milestone event. We are also obligated to make future milestone payments for each antibody product that includes the Acquired Assets, or an Antibody Product, of up to \$315.0 million in the aggregate upon the achievement of specified milestones. These milestone payments relate to multiple indications for an Antibody Product, and are comprised of up to \$165.0 million in the aggregate upon achievement of specified clinical and regulatory milestone events and \$150.0 million in the aggregate upon the achievement of specified annual net sales thresholds. Commencing on the first commercial sale of an Antibody Product, we are obligated to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the high single-digit percentages and ending below the teens. We must pay such royalties on a product-by-product and country-by-country basis until the latest to occur of the expiration of patents that cover an Antibody Product, the expiration of regulatory exclusivity or the tenth anniversary of first commercial sale of such product in such country. We have also agreed to pay certain obligations under third-party contracts retained by Biogen that relate to vixarelimab.

In countries where patents covering Antibody Products have issued, the statutory expiration date is 2034, not including any patent term extensions or adjustments. While the current expected patent expiration dates are known in countries where licensed patents have issued, these expiration dates are subject to significant uncertainty. For example, the patents may be challenged, and accordingly, the relevant expiration dates could be shortened. In addition, as we continue to file and prosecute new patent applications related to Antibody Products, the granting of such pending applications or future patent applications could extend the relevant statutory expiration dates beyond 2034. The expiration date of regulatory exclusivity is determined on a country-by-country basis if the applicable product is approved in such country and if any applicable regulatory exclusivity applies and is granted. The actual expiration date of any such regulatory exclusivity, however, is subject to significant uncertainty. For instance, the applicable regulatory exclusivity period is often triggered by the date a product candidate obtains regulatory approval, and we cannot predict with any certainty whether and if so, when, the applicable product would receive regulatory approval in any given jurisdiction. Furthermore, the type, scope and duration of such exclusivities will vary on a country-by-country basis depending on the jurisdictions in which a product candidate is approved and the particular regulatory exclusivity for which the product is eligible as of the time of approval. For example, in the United States, a reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, which means that the FDA cannot make effective the approval of a biosimilar product that references the biologic product until 12 years from the date on which the reference product was first licensed. In the EEA, new products authorized (i.e. reference products) for marketing may qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The two-year period may be extended to three years if the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Furthermore, if a product candidate that has received orphan drug designation is subsequently approved for the disease or condition for which it has such designation, the product may be entitled to orphan drug exclusivity, which generally grants seven years of market exclusivity in the United States and up to 10 years of market exclusivity in the EEA, and such period may run contemporaneously with the other exclusivities that may apply. In the EEA, the ten-year period of market exclusivity is extended by two years for drugs that also have complied with an agreed pediatric investigation plan, or PIP, granted at the time of review of the orphan drug designation. In the United States, an additional six-month period of pediatric exclusivity may be available as an extension to any existing non-patent regulatory exclusivity period if the sponsor has conducted and submitted pediatric studies in response to a written request from the FDA. Additionally, our eligibility for regulatory exclusivity may depend in part on the indications for which we seek regulatory approval of our product candidates, which may depend on the data we receive from our clinical studies, and accordingly, may change over time, and the laws and regulations governing regulatory exclusivity may change in various jurisdictions as the political focus

on drug exclusivity increases. For risk related to regulatory exclusivity matters, see “Risk Factors—Risks related to product development and regulatory approval.”

Under the Biogen Agreement, Biogen has a time-limited right of first negotiation to purchase the assets we acquired from Biogen or obtain a license to exploit Antibody Products, in each case, in the event we decide to sell the acquired assets, including through the sale of our company, or out-license the rights to the Antibody Products.

The Biogen Agreement will remain in effect until expiration of all payment obligations in all countries related to the last antibody product subject to the Biogen Agreement. The Biogen Agreement may be terminated by us with 90 days' prior notice, by either party in the event of a material breach by the other party that remains uncured for 90 days (or 30 days for payment-related breaches) or by both parties upon mutual consent. In the event of a termination, the Acquired Assets, including certain licenses and rights related thereto, will revert to Biogen, and, upon written request by Biogen, we are required to grant to Biogen an exclusive, worldwide, sub-licensable license to certain of our intellectual property related to the Acquired Assets, including know-how and patent rights.

#### ***Primatope Stock Purchase Option Agreement***

In September 2017, we entered into a stock purchase option agreement, or the Primatope Agreement, with Primatope, pursuant to which we were granted a license to certain intellectual property rights owned or controlled by Primatope to research, develop, and manufacture the preclinical antibody, KPL-404, and an exclusive call option through April 2018 to purchase all of the outstanding securities of Primatope with up to three extensions periods through mid-January 2019. Upon execution of the agreement, we made \$0.5 million in upfront payments for the initial option period and we made payments totaling \$0.8 million for extending option period through mid-January 2019. During the option periods, we conducted research and preclinical work to assess the viability of the program.

In January 2019, we exercised the call option and in March 2019, we acquired all of the outstanding securities of Primatope, or Primatope Acquisition. The aggregate amount of upfront and contingent payments we paid to the former Primatope shareholders to acquire Primatope was comprised of (1) \$15.0 million paid at closing in March 2019, comprised of upfront consideration of \$10.0 million and milestone payments of \$5.0 million which had been achieved as of the closing date, and (2) \$3.0 million paid in June 2019 for the final milestone payment, which was achieved following the closing during the six months ended June 30, 2019, each paid in a combination of cash and our Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the Primatope Agreement. We released the escrow and issued Class A common shares that were held back at closing in June 2020 and issued the Class A common shares that were held back at the final milestone payment in September 2020.

As a result of the Primatope Acquisition, we acquired the rights to an exclusive license to certain intellectual property rights controlled by Beth Israel Deaconess Medical Center, Inc., or BIDMC, to make, use, develop and commercialize KPL-404 under the BIDMC license agreement, or BIDMC Agreement. Under the BIDMC Agreement, we are solely responsible for all development, regulatory and commercial activities and costs. We are also responsible for costs related to filing, prosecuting and maintaining the licensed patent rights. Under the BIDMC Agreement, we are obligated to pay an insignificant annual maintenance fee as well as clinical and regulatory milestone payments of up to an aggregate of \$1.2 million to BIDMC. We are also obligated to pay a low single-digit royalty on annual net sales of products licensed under the agreement, if approved.

#### **Manufacturing**

We do not currently own or operate any late stage manufacturing facilities. Although we have built a development and manufacturing facility to produce drug substance to support certain research, preclinical and other clinical development for our product candidates, we rely, and expect to continue to rely, on third parties for the manufacture of our late-stage product candidates and certain of our early-stage product candidates for the majority of our clinical development efforts, as well as for the potential commercial manufacture of our product candidates, if approved. We have also entered into a Supply Agreement with Regeneron pursuant to which Regeneron has the exclusive right to manufacture and supply all of our requirements of rilonacept for clinical development. If Regeneron determines to discontinue the supply of rilonacept to us, it must use its reasonable efforts to transfer all relevant documentation,

materials and technology necessary for the manufacture of riloncept to us or our designee. The Supply Agreement terminates upon the termination of the Regeneron Agreement or the transfer of technology related to the bulk manufacture of riloncept. Regeneron, in turn, relies upon a third-party CMO to conduct fill/finish operations for riloncept. Under certain circumstances, we or Regeneron could initiate a technology transfer to either us or another CMO to manufacture riloncept.

We also have entered into an agreement with a CMO to produce mavrilimumab beyond our current inventory and have engaged CMOs to manufacture vixarelimab drug substance and drug product currently in use in our on-going clinical trials. We intend to use CMOs for development and scale-up work for any future clinical trials and eventual commercialization of mavrilimumab and vixarelimab, if approved.

We have also engaged CMOs to produce our clinical drug substance for certain preclinical studies, but we intend to produce our preclinical product candidates for Phase 1 and Phase 2 studies in our own early stage manufacturing facilities. We plan to continue to use CMOs to produce the corresponding drug product clinical material. Longer-term, we expect to use CMOs to produce these product candidates for later-phase clinical studies and eventual commercialization, if approved.

We require our CMOs to conduct manufacturing activities in compliance with current good manufacturing practice, or cGMP, requirements. We have assembled a team of experienced employees and consultants to provide the necessary technical, quality and regulatory oversight of our CMOs. We currently perform process development internally but are reliant on CMOs for late stage clinical manufacturing, process qualification and validation and commercial supply. We anticipate that these CMOs will have the capacity to support both clinical supply and commercial-scale production, but we do not have any formal agreements at this time with any of these CMOs to cover commercial production. We also may elect to pursue additional CMOs for manufacturing supplies of drug substance and finished drug product in the future.

#### **Commercial Operations**

Our team is experienced in commercial leadership and we intend to expand our capabilities in parallel with the development path of our product candidates. If the FDA approves riloncept for recurrent pericarditis, we intend to market and commercialize riloncept in the United States and, in anticipation of a potential commercial launch, we are establishing our own a specialty cardiology salesforce that will be complemented by our current medical affairs and payor and patient services teams as well as an efficient digital marketing effort by our current marketing team targeting a subset of cardiologists currently treating pericarditis. For our other product candidates, we intend to establish commercialization strategies for each as we approach potential marketing approval and, due to the specialization among physicians treating the indications we are targeting, we expect to be able leverage our then-existing medical affairs, payor and patient services, and marketing organizations.

#### **Competition**

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face potential competition from many different sources, including pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize, including riloncept, mavrilimumab, vixarelimab and KPL-404, and any other product candidates that we may develop, may compete with existing products and new products that may become available in the future.

Our competitors may have significantly greater financial resources, established presence in the market, expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific, sales, marketing and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of rilonacept, mavrilimumab, vixarelimab and KPL-404 and any other product candidates that we develop, if approved, are likely to be our product candidates, including their efficacy, safety, convenience, price, the level of generic competition and the availability of reimbursement from government and other third-party payors. Our commercial opportunity for any of our product candidates could be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products.

We are aware of the following products currently marketed or in clinical development for the treatment of the diseases that we are initially targeting:

*Rilonacept*

Recurrent Pericarditis: We are not aware of any approved therapies in recurrent pericarditis, but are aware of one program (RPH-104) being developed by R-Pharm International, which inhibits IL-1 $\beta$ /IL-1F2-induced signaling and is in Phase 2 development in recurrent pericarditis subjects in Russia.

Dual IL-1 $\alpha$  and IL-1 $\beta$  Inhibition: Anakinra (KINERET), marketed by Swedish Orphan Biovitrum AB, is currently approved for use in Rheumatoid Arthritis, CAPS and DIRA. We are not aware of any active, industry sponsored development programs using anakinra seeking a label for recurrent pericarditis.

IL-1 $\beta$  Inhibition Alone: Canakinumab (ILARIS), marketed by Novartis Pharmaceuticals Corporation, is currently approved for use in CAPS, Tumor Necrosis Factor Receptor Associated Periodic Syndrome (TRAPS), Hyperimmunoglobulin D Syndrome (HIDS), Mevalonate Kinase Deficiency (MKD) and Familial Mediterranean Fever (FMF), Still's Disease and Systemic Juvenile Idiopathic Arthritis (SJIA). We are not aware of any active, industry sponsored development programs using canakinumab seeking a label for recurrent pericarditis. Additionally, Novartis is also developing gevokizumab for use in oncologic indications.

IL-1 $\alpha$  Inhibition Alone: There are other therapies which modulate IL-1 $\alpha$  in preclinical and clinical development for diseases other than recurrent pericarditis from Johnson & Johnson and XBIOTECH USA, INC. We are not aware of any active, industry sponsored development programs for these programs seeking a label for recurrent pericarditis.

*Mavrilimumab*

Giant Cell Arteritis: Tocilizumab (ACTEMRA), produced by Hoffmann—La Roche AG, or Roche, and Chugai Pharmaceutical Co., Ltd., is an IL-6 inhibitor that is approved by the FDA for the treatment of GCA on top of a concomitant corticosteroid taper. In addition, Eli Lilly and Company AbbVie, Inc. are conducting clinical trials for oral janus kinase inhibitors; Novartis International AG, is recruiting a trial with their IL-17 antagonist secukinumab (Cosentyx) and Janssen Global Services, LLC is in active development with their IL-23 antagonist guselkumab (Tremfya).

COVID-19: We are also pursuing mavrilimumab development for the treatment of COVID-19 pneumonia and hyperinflammation. There are currently hundreds of active, industry sponsored clinical trials testing many different mechanisms of action for the treatment of COVID-19 related therapeutic areas in addition to the approved vaccines, and the many other clinical trials testing vaccines, for the prevention of COVID-19.

GM-CSF Antagonists: There are also five other programs in clinical development outside of GCA in various indications that modulate GM-CSF signaling from GlaxoSmithKline plc, or GSK (otilimab), Izana Bioscience Ltd. (namilumab), I-MAB Biopharma (plonmarlimab), Roivant Sciences Ltd. (gimsilumab) and Humanigen, Inc. (lenzilumab). All of these competitive programs target the GM-CSF ligand itself versus targeting the GM-CSF receptor.

*Vixarelimab*

We are not aware of any therapies currently approved by the FDA for the treatment of prurigo nodularis and we are also not aware of any programs in preclinical or clinical development targeting OSMR $\beta$  antagonism.

Prurigo Nodularis: Trevi Therapeutics, Inc., is conducting a Phase 2/3 study with their k-opioid antagonist, nalbuphine ER; Galderma SA is conducting a Phase 3 study with their IL-31 specific antagonist nemolizumab; and, Regeneron / Sanofi SA are conducting a Phase 3 study with their IL-4 antagonist dupilumab (Dupixent).

*KPL-404*

There are various programs in clinical development antagonizing the CD40 / CD40L signaling pathway that can be distinguished by the potential to be administered subcutaneously and those programs, that due to their high required doses or short plasma half-lives, are currently being studied as intravenous only:

Intravenous Administration Only: Astellas Pharma Inc. is developing bleelumab (anti-CD40R); Viela Bio (currently in the process of being acquired by Horizon Therapeutics plc) is developing the Tn3 fusion protein, VIB4920 (anti-CD40L); Biogen, Inc. and UCB S.A. are developing dapirolizumab pegol (anti-CD40L); and, Eledon Pharmaceuticals, Inc. (formerly Novus, and also formerly Anelixis) are developing AT-1501 (anti-CD40L).

Potential Subcutaneous Administration: Novartis A.G. is developing CFZ-533, or iscalimab (anti-CD40), Sanofi S.A./ImmuNext Inc. are developing SAR441344 (anti-CD40L), and Abbvie, Inc. and Boehringer Ingelheim International GmbH are developing ravagalimab (anti-CD40).

**Intellectual Property**

Our success depends in part on our ability to obtain and maintain proprietary protection for our drug candidates, manufacturing and process discoveries, and other know how, to operate without infringing the proprietary rights of others, and to prevent others from infringing our proprietary rights. We plan to protect our proprietary position using a variety of methods, which include pursuing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements, including compositions of matter, drug product formulations, methods of use and methods of manufacture, that are important to the development and implementation of our business. For example, we or our licensors have or are pursuing patents covering the composition of matter for each of our product candidates and we generally pursue patent protection covering methods of use for each clinical program. We also rely on trade secrets, know how, continuing technological innovation and potential in licensing opportunities to develop and maintain our proprietary position.

*Rilonacept*

We have a field specific exclusive license under the Regeneron Agreement to granted patents and pending applications in the United States and numerous other jurisdictions relating to rilonacept. As of December 31, 2019, the patent rights in licensed under the Regeneron Agreement relating to our program include one granted patent in the United States and 47 patents granted in other jurisdictions, including Canada, Australia, Brazil and selected countries in Europe and Asia. In addition, the patent rights in licensed under the Regeneron Agreement relating to our program include patent applications that are pending in the United States. A U.S. patent covering rilonacept as a composition of matter has a statutory expiration date in 2019, not including patent term adjustment, and relevant counterparts outside of the United States are expected to expire between 2019 and 2023, in each case, not including any patent term extensions. The FDA granted orphan drug designation for rilonacept for the treatment of pericarditis, which includes recurrent pericarditis. If we are successful in obtaining regulatory approval of rilonacept for the treatment of recurrent pericarditis, we would rely on orphan exclusivity, which generally grants seven years of marketing exclusivity in the United States and, if orphan designation is similarly granted in the European Union, 10 years of marketing exclusivity in Europe. See “—License agreement with Regeneron” above for additional information on our rights under the Regeneron Agreement.

*Mavrilimumab*

We have an exclusive license under the MedImmune Agreement to granted patents and pending patent applications in the United States and numerous other jurisdictions relating to mavrilimumab. These patents and patent applications cover mavrilimumab as a composition of matter and its use. As of December 31, 2020, the patent rights in licensed under the MedImmune Agreement relating to our program include three granted patents in the United States and 106 patents granted in other jurisdictions, including Canada, Australia and selected countries in Europe and Asia. In addition, the patent rights in licensed under the MedImmune Agreement relating to our program include patent applications that are pending in the United States, Europe, Canada, and selected countries in Asia and Latin America. The composition of matter patents for mavrilimumab generally have statutory expiration dates in 2027, although the term of some U.S. patents may be longer due to patent term adjustment to compensate for delays during the patent prosecution process. Patent term extension could extend the expiration date of one patent in the United States and patents in certain other jurisdictions, each in accordance with applicable law. There can be no assurances that patents will issue from any pending patent applications. See “—License agreement with MedImmune” above for additional information on our rights under the MedImmune Agreement.

*Vixarelimab*

We own, via our acquisition of certain assets from Biogen, granted patents and pending patent applications in the United States and numerous other jurisdictions relating to vixarelimab. These patents and patent applications cover vixarelimab as a composition of matter and its use. As of December 31, 2020, the patent rights acquired from Biogen include four patents granted in the United States and 38 patents granted in other jurisdictions, including Australia, Mexico, South Africa and selected countries in Europe and Asia. In addition, the patent rights acquired from Biogen include patent applications pending in the United States, Europe, Canada, and selected countries in Asia and Latin America. The issued composition of matter patents for vixarelimab have statutory expiration dates in 2034. Patent term extension could extend the expiration date of one patent in the United States and patents in certain other jurisdictions, each in accordance with applicable law. There can be no assurance that patents will issue from any of our pending patent applications. See “—Biogen asset purchase agreement” above for additional information on our rights under the Biogen Agreement.

*KPL-404*

We own, via our acquisition of Primatope, granted patents and pending patent applications in the United States and numerous other jurisdictions relating to KPL 404. We also have an exclusive license with Beth Israel Deaconess Medical Center to granted patents and pending patent applications in the United States and numerous other jurisdictions relating to KPL-404. These patents and patent applications cover KPL 404 as a composition of matter and its use. As of December 31, 2020, the patent rights acquired from Primatope include three patents granted in the United States. In addition, the patent rights acquired from Primatope include patent applications pending in the United States, Europe, Canada, and selected countries in Asia. The issued composition of matter patents have statutory expiration dates in 2036. As of December 31, 2020, the patent rights licensed from Beth Israel Deaconess Medical Center include two patents granted in the United States and 30 patents granted in other jurisdictions, including Australia and selected countries in Europe and Asia. In addition, the patent rights licensed from Beth Israel Deaconess Medical Center include patent applications pending in the United States, Europe, Canada, and selected countries in Asia. The issued composition of matter patents licensed from Beth Israel Deaconess Medical Center have statutory expiration dates in 2032, not including any patent term extensions or adjustments. Patent term extension could extend the expiration date of one patent in the United States and patents in certain other jurisdictions, each in accordance with applicable law. There can be no assurance that patents will issue from any of our pending patent applications.

The term of individual patents depends upon the legal term for patents in the countries in which they are obtained. In most countries, including the United States, the patent term is 20 years from the earliest filing date of a non provisional patent application. In the United States, a patent’s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO, in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier expiring patent. In certain countries, the term of a patent that covers a drug product may also be eligible for patent term extension when regulatory approval is granted, provided the legal requirements are met. In the future, if and when our drug candidates receive approval by the FDA or

comparable regulatory authorities in other jurisdictions, provided the legal requirements are met, we expect to apply for patent term extensions on issued patents covering those drugs, depending upon the length of the clinical trials for each drug and other factors. There can be no assurance that any of our pending patent applications will issue or that we will benefit from any patent term extension or favorable adjustment to the term of any of our patents.

#### **Government Regulation**

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

#### ***U.S. Government Regulation of Biological Products***

In the United States, the FDA regulates biologics under the Federal Food, Drug, and Cosmetic Act, or FDCA, and the Public Health Service Act, or PHSA, and their implementing regulations. Products are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending biologic license applications, or BLAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits or civil or criminal penalties.

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

- Completion of extensive preclinical studies and tests in accordance with applicable regulations, including Good Laboratory Practice, or GLP, regulations and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- Submission to FDA of an IND which must become effective before human clinical trials may begin;
- Approval by an independent institutional review board, or IRB, or ethics committee at each clinical trial site before each trial may be initiated;
- Performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, good clinical practices, or GCPs, and other clinical-trial related regulations to evaluate the safety and efficacy of the investigational product for each proposed indication;
- Submission to FDA of a BLA for marketing approval that includes substantive evidence of safety, purity, and potency from results of preclinical testing and clinical trials;
- A determination by FDA within 60 days of its receipt of a BLA to accept the filing for review;
- Satisfactory completion of one or more FDA pre-approval inspections of the manufacturing facility or facilities where the biologic will be produced to assess compliance with cGMPs to assure that the facilities, methods and controls used in product manufacture are adequate to preserve the biologic's identity, strength, quality and purity;

- Potential FDA audit of the preclinical or clinical trial sites that generated the data in support of the BLA;
- Payment of user fees for FDA review of the BLA; and
- FDA review and approval of the BLA, including satisfactory completion of an FDA advisory committee review, if applicable, prior to any commercial marketing or sale of the product in the United States.

***Preclinical Studies and CMC Evaluations***

Before testing any biological product candidate, including our product candidates, in humans, the product candidate must undergo rigorous preclinical testing. The preclinical development stage generally involves laboratory evaluations of the chemistry, formulation and stability of the product candidate, as well as trials to evaluate toxicity in animals, which support subsequent clinical testing. The conduct of the preclinical tests must comply with federal regulations and requirements, including GLP regulations. The sponsor must submit the results of the preclinical studies, together with chemistry manufacturing and controls, or CMC, information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin. Some preclinical 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 CMC issues, preclinical issues, or one or more issues in the proposed clinical trials and places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not necessarily result in the FDA allowing clinical trials to commence. The FDA also may place the IND on partial clinical hold, and a proposed study may only be partially executable, including due to FDA restrictions.

***Clinical Trials***

The clinical stage of development involves the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by, or under control of, the trial sponsor, in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and inclusion/exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent amendments to the protocol, must be submitted to the FDA as part of the IND. Furthermore, each clinical trial must be reviewed and approved by an IRB for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative, and must monitor the clinical trial until completed. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Information about most clinical trials in must be submitted within specific timeframes for publication on the [www.clinicaltrials.gov](http://www.clinicaltrials.gov) website. Information related to the product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. Sponsors are also obligated to disclose the results of certain qualifying clinical trials after completion. Disclosure of the results of these trials can be delayed in some cases for up to two years after the date of completion of the trial. Competitors may use this publicly available information to gain knowledge regarding the progress of product candidates.

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

- Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, side effect tolerability and safety of the drug.

- Phase 2 clinical trials involve studies in disease-affected patients to determine the optimal dose required to produce the desired benefits. At the same time, safety and further pharmacokinetic and pharmacodynamic information is collected, possible adverse effects and safety risks are identified and a preliminary evaluation of efficacy is conducted.
- Phase 3 clinical trials generally involve a larger number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product labeling and approval. These trials may include comparisons with placebo or other comparator treatments. The duration of treatment is often extended to mimic the actual use of a product during marketing.

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

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. The FDA or the sponsor may suspend or terminate a clinical trial at any time or the FDA may impose a clinical hold on other sanctions on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk. Similarly, an IRB can refuse, suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRBs requirements or if the drug has been associated with unexpected serious harm to patients.

Concurrently with clinical trials, companies usually complete additional preclinical studies and must also develop additional information about the physical characteristics of the biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHSA emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

#### ***BLA Review and Approval***

Assuming successful completion of the required clinical testing, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. The BLA must contain proof of safety, purity, potency and efficacy and may include both negative and ambiguous results of preclinical studies and clinical trials as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of the FDA. FDA approval of a BLA must be obtained before a biologic may be marketed in the United States.

In most cases, the submission of a BLA is subject to a substantial application user fee. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, for original BLAs, the FDA has ten months from the filing date in which to complete its initial review of a standard application and respond to the applicant, and six months from the 60-day filing date for an application with priority review. The FDA does not always meet its PDUFA goal dates, and the review process is often significantly extended by FDA requests for additional information or clarification. This review typically takes twelve months from the date the BLA is submitted to the FDA because the FDA has approximately two months to make a "filing" decision.

Before approving a BLA, the FDA will typically conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether the manufacturing processes and facilities comply with cGMPs. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The FDA also may inspect the sponsor and one or more clinical trial sites to assure compliance with GCP requirements and the integrity of the clinical data submitted to the FDA.

Additionally, the FDA may refer applications for novel biologic candidates which present challenges in interpretation of the safety or efficacy data to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will re-analyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. The FDA also may require submission of a Risk Evaluation and Mitigation Strategy, or REMS, plan if it determines that a REMS is necessary to ensure that the benefits of the drug outweigh its risks and to assure the safe use of the biological product. The REMS plan could include medication guides, physician communication plans, assessment plans or elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools. The FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS. The FDA will not approve a BLA without a REMS, if required.

Under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data that are adequate to assess the safety and efficacy of the product candidate for the claimed indications in all relevant pediatric populations and to support dosing and administration for each pediatric population for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The Food and Drug Administration Safety and Innovation Act, or FDASIA, amended the FDCA to require that a sponsor who is planning to submit a marketing application for a product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or iPSP, within sixty days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 clinical trial. The initial iPSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including trial objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the iPSP. A sponsor can submit amendments to an agreed upon initial iPSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials or other clinical development programs.

After the FDA evaluates a BLA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the BLA identified by the FDA. The Complete Response Letter may require additional clinical or other data, additional pivotal Phase 3 clinical trial(s) or other significant and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the re-submitted BLA does not satisfy the criteria for approval.

If a product receives regulatory approval, the approval is limited to the conditions of use (e.g., patient population, indication) described in the label. Further, depending on the specific risk(s) to be addressed, the FDA may require that contraindications, warnings or precautions be included in the product labeling, require that post-approval trials, including Phase 4 clinical trials, be conducted to further assess a product'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 trials or surveillance programs, or new safety findings after market introduction. 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 designation to a drug or biologic product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety, by providing a major contribution to patient care or in instances of drug supply issues. Orphan drug exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval before we do of the same product, as defined by the FDA, for the same indication we are seeking, or if our product candidate is determined to be contained within the scope of the competitor's product for the same indication or disease. If one of our products designated as an orphan drug receives marketing approval for an indication broader than that which is designated, it may not be entitled to orphan drug exclusivity. Orphan drug status in the European Union has similar, but not identical, requirements and benefits.

#### ***Expedited Review and Approval***

The FDA has various programs, including Fast Track designation, Breakthrough Therapy designation, accelerated approval and priority review, which are intended to expedite or simplify the process for the development and FDA review of drugs and biologics 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 and biologics 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. Fast Track designation provides opportunities for more frequent interactions with the FDA review team to expedite development and review of the product. The FDA may also review sections of the BLA for a Fast Track product on a rolling basis before the complete application is submitted, if the sponsor and the FDA agree on a schedule for the submission of the application sections, and the sponsor pays any required user fees upon submission of the first section of the BLA.

Any product submitted to the FDA for approval, including a product with a Fast Track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it is designed to treat a serious condition, and if approved, would provide a significant improvement in safety or effectiveness compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a biologic designated for priority review in an effort to facilitate the review. The FDA endeavors to review original BLAs with priority review designations within six months of the filing date as compared to ten months under its standard review goals.

In addition, a product may be eligible for accelerated approval. Drug and biologics intended to treat serious or life-threatening diseases or conditions may be eligible for accelerated approval upon a determination that the 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 that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials to verify the predicted clinical benefit. A product that receives accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing trials or if such trials fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

In addition, a sponsor can request designation of a product candidate as a "Breakthrough Therapy." A Breakthrough Therapy is defined as a drug or biologic that is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug or biologic 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 designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance. The Breakthrough Therapy designation is a distinct status from both accelerated approval and priority review, which can also be granted to the same drug if relevant criteria are met. If a product is designated as Breakthrough Therapy, the FDA will expedite the development and review of such drug. All requests for Breakthrough Therapy designation will be reviewed within 60 days of receipt, and the FDA will either grant or deny the request.

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. Furthermore, Fast Track designation, Breakthrough Therapy designation, accelerated approval and priority review do not change the standards for approval and may not ultimately expedite the development or approval process.

#### **Post-approval Requirements**

Following approval of a new product, the manufacturer and the approved product are subject to pervasive and continuing regulation by the FDA, including, among other things, monitoring and recordkeeping activities, reporting of adverse experiences with the product, product sampling and distribution restrictions, complying with promotion and advertising requirements, which include restrictions on promoting drugs for unapproved uses or patient populations (i.e., "off-label use") and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. 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. If there are any modifications to the product, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new BLA or BLA supplement, which may require the applicant to develop additional data or conduct additional preclinical studies and clinical trials. The FDA may also place other conditions on approvals including the requirement for a REMS to assure the safe use of the product. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMPs. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. These manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs or biologics are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of conditions that violate these

rules, including failure to conform to cGMPs, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved BLA, including voluntary recall.

Once an approval or clearance of a drug 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 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 other enforcement-related letters or clinical holds on post-approval clinical trials;
- refusal of the FDA to approve pending BLAs or supplements to approved BLAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- injunctions or the imposition of civil or criminal penalties; and
- consent decrees, corporate integrity agreements, debarment, or exclusion from federal healthcare programs; or mandated modification of promotional materials and labeling and the issuance of corrective information.

#### ***Biosimilars and Exclusivity***

An abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product was created by the Biologics Price Competition and Innovation Act of 2009, or BPCIA, as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Affordable Care Act. This amendment to the PHS Act, in part, attempts to minimize duplicative testing. A recent federal district court ruling struck down the Affordable Care Act in its entirety. This decision means numerous reforms enacted as part of the Affordable Care Act, but not specifically related to health insurance, such as the BPCIA, are invalid as well. While the presidential administration and CMS have both stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, if any, and other efforts to repeal and replace the Affordable Care Act will impact the Affordable Care Act and our business. To date, the FDA has approved a number of biosimilars, and numerous biosimilars have been approved in Europe. The FDA has issued several guidance documents outlining its approach to reviewing and approving biosimilars.

Biosimilarity, which requires that the biological product be highly similar to the reference product notwithstanding minor differences in clinically inactive components and that there be no clinically meaningful differences between the product and the reference product in terms of safety, purity and potency, must be shown through analytical studies, animal studies and a clinical trial or trials. Interchangeability requires that a biological product be biosimilar to the reference product and that the product can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biological product without such alternation or switch. Complexities associated with the larger, and often more complex, structure of biological products as compared to small molecule drugs, as well as the processes by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

A reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, and the FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a supplement for the reference product for a subsequent application filed by the same sponsor or manufacturer of the reference product (or licensor, predecessor in interest or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength or for a modification to the structure of the biological product that does not result in a change in safety, purity or potency. Therefore, one must determine whether a new product includes a modification to the structure of a previously licensed product that results in a change in safety, purity or potency to assess whether the licensure of the new product is a first licensure that triggers its own period of exclusivity. Whether a subsequent application, if approved, warrants exclusivity as the "first licensure" of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, recent government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation and meaning of the BPCIA remain subject to significant uncertainty.

#### ***U.S. Patent Term Restoration***

Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments, and similar legislation in the European Union. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension must be based on the first approval for the product, and the extension cannot extend the total patent term beyond fourteen years from approval. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened and our competitors may obtain approval to market competing products sooner.

#### ***European Union Drug Development, Review and Approval***

In the European Union, or EU, our product candidates also may be subject to extensive regulatory requirements. As in the United States, medical products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained whether or not product candidates obtain FDA approval for a pharmaceutical product, we would need to obtain the necessary approvals by the comparable foreign regulatory authorities before we can start clinical trials or marketing of the products in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls.

The EU Clinical Trials Directive 2001/20/EC as well as the Directive 2005/28/EC on good clinical practice as regards investigational drug products for human use, or GCP, and the related national implementing provisions of the individual EU Member States govern the system for the approval of clinical trials in the in the European Economic Area,

or EEA (27 EU Member States plus Iceland, Norway and Liechtenstein). Under this system, before a clinical trial can be initiated, an applicant must obtain approval in each EEA Member State in which the clinical trial is to be conducted by two separate entities: the national competent authority and one or more ethics committees much like the FDA and the IRB, respectively. In all cases, the clinical studies must be conducted in accordance with GCP. Good Laboratory Practice standards must also be respected during the conduct of the trials, including the International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use, or ICH, as well as the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. All suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the competent national authority and the ethics committee of the Member State where they occurred. The requirements and process governing the conduct of clinical studies are to a significant extent harmonized at EU level but could vary from country to country. During the development of a medicinal product, the European Medicines Agency, or EMA, and national regulators within the EU provide the opportunity for dialogue and guidance on the development program.

The EU Member States have transposed and applied the provisions of the Clinical Trials Directive in a manner that is not always uniform. This has led to variations in the rules governing the conduct of clinical trials in the individual EU Member States. The EU has, therefore, adopted Regulation (EU) No 536/2014 (Clinical Trials Regulation) in April 2014. The Regulation is expected to come into application in 2022. The Clinical Trials Regulation will be directly applicable in all the EU Member States, repealing the current Clinical Trials Directive. Conduct of all clinical trials performed in the European Union will continue to be bound by currently applicable provisions until the new Clinical Trials Regulation becomes applicable. The extent to which ongoing clinical trials will be governed by the Clinical Trials Regulation will depend on when the Clinical Trials Regulation becomes applicable and on the duration of the individual clinical trial. If a clinical trial continues for more than three years from the day on which the Clinical Trials Regulation becomes applicable the Clinical Trials Regulation will at that time begin to apply to the clinical trial.

The Clinical Trials Regulation harmonizes the assessment and supervision processes for clinical trials throughout the EU via a Clinical Trials Information System, which will notably contain a centralized EU portal and database.

To obtain a marketing authorization, or MA, of a drug in the EEA, we may submit marketing authorization applications, or MAA, either under the so-called centralized (mandatory for biologics) or national authorization procedures.

#### *Centralized Procedure*

The centralized procedure provides for the grant of a single MA by the European Commission following a favorable opinion by the Committee for Medicinal Products for Human Use, or CHMP, of the EMA, that is valid throughout the entire territory of the EEA. The centralized procedure is compulsory for certain types of medicines, such as medicines derived from biotechnological processes, products designated as orphan medicinal products, advanced-therapy medicines (such as gene-therapy, somatic cell-therapy or tissue-engineered products) and products with a new active substance indicated for the treatment of specified diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions and viral diseases. The centralized procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that represent a significant therapeutic, scientific or technical innovation, or whose authorization would be in the interest of public health. Under the centralized procedure the maximum timeframe for the evaluation of an MAA by the EMA is 210 days, excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP.

#### *National Authorization Procedures*

There are also other possible routes to authorize medicinal products in several EEA countries, which are available for investigational medicinal products that fall outside the scope of the centralized procedure. National MAs, are issued by the competent authorities of the Member States of the EEA and only cover their respective territory.

- Decentralized procedure. Using the decentralized procedure, an applicant may apply for simultaneous authorization in more than one EEA country of medicinal products that have not yet been authorized in any EU country and that do not fall within the mandatory scope of the centralized procedure.
- Mutual recognition procedure. In the mutual recognition procedure, a medicine is first authorized in one EEA country, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other EEA countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization.

Under the above described procedures, in order to grant the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

MAs have an initial duration of five years. After these five years, the authorization may be renewed on the basis of a reevaluation of the risk-benefit balance.

Innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for a number of expedited development and review programs, such as the PRIME scheme, which provides incentives similar to the breakthrough therapy designation in the U.S. Such products are generally eligible for accelerated assessment (according to which the timeframe for the evaluation of a MA application is reduced to 150 days, excluding clock stops) and may also benefit from different types of fast track approvals, such as a conditional marketing authorization or a marketing authorization under exceptional circumstances granted on the basis of less comprehensive clinical data than normally required (respectively in the likelihood that the sponsor will provide such data within an agreed timeframe or when comprehensive data cannot be obtained even after authorization).

#### *European Union Regulatory Exclusivity*

In the EEA, new products authorized for marketing (i.e., reference products) qualify for eight years of data exclusivity and an additional two years of market exclusivity upon MA. The data exclusivity period prevents generic or biosimilar applicants from relying on the pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar marketing authorization in the European Union during a period of eight years from the date on which the reference product was first authorized in the European Union. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its product in the EU until ten years have elapsed from the initial authorization of the reference product in the EU. The overall ten-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies.

#### *European Union Orphan Designation and Exclusivity*

The criteria for designating an “orphan medicinal product” in the European Union, are similar in principle to those in the United States. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the European Union when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the European Union to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the European Union, or if such a method exists, the product

will be of significant benefit to those affected by the condition. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to ten years of market exclusivity for the approved therapeutic indication. The application for orphan drug designation must be submitted before the application for MA. The applicant will receive a fee reduction for the marketing authorization application if the orphan designation has been granted, but not if the designation is still pending at the time the MA is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The ten-year market exclusivity in the European Union may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, MA may be granted to a similar product for the same indication at any time if (1) the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior; (2) the applicant consents to a second orphan medicinal product application; or (3) the applicant cannot supply enough orphan medicinal product.

#### ***Pediatrics Development***

In the EEA, MAA for new medicinal products have to include the results of studies conducted in the pediatric population, in compliance with a PIP agreed with the EMA's Pediatric Committee, or PDCO. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which MA is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when these data is not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the MA is obtained in all Member States of the EU and study results are included in the product information, even when negative, the product is eligible for six months' supplementary extension of the protection under a supplementary protection certificate (if any is in effect at the time of approval) or, in the case of orphan medicinal products, a two year extension of the orphan market exclusivity is granted.

#### ***Post-approval Requirements***

Similar to the United States, both marketing authorization holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the EU Member States. The holder of MA for a medicinal product must also comply with pharmacovigilance legislation and its related regulations and guidelines, which entail many requirements for conducting pharmacovigilance, or the assessment and monitoring of the safety of medicinal products. Failure to comply with EU and national laws that apply to the conduct of clinical trials, manufacturing approval, MA of medicinal products and marketing of such products, both before and after grant of the MA, manufacturing of medicinal products, statutory health insurance, bribery and anti-corruption or with other applicable regulatory requirements may result in administrative, civil or criminal penalties. These penalties could include delays or refusal to authorize the conduct of clinical trials or to grant MA, product withdrawals and recalls, product seizures, suspension, withdrawal or variation of the marketing authorization, total or partial suspension of production, distribution, manufacturing or clinical trials, operating restrictions, injunctions, suspension of licenses, fines and criminal penalties.

In addition, the advertising and promotion of our products is also subject to EU laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. In addition, other national legislation of individual EU Member States may apply to the advertising and promotion of medicinal products and may differ from one country to another. Violations of the rules governing the promotion of medicinal products in the European Union could be penalized by administrative measures, fines and imprisonment. These laws may further limit or restrict the advertising and promotion of our products to the general public and may also impose limitations on its promotional activities with healthcare professionals.

### **Rest of the World Regulation**

For other countries outside of the European Union and the United States, such as countries in Eastern Europe, Latin America, Asia, or Japan, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from jurisdiction to jurisdiction. Additionally, the clinical trials must be conducted in accordance with cGCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

### **Other Healthcare Laws**

In addition to FDA restrictions on the marketing of pharmaceutical products, other U.S., federal and state healthcare regulatory laws restrict business practices in the pharmaceutical industry. These laws include, but are not limited to, federal and state anti-kickback, false claims, data privacy and security and physician payment and drug pricing transparency laws. Similar laws exist in foreign jurisdictions, including the EEA, as well.

The U.S. federal Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any good, facility, item or service reimbursable, in whole or in part, 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 and medical device manufacturers on the one hand and prescribers, purchasers, formulary managers and beneficiaries on the other hand. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions 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 meet the requirements of a statutory or regulatory exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the U.S. federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. 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. In addition, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. The majority of states also have anti-kickback laws, which establish similar prohibitions and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers, or to self-pay patients.

The federal false claims and civil monetary penalties laws, including the civil False Claims Act, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government, 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, or knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government. A claim includes "any request or demand" for money or property presented to the U.S. Government. Moreover, a claim including items or services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act. Actions under the civil False Claims Act may be brought by the Attorney General or as a *qui tam* action by a private individual in the name of the government. Violations of the civil False Claims Act can result in very significant monetary penalties and treble damages. Several biopharmaceutical, medical device and other healthcare companies have been prosecuted under these laws for, among other things, 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 (e.g., off-label), and thus non-covered, uses. In addition, the civil monetary penalties statute 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. Many states also 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.

Violations of fraud and abuse laws, including federal and state anti-kickback and false claims laws, may be punishable by criminal and civil sanctions, including fines and civil monetary penalties, the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid), disgorgement of profits and corporate integrity agreements, which impose, among other things, rigorous operational and monitoring requirements on companies. Similar sanctions and penalties, as well as imprisonment, also can be imposed upon executive officers and employees of such companies. Given the significant size of actual and potential settlements, it is expected that the government authorities will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense 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. Similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians and certain other healthcare providers. The Affordable Care Act imposed, among other things, new annual reporting requirements through the Physician Payments Sunshine Act for covered manufacturers for certain payments and "transfers of value" provided to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), and additional categories of health care providers in 2022, and teaching hospitals as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties. Covered manufacturers must submit reports by the 90<sup>th</sup> day of each subsequent calendar year and the reported information is publicly made available on a searchable website. In addition, certain states require implementation of compliance programs and compliance with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, impose restrictions on marketing practices or require the tracking and reporting of marketing expenditures and pricing information as well as gifts, compensation and other remuneration or items of value provided to physicians and other healthcare professionals and entities.

We may also 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, and their respective implementing regulations, impose specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business associates, that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity, although we believe that we would not be considered a "business associate" in the normal course of our business. Entities that are found to be in violation of HIPAA, whether as the result of a breach of unsecured PHI, a complaint about privacy practices, or an audit by HHS, may be subject to significant civil, criminal, and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. Further, entities that knowingly receive individually identifiable health information from a HIPAA covered entity in a manner that is not authorized or permitted by HIPAA may be subject to criminal penalties. Even when HIPAA does not apply, according to the Federal Trade Commission or the FTC, failing to take appropriate steps to keep consumers' personal information secure constitutes unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the

cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards.

In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same requirements, thus complicating compliance efforts. For example, California enacted the California Consumer Privacy Act, or the CCPA, which went into effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Further, the California Privacy Rights Act, or the CPRA, was recently voted into law by California residents. The CPRA significantly amends the CCPA, and imposes additional data protection obligations on covered companies doing business in California, including additional consumer rights processes and opt outs for certain uses of sensitive data. It also creates a new California data protection agency specifically tasked to enforce the law, which would likely result in increased regulatory scrutiny of California businesses in the areas of data protection and security. The substantive requirements for businesses subject to the CPRA will go into effect on January 1, 2023, and become enforceable on July 1, 2023.

Similar laws and regulations in jurisdictions outside of the United States, which may include, for instance, applicable post-marketing requirements, anti-fraud and abuse laws and implementation of corporate compliance programs, reporting of payments or other transfers of value to healthcare professionals or data privacy and security laws, may apply to us to the extent that any of our product candidates, once approved, are sold in a country other than the United States.

Because of the breadth of these laws and the narrowness of their exceptions and safe harbors, it is possible that business activities can be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry.

Ensuring that business arrangements with third parties comply with applicable healthcare laws and regulations is costly and time consuming. If business operations are found to be in violation of any of the laws described above or any other applicable governmental regulations a pharmaceutical manufacturer may be subject to penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement of profits, individual imprisonment, exclusion from governmental funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of operations, any of which could adversely affect a pharmaceutical manufacturer's ability to operate its business and the results of its operations.

#### ***Coverage, Pricing and Reimbursement***

Significant uncertainty exists as to the coverage and reimbursement status of any biological products for which we obtain regulatory approval. The United States government, state legislatures and governments outside the United States have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price-controls, restrictions on reimbursement and requirements for substitution of generic products for branded drug and biologic products. In the United States and markets in other countries, patients who are prescribed products generally rely on third-party payors to reimburse all or a substantial part of the associated healthcare costs. Providers and patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a substantial portion of the cost of our products. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. If approved, sales of our product candidates will depend, in part, on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care plans, private health insurers and other organizations.

In the United States, the process for determining whether a third-party payor will provide coverage and the related coverage criteria for a biological product typically is separate from, but related to, the process for setting the price of such product or for establishing the level of reimbursement that the payor will pay for the product once coverage is approved. With respect to biologics, third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication, or place products at certain formulary levels that result in lower reimbursement levels, which results in higher cost-sharing financial obligation imposed on patients. A decision by a third-party payor not to cover our product candidates, or to impose coverage criteria the limiting situations in which our product candidates are covered, could reduce physician utilization of a product. Moreover, a third-party payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable a manufacturer to maintain price levels sufficient to realize an appropriate return on its investment in product development. Additionally, coverage, coverage criteria, and reimbursement for products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product does not ensure that other payors will also provide coverage for the medical product, or will provide coverage at an adequate reimbursement rate. As a result, the coverage determination process usually requires manufacturers to provide scientific, clinical and health economic support for the use of their products to each payor separately, which is a time-consuming process.

As noted above, the marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide coverage and adequate reimbursement. The increasing emphasis on cost containment measures in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement are attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity and reviewing the cost-benefit of pharmaceutical products, in addition to questioning safety and efficacy. If third-party payors do not consider a product to offer a favorable cost-benefit compared to other available therapies, they may not cover that product after FDA approval or, if they do, the level of payment may not be sufficient to allow a manufacturer to sell its product at a profit.

In addition, in many countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. In the EEA, governments influence the price of products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Member States are free to restrict the range of pharmaceutical products for which their national health insurance systems provide reimbursement, and to control the prices and reimbursement levels of pharmaceutical products for human use. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed to by the government. Member States may approve a specific price or level of reimbursement for the pharmaceutical product, or alternatively adopt a system of direct or indirect controls on the profitability of the company responsible for placing the pharmaceutical product on the market, including volume-based arrangements, caps and reference pricing mechanisms. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost effectiveness of a particular product to currently available therapies. Other Member States allow companies to fix their own prices for medicines, but monitor and control company profits. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. The downward pressure on healthcare costs in general, particularly prescription products, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross border imports from low-priced markets exert a commercial pressure on pricing within a country.

#### ***Healthcare Reform and Potential Changes to Healthcare Laws***

The FDAs 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 devices and to spur innovation, but its ultimate implementation is uncertain. In

addition, in August 2017, the FDA Reauthorization Act was signed into law, which reauthorized the FDA's user fee programs and included additional drug and device provisions that build on the Cures Act. 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 otherwise may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the level of reimbursement for particular medical products and services, implementing reductions in Medicare and other healthcare funding and applying new payment methodologies. For example, in March 2010, the Affordable Care Act was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; introduced 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; extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans; imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D; subjected drug manufacturers to new annual fees based on pharmaceutical companies' share of sales to federal healthcare programs; imposed a new federal excise tax on the sale of certain medical devices; created a new Patient Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; created the Independent Payment Advisory Board, which, once empaneled, will have authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription drugs; and established a Center for Medicare Innovation at the CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act. By way of example, the Tax Cuts and Jobs Acts was enacted, which, among other things, removes penalties for not complying with the individual mandate to carry health insurance. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, ruled that the individual mandate is a critical and inseparable feature of the Affordable Care Act, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the Affordable Care Act, such as the BPCIA, are invalid as well. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the district court's decision that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. The U.S. Supreme Court is currently reviewing the case, although it is unclear how the Supreme Court will rule. It is also unclear how other efforts, if any, to challenge, repeal or replace the Affordable Care Act will impact the law or our business.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act to reduce healthcare expenditures. These changes include the Budget Control Act of 2011, which, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year and that will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2021, unless additional action is taken by Congress; and the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. More recently, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has 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 pharmaceutical and biologic products.

Individual states in the United States have become increasingly active in passing legislation and implementing regulations designed to control biotechnology and pharmaceutical 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 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. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that governments and third-party payors will pay for healthcare products and services.

#### **Human Capital**

We are intent on cultivating a highly-skilled and passionate team determined to strive to deliver transformative therapies to the patients who need them most. As of December 31, 2020, we had approximately 168 full-time employees, of which approximately 164 were located within the United States and 4 employees were located outside of the United States.

We believe that the success and growth of our business depends in large part on our continued ability to attract, retain and motivate qualified personnel at all levels of our company. To do that, we employ a number of measures, including competitive compensation and benefits, fostering an ethical culture that values diversity and inclusion, and focusing on employee safety and wellness as well as training. These measures help form our human capital management framework and are advanced through the following:

*Competitive Pay and Benefits.* We provide our employees with competitive fixed salaries, cash bonus opportunities designed to incentivize achievement of our goals and individual objectives, equity awards and opportunities for equity ownership through our employee share purchase plan as well as a robust benefit package designed to promote well-being across all aspects of our employees' lives, including comprehensive health insurance, dental and vision plans, life and other employment related insurance, retirement planning through a 401(k) plan with partial company match, and paid time off.

*Diversity and Inclusion.* We value diversity and inclusion at all levels of our company. We believe that our business benefits from the different perspectives that a diverse workforce brings, and we pride ourselves on having an inclusive culture based on our shared mission and values.

*Health and Safety and our Response to COVID-19.* Health and Safety are firmly rooted across our company through the integration of health and safety processes throughout our business and risk management. To foster a safe and healthy culture, we have implemented a comprehensive safety program, driving to understand and mitigate against health and safety incidents. In response to the COVID-19 pandemic and measures introduced by state and federal governments in the United States, we implemented workplace protocols at our facilities. While the majority of our employees are able to carry out their responsibilities working outside of our physical locations, for our essential workers and those choosing to return to our offices to carry out their responsibilities, we implemented additional safety measures, including occupancy limits, restricting business travel, providing and requiring the use of personal protective equipment, self-screening prior to accessing our facilities, and others. We continue to monitor the developments, restrictions and requirements in jurisdictions where we have employees, and update our protocols as applicable.

#### **Our Corporate Information**

We are an exempted company incorporated under the laws of Bermuda in July 2015. Our registered office is located in Bermuda at Clarendon House, 2 Church Street, Hamilton HM11, Bermuda. The telephone number for our registered office is +44 808-189-6257. Our website address is [www.kiniksa.com](http://www.kiniksa.com). The information contained on our website is not incorporated by reference into this Annual Report, and you should not consider any information contained on, or that can be accessed through, our website as part of this Annual Report.

#### **Where You Can Find More Information**

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically, such as ourselves, with the SEC at <http://www.sec.gov>.

We make available free of charge on our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably possible after we electronically file such material with, or furnish it to, the SEC. Our website is located at [www.kiniksa.com](http://www.kiniksa.com). The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this Annual Report.

**ITEM 1A. RISK FACTORS.**

*You should carefully consider the risks described below, as well as the other information in this Annual Report, including our audited consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The occurrence of any of the events or developments described below could adversely affect our business, financial condition, results of operations and growth prospects. In such an event, the market price of our Class A common shares could decline. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.*

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

***We are a biopharmaceutical company and have not generated any revenue from product sales. We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.***

Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. Typically, it takes many years to develop one new product from the time it is discovered to when it is available for treating patients, and development may cease for a number of reasons. We have incurred operating losses in each year since our inception in 2015 and anticipate incurring losses for the foreseeable future. Our future success is dependent on our ability to develop, obtain regulatory approval for and successfully commercialize one or more of our product candidates. For example, while the U.S. Food and Drug Administration, or the FDA, accepted the supplemental Biologics License Application, or sBLA, for rilonacept in recurrent pericarditis with priority review and assigned a Prescription Drug User Fee Act, or PDUFA, goal date of March 21, 2021, we have not yet demonstrated our ability to obtain regulatory approvals, manufacture a commercial-scale drug, or conduct sales and marketing activities necessary for commercialization of rilonacept, if approved. We currently generate no revenue from sales of any products, and we may never be able to develop or commercialize a marketable product.

We have incurred significant losses related to expenses for research and development and our ongoing operations. As of December 31, 2020, we had an accumulated deficit of \$517.5 million. We expect to continue to incur losses for the foreseeable future, and anticipate these losses will increase substantially as a result of many factors, including:

- establishing and expanding sales, marketing and distribution capabilities, infrastructure and organization to commercialize products for which we may obtain marketing approval, including our lead program, rilonacept for approved indications in the United States;
- our research and preclinical and clinical development of our product candidates, including our global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe coronavirus disease 2019, or COVID-19, pneumonia and hyperinflammation, Phase 2b dose-ranging study of vixarelimab in prurigo nodularis, and our Phase 1 clinical trial in healthy volunteers for KPL-404;
- manufacturing our product candidates for clinical or commercial use, and increasing our manufacturing capabilities or adding additional manufacturers or suppliers;
- seeking regulatory and marketing approvals for our product candidates that successfully complete clinical trials, if any;

- initiating potential additional preclinical studies and clinical trials for our product candidates;
- making milestone or other payments under any current or future license, acquisition, collaboration or other strategic transaction agreements;
- seeking to identify, assess and study new or expanded indications for our product candidates, new or alternative dosing levels and frequency for our product candidates, or new or alternative administration of our product candidates, including method, mode or delivery device;
- seeking to identify, assess, acquire or develop additional product candidates;
- entering into licensing, acquisition, collaboration or other strategic transaction agreements;
- seeking to maintain, protect and expand our intellectual property portfolio;
- seeking to attract and retain skilled personnel;
- creating additional infrastructure to support our operations as a public company and large accelerated filer, our product development and planned commercialization efforts; and
- experiencing delays or encountering issues with any of the above, including but not limited to the impact of the COVID-19 pandemic and measures taken in response to the COVID-19 pandemic, failed trials, complex results, safety issues, regulatory challenges that require longer follow-up of existing trials, additional major trials, or additional supportive trials in order to pursue marketing approval.

See “Risk Factors — Risks related to product development — The COVID-19 pandemic, and measures taken in response to the pandemic, could have an adverse impact on our current or planned preclinical studies and clinical trials, which could be significant.”

Further, the net losses we incur may fluctuate significantly from quarter-to-quarter and year-to-year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our shareholders’ equity (deficit) and working capital.

***We will require substantial additional financing, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, will force us to delay, limit, reduce or cease one or more of our product development plans, research and development programs for our product candidates, or other operations or commercialization efforts.***

The development and commercialization of biopharmaceutical products is capital intensive. We are advancing our product candidates through research, preclinical and clinical development, including our global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation, our Phase 2b dose-ranging study of vixarelimab in prurigo nodularis, and our Phase 1 clinical trial with KPL-404 in healthy volunteers.

We expect our expenses to increase in connection with our ongoing activities as we continue the research and development of our product candidates, establish and expand our sales, marketing and distribution capabilities, infrastructure and organization, or enter into agreements with third parties to conduct one or more of these commercialization activities. The FDA accepted the sBLA for riloncept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of riloncept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. We expect to incur significant additional commercialization expenses leading up to and after marketing approval for riloncept or any of our other product candidates related to manufacturing, product sales, marketing and distribution. As our product candidates

progress through development and towards commercialization, we will need to make milestone payments and, if successful, eventually make profit-split or royalty payments to the licensors and other third parties from whom we have acquired our product candidates. Furthermore, we expect to continue to incur costs associated with operating as a public company, including with respect to increased compliance and disclosure obligations as a result of becoming a large accelerated filer effective as of December 31, 2020 and no longer being an emerging growth company as of that time or a smaller reporting company as of January 1, 2021.

Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed on acceptable terms, if at all, we will be forced to delay, limit, reduce or cease one or more of our product development plans, research and development programs for our product candidates, or commercialization efforts. We also may not be able to expand our operations or otherwise capitalize on our business opportunities, or may be required to relinquish rights to our product candidates or products.

The development process for our product candidates is highly uncertain, and we cannot estimate with certainty the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of our product candidates. Our operating plans may change as a result of many factors currently unknown to us, including delays in or other adverse impacts to our commercialization of riloncept impacting our ability to generate projected revenue from riloncept or delays in commercialization of any of our other product candidates, and we may need to seek additional funds sooner than expected, through public or private securities offerings, debt financings or other sources, including government funding or grants. Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- our ability to successfully commercialize any of our product candidates, including the cost and timing of establishing and expanding our sales, marketing and distribution capabilities, infrastructure and organization or entering into agreements with third parties to conduct one or more of these activities for riloncept, if approved, any of our product candidates, if approved or in anticipation of such approval, including preparations for the potential commercial launch of riloncept in recurrent pericarditis;
- the amount and timing of sales revenues from riloncept or any of our other product candidates, if approved, including the sales price and the availability of coverage and adequate third-party reimbursement;
- competitive and potentially competitive products and technologies and patients' and physicians' receptivity to our product candidates and the technology underlying them in light of competitive products and technologies;
- the costs and timing of payments for producing product candidates to support clinical trials as well as the potential commercial launch of our product candidates such as riloncept, reserving manufacturing slots, or transferring manufacturing technology to third-party manufacturers;
- the results from, and the time and cost necessary for development of our product candidates, including for our global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation, our Phase 2b dose-ranging trial of vixarelimab in prurigo nodularis, and our Phase 1 clinical trial in healthy volunteers for KPL-404;
- the costs and timing of establishing and maintaining clinical trial sites for the development of our product candidates, both in the United States and in jurisdictions outside of the United States, including as a result of the COVID-19 pandemic and measures taken in response to the pandemic;
- the number, size and type of preclinical activities and any additional clinical trials;
- the costs, timing and outcomes of seeking and potentially obtaining approvals from the FDA or comparable regulatory authorities outside of the United States, including the potential for the FDA or such comparable

regulatory authorities to require that we conduct more studies than we currently plan to conduct and the costs of post-marketing studies or risk evaluation and mitigation strategies, or REMS, that could be required by regulatory authorities;

- the timing and amount of milestone and other payments we must make under our agreements with Regeneron, MedImmune, Limited, or MedImmune, Biogen MA Inc., or Biogen, and the other third parties from whom we have acquired or in-licensed our product candidates or from whom we may in the future acquire or in-license product candidates;
- the cash requirements for seeking to identify, assess and study new or expanded indications for our product candidates, new or alternative dosing levels or frequency for our product candidates, or new or alternative administration of our product candidates, including method, mode or delivery device;
- the cash requirements of any future in-license, acquisition, development or discovery of additional product candidates, including in connection with any licensing, acquisition, collaboration or other strategic transaction agreements;
- the time and cost necessary to respond to technological and market developments;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- any product liability or other lawsuits related to our product candidates or any related activities;
- the costs associated with being a public company, including as a result of becoming a large accelerated filer as of December 31, 2020 and no longer being an emerging growth company at that time or a smaller reporting company as of January 1, 2021;
- our need and ability to hire and retain skilled personnel; and
- the receptivity of the capital markets to financings by biopharmaceutical companies generally and companies with product candidates and technologies such as ours specifically.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. The COVID-19 pandemic continues to adversely impact the global economy with the potential for the continued economic downturn to be severe and prolonged. A continued severe or prolonged economic downturn could result in a variety of risks to our business, including disruptions in the financial markets, that may make our ability to raise additional capital when needed, including through private or public securities offerings and debt financings more difficult to obtain, if at all, and may have a material adverse effect on our ability to meet our fundraising needs when they arise.

Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If we are unable to obtain funding when needed, we will be forced to curtail, delay, limit, reduce or cease one or more of our product development plans, research and development programs for our product candidates, or commercialization efforts of any product candidate. We may also be unable to expand our operations or otherwise capitalize on our business opportunities or may be required to relinquish rights to our product candidates or products. Any of these occurrences could materially affect our business, financial condition and results of operations.

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

Until such time as we can generate substantial product revenue, if ever, we expect to finance most of our cash needs through private or public securities offerings, debt financings, government funding or grants, or other sources,

including licensing, collaboration or other strategic transactions or arrangements with third parties and to a lesser extent through projected revenue from riloncept if approved in recurrent pericarditis or any of our other product candidates. The terms of any financing may adversely affect the holdings or the rights of our shareholders and our issuance of additional securities, whether equity or debt, or the possibility of such issuance, may cause the market price of our Class A common shares to decline. The sale of additional equity or convertible securities would dilute all of our shareholders. The incurrence of indebtedness would result in increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Obtaining funds through licensing, collaboration or other strategic transactions or arrangements with third parties may require us to relinquish rights to some of our technologies, product candidates or future revenue streams, or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects. If we raise funds through research grants, we may be subject to certain requirements, which may limit our ability to use the funds or require us to share information from our research and development. Raising additional capital through any of these or other means could adversely affect our business and the holdings or rights of our shareholders, and may cause the market price of our Class A common shares to decline.

#### **Risks Related to Product Development**

***We depend heavily on the success of one or more of our product candidates, which are in various stages of clinical development. If we are unable to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize one or more of our product candidates, or experience significant delays in doing so, our business will be significantly harmed.***

We do not currently generate any revenue from sales of any products, and we may never be able to develop or commercialize marketable products. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable regulatory authorities outside of the United States. Our product candidates in various stages of clinical development. Our assumptions about why our product candidates are worthy of future development and potential approval in the indications for which we are studying them, or any other indications, are based in part on indirect data collected by other companies and in part from data collected from our preclinical and clinical trials. We may not be able to demonstrate that they are safe or effective in the indications for which we are studying them, and they may not be approved.

Although riloncept is approved and marketed for human use for the treatment of other indications in the United States by Regeneron, we studied riloncept for the treatment of a different indication called recurrent pericarditis, for which the FDA accepted the sBLA with priority review and assigned a PDUFA goal date of March 21, 2021. Mavrilimumab was studied in Phase 2 clinical trials conducted by MedImmune outside of the United States for the treatment of rheumatoid arthritis, or RA. However, we studied mavrilimumab in a global Phase 2 clinical trial for the treatment of GCA, for which we announced that the trial met both the primary and secondary efficacy endpoints with statistical significance. Further, we are conducting a global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation. We have been studying vixarelimab in prurigo nodularis, for which we released top-line data from our Phase 2a clinical trial, and are enrolling and dosing patients in a Phase 2b dose-ranging study of vixarelimab in prurigo nodularis. In addition, we are conducting a Phase 1 clinical trial of KPL-404 in healthy volunteers. Our future preclinical product candidates would need to progress through toxicology studies and other requirements to enable an Investigational New Drug application, or IND, prior to clinical development.

We cannot be certain that any of our product candidates will be successful in these clinical trials or that riloncept, or any of our other product candidates, will receive regulatory approval even after completing a successful pivotal clinical trial. We may also determine that the potential product and commercial profile of any of our product candidates may not ultimately be commercially successful or even if they have the potential to ultimately be successful, we may not have sufficient recourse, which in either case could lead us to discontinue its development, or we may determine to not support further development of any of our product candidates at any time for any reason. If we do not receive regulatory approvals for one or more of our product candidates, we may not be able to continue our operations.

While our global, pivotal Phase 3 clinical trial, RHAPSODY, of rilonacept in recurrent pericarditis met statistical significance on its primary and all major secondary efficacy endpoints, we may be required to conduct additional studies before or after we receive FDA approval of rilonacept in recurrent pericarditis. Each of our other product candidates require additional preclinical or clinical development and all of our product candidates will require regulatory approval in one or more jurisdictions, manufacturing capacity and expertise, successful manufacture of clinical supply, an organization to support commercialization and product launch, and significant marketing efforts before we will be able to generate any revenue from product sales. The success of our product candidates or potential future product candidates depends upon several factors, including the following:

- submission to and acceptance by the FDA of INDs and of clinical trial applications to governmental authorities outside of the United States for our product candidates to commence planned clinical trials or future clinical trials;
- successful completion of preclinical studies, including toxicology studies, biodistribution studies and minimally efficacious dose studies in animals, conducted, where applicable, under the FDA's Good Laboratory Practice, or GLP, regulations;
- successful site activation for, enrollment in, and completion of clinical trials, the design and implementation of which are agreed to by the applicable regulatory authorities, and the ability of our contract research organizations, or CROs, to successfully conduct such trials within our planned budget and timing parameters and without materially adversely impacting our trials;
- successful data from our clinical programs that support an acceptable risk-benefit profile of our product candidates for the targeted indications in the intended populations to the satisfaction of the applicable regulatory authorities;
- timely receipt, if at all, of regulatory approvals from applicable regulatory authorities and maintenance of any such approvals;
- as applicable, pediatric study plans acceptable to the FDA and comparable regulatory authorities outside of the United States, and follow through of any pediatric study commitments, including development of pediatric formulations where indicated;
- establishment and maintenance of arrangements with third-party manufacturers, as applicable, for continued clinical supply and commercial manufacturing;
- successful development of our manufacturing processes and transfer to third-party facilities to support future development activities and commercialization that are operated by contract manufacturing organizations, or CMOs, in a manner compliant with all regulatory requirements;
- successful manufacture of sufficient supplies of our product candidates within approved specifications for purity and efficacy from our facility and from our CMOs or other sole-source manufacturers in order to meet clinical or commercial demand, as applicable;
- establishment and maintenance of patent and trade secret protection or regulatory exclusivity for our product candidates;
- timely and successful commercial launch of our product candidates, including rilonacept if and when approved;
- acceptance of our products, if and when approved, by patients, patient-advocates, the medical community and third-party payors;

- effective competition with other therapies;
- establishment and maintenance of adequate healthcare coverage and reimbursement;
- enforcement and defense of intellectual property rights and claims;
- continued compliance with any post-marketing requirements imposed by regulatory authorities, including any required post-marketing clinical trial commitments or REMS; and
- maintenance of a continued acceptable safety profile of our product candidates following approval.

If we do not accomplish one or more of these factors in a timely manner or at all, including as a result of the COVID-19 pandemic and measures taken in response to the pandemic, we could experience significant delays in, or an inability to, timely or successfully commercialize our product candidates, which would materially harm our business. If we do not receive regulatory approvals for one or more of our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to manufacture and market our product candidates, our revenues will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval and have commercial rights, among other things. If the markets for patient subsets that we are targeting are smaller than we estimate, we may not generate projected revenue levels from sales of such products, if approved.

***Clinical drug development is a lengthy and expensive process with uncertain timelines and uncertain outcomes. 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. We may therefore be unable to obtain required regulatory approvals and be unable to commercialize our product candidates on a timely basis, if at all.***

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, time consuming and uncertain as to outcome. We are conducting a global, placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation, a Phase 2b dose-ranging study of vixarelimab in prurigo nodularis, for which we are enrolling and dosing patients, and a Phase 1 clinical trial with KPL-404 in healthy volunteers. Not all of our clinical trials have been conducted as initially planned or completed on our initial projected schedule, and accordingly, we cannot guarantee that any of our current or potential future clinical trials will be conducted as initially planned or completed on our initial projected schedule, if at all, including as a result of the COVID-19 pandemic and measures taken in response to the pandemic.

Commencing a clinical trial is subject to acceptance by the FDA of an IND or IND amendments, acceptance by European regulatory authorities of a Clinical Trial Application, or CTA, or acceptance by other applicable regulatory authorities, and finalizing the trial design based on discussions with the FDA, European regulatory authorities or other applicable regulatory authorities. We have and may in the future receive feedback or guidance from regulatory authorities on our clinical trial design and protocols and, even after we incorporate such feedback or guidance from these regulatory authorities, such regulatory authorities may impose other requirements for our clinical trials, could disagree that we have satisfied their requirements to commence our clinical trials, disagree with our interpretation of data from the relevant preclinical studies, clinical trials or chemistry, manufacturing and controls, or CMC, data, or disagree or change their position on the acceptability of our trial designs, including the proposed dosing level or schedule, treatment duration, our definitions of the patient populations or the clinical endpoints selected, which may require us to complete additional preclinical studies, clinical trials, CMC development, other studies or impose stricter approval conditions than we currently expect.

For example, the FDA has provided feedback that the risk-benefit assessment for investigation of mavrilimumab in a clinical trial may differ depending on the patient population studied. Specifically, the FDA acknowledged that the risk-benefit assessment for initiation of a clinical trial may be considered favorable in a patient population with high morbidity and limited effective treatment options. In addition, we anticipate that other potential indications for mavrilimumab would need to be in serious or life-threatening diseases where the burden of the disease is sufficient to justify the risk-benefit of mavrilimumab to pursue clinical development in such indications or potentially in

indications requiring limited doses where the theoretical risk of PAP is low. Further, based on FDA feedback we received in connection with its review and approval of an IND for our global Phase 2 clinical trial of mavrilimumab in GCA, we anticipate that to help inform the risk-benefit profile for the use of mavrilimumab in GCA, we will need to eventually demonstrate safety and effectiveness of mavrilimumab beyond 26 weeks, as well as evaluate its pharmacokinetic profile and the effectiveness of mavrilimumab at different doses in GCA.

Commencing our planned clinical trials is also subject to approval by an IRB at each clinical trial site before a trial may be initiated, which approval could be delayed, rejected or suspended. Further the IRBs of the institutions in which such trials are being conducted, the Data Safety Monitoring Board for such trial or the FDA or other regulatory authorities may impose a suspension or termination of our clinical trials even after approval and initiation of trial sites due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities, unforeseen safety issues or adverse side effects that arise in the trial, failure to demonstrate a benefit from using a drug, any of which could result in the imposition of a clinical hold, as well as changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Successful completion of our clinical trials is a prerequisite to submitting a Biologics License Application, or BLA, sBLA or New Drug Applications, or NDA, to the FDA and a marketing authorization application, or MAA, to the European Medicines Agency, or EMA, or other applicable regulatory authorities in other countries for each product candidate and, consequently, to obtaining approval and initiating commercial marketing of our current and any future product candidates. A failure of one or more of our current or future clinical trials can occur at any stage of testing, and our clinical trials may not be successful. We have and may continue to experience delays in our ongoing clinical trials, and we do not know whether planned clinical trials will begin on time, be allowed by regulatory authorities, need to be redesigned, or if we can activate sites or enroll patients on time, or if they will be completed on schedule, if at all. Events that have and may continue to delay or prevent commencement or successful completion of clinical development of our product candidates as planned and on schedule, if at all, include but are not limited to:

- inability to generate sufficient preclinical, toxicology or other in vivo or in vitro data to support the initiation of human clinical trials;
- delays or failure in reaching a consensus with regulatory agencies on trial design or implementation;
- delays or failure in establishing the appropriate dosage levels or frequency of dosing or treatment period in clinical trials;
- delays or failure in reaching agreement on acceptable terms with prospective CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- difficulties in obtaining required IRB approval at each clinical trial site;
- delays or failure in obtaining regulatory approval to commence a trial, or imposition of a clinical hold by regulatory authorities, after review of an IND or IND amendment, or equivalent application or amendment, or an inspection of our clinical trial operations or study sites;
- challenges in recruiting and enrolling suitable patients or a sufficient number thereof to participate in our clinical trials;
- amendments to clinical trial protocols impacting study criteria, endpoints or design, including amendments that either we initiate or are requested by regulatory authorities;
- difficulty collaborating with patient groups and investigators;

- failure by our CROs, medical institutions, other third parties we contract with in connection with our clinical trials, or us to adhere to clinical trial requirements or to perform their obligations in a timely or compliant manner;
- failure to perform in accordance with the FDA's good clinical practices requirements, or GCPs, or applicable comparable regulatory guidelines in other countries;
- patients not completing participation in a clinical trial or returning for post-treatment follow-up, in either case including as a result of trial demands on participants as a result of the COVID-19 pandemic and measures taken in response to the pandemic or otherwise, among other things;
- clinical trial sites or patients withdrawing from a clinical trial, including as a result of the COVID-19 pandemic and measures taken in response to the pandemic or otherwise, among other things;
- participating patients experiencing serious adverse events or undesirable side effects or being exposed to unacceptable health risks;
- participating patients failing to experience confirmed pre-specified events during the clinical trial within an expected time-frame, if at all;
- safety issues, including occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- difficulty in identifying the patient populations that we are trying to enroll in a particular trial, which may delay enrollment and reduce the power of a clinical trial to detect statistically significant results;
- changes in regulatory requirements, policies and guidance that require amending or submitting new clinical protocols;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative, inconclusive or uncompetitive results, which may result in us deciding, or regulators requiring us, to conduct additional clinical trials or modify or cease development programs for our product candidates;
- suspensions or terminations of our clinical trials by us or the IRBs of the institutions in which our clinical trials are being conducted, the Data Safety Monitoring Board for such trials or the FDA or comparable regulatory authorities;
- failure of manufacturers, or us, to produce phase-appropriate supplies of our product candidates for use in our clinical trials in accordance with current good manufacturing practices, or cGMP, requirements and regulations or applicable comparable regulatory guidelines in other countries;
- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing; and
- disruptions to our business operations, including our manufacturing operations, and the business operations of our third-party manufacturers, CROs upon whom we rely to conduct our clinical trials, or other third parties with whom we conduct business or otherwise engage, as well as disruptions in travel into and within the countries in which we conduct our clinical trials, our manufacturers produce our product candidates or we otherwise conduct business or engage with other third parties, now or in the future as a result of the impact of the COVID-19 pandemic.

Delays in the commencement or completion of our planned and ongoing clinical trials of our product candidates have and may continue to occur. Consequences of delays have or may increase our costs of developing our product candidates, slow down the development and approval of our product candidates, delay or jeopardize our ability to commence product sales and generate revenue, if any, from our product candidates and harm their commercial prospects. Furthermore, disruptions caused by the COVID-19 pandemic have and may continue to increase the likelihood that we encounter such difficulties or delays in commencing or completing our planned and ongoing clinical trials or other development. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates or us deciding to modify or cease development of our product candidates.

Clinical trial delays could also shorten any periods during which our products have patent protection or shorten any periods during which we have the exclusive right to commercialize our product candidates and may allow our competitors to bring products to market before we do, which could impair our ability to obtain orphan exclusivity for our products that potentially qualify for this designation and to successfully commercialize our product candidates, and may harm our business and results of operations. Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue and harm our business, financial condition and prospects significantly.

Furthermore, clinical trials must be conducted in accordance with the laws, rules and regulations, guidelines and other requirements of the FDA, European Union, or EU, and other applicable regulatory authorities outside of those jurisdictions and are subject to oversight by these regulatory authorities and IRBs at the medical institutions where the clinical trials are conducted. Further, conducting global clinical trials, as we do for certain of our product candidates, may require that we coordinate among the legal requirements and guidelines of regulatory authorities across a number of jurisdictions, including the United States, EU and countries outside of those jurisdictions, which could require that we amend clinical trial protocols or determine not to conduct a trial in one or more jurisdictions or to run separate trials in various jurisdictions due to the inability, cost or delay in harmonizing divergent requests from such regulatory authorities, all of which could increase costs. In addition, clinical trials that are conducted in countries outside the United States and the EU may subject us to risks associated with the engagement of non-United States and non-EU CROs who are unknown to the FDA or the EMA, and may have different standards of diagnosis, screening and medical care, as well as risks associated with further delays and expenses as a result of increased shipment costs (including as a result of local quality release or in-country testing of a product candidate supply produced in a different jurisdiction for our clinical trials) and political and economic risks relevant to such countries outside the United States and the EU.

***The COVID-19 pandemic, and measures taken in response to the pandemic, could have an adverse impact on our current or planned preclinical studies and clinical trials, which could be significant.***

The COVID-19 pandemic, and measures taken in response to the pandemic, have had and could continue to have an impact on our current or planned preclinical studies and clinical trials. If the COVID-19 pandemic and measures undertaken in response to the pandemic are prolonged, or the easing of any of such measures has adverse consequences, we may experience significant disruptions that could materially impact our preclinical studies and clinical trials, including by:

- impeding, delaying, limiting or preventing the production, delivery or release of our product candidates to our clinical trial sites or patients, including due to interruptions in the supply of raw materials or global shipping that may affect the transport of our product candidates or clinical trial materials, or the reprioritization by third parties or the U.S. government for any products or potential products related to the treatment or prevention of COVID-19;
- impeding, delaying, limiting or preventing the production, delivery or release of the potential commercial supply of rilonacept, including due to disruptions at Regeneron's manufacturing facilities that produce rilonacept, staffing shortages or reprioritizations, production slowdowns or stoppages or interruptions in global shipping;

- impeding, delaying, limiting or preventing clinical trial investigators, other critical staff, or patients from traveling to our clinical trial sites or visiting nurses traveling to patients;
- impeding, delaying, limiting or preventing key clinical trial activities, including clinical trial site monitoring, patient dosing, study procedures (such as biopsies, which may be deemed non-essential), collection of clinical data and samples as well as cleaning and verification of clinical data, which could affect the integrity of clinical trial data;
- diverting healthcare resources away from the conduct of clinical trials or a reprioritizing of the focus of such resources on clinical trials for product candidates with the potential for treatment or prevention of COVID-19 related conditions;
- impeding, delaying, limiting or preventing clinical trial site initiation, including difficulties in recruiting clinical site investigators and clinical site staff, and enrollment or retention of patients in our clinical trials;
- increasing the risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- interrupting or delaying preclinical studies due to restricted or limited operations at our research and development laboratory facility;
- causing interruptions or delays at the FDA, or other regulatory authorities, which could result in delays in review and approval of our submissions and applications, including INDs, clinical trial protocols and BLAs for our product candidates;
- resulting in the refusal of the FDA to accept data from clinical trials in affected geographies;
- prompting changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or cause us to pause or discontinue one or more of our current or planned clinical trials altogether;
- delaying necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- limiting employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire or requirement of employees to avoid contact with large groups of people.

Any one of the foregoing could significantly impede, delay, limit or prevent the clinical development of our product candidates and ultimately lead to the delay or denial of regulatory approval of our product candidates. For example, the large number of competitive studies for the treatment of conditions associated with COVID-19 and the evolving standard of care with overall improvement in the quality of care for patients diagnosed with COVID-19 initially had an impact on the number of eligible patients for our global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation. While we continuously look to identify business-critical activities and to develop contingencies and mitigation strategies for those activities to potentially minimize the impact of the COVID-19 pandemic on our business and operations, there can be no assurance that we will be able to identify all such activities or that any identified contingencies and mitigation strategies will be effective. If the clinical development of our product candidates is significantly impeded, delayed, limited or is prevented, it could ultimately lead to the delay or denial of regulatory approval of our product candidates which would materially adversely affect our business and operations, including our ability to generate revenue.

***We may find it difficult to enroll patients in our clinical trials in a timely manner given the limited number of patients who have the diseases for which our product candidates are being studied, our particular enrollment criteria or competing clinical studies in the same patient population, including patients with COVID-19, or due to the impact of the COVID-19 pandemic. Difficulty in enrolling patients could delay or prevent completion of our clinical trials of our product candidates, and our research and development efforts could be adversely affected.***

Identifying and qualifying patients to participate in clinical trials of our product candidates is critical to our success. The timing of our clinical trials depends in part on the speed at which we can recruit a sufficient number of patients to participate in testing our product candidates, including for the treatment of conditions associated with COVID-19, particularly given that many of the conditions for which we are evaluating our current product candidates or may evaluate them in the future are in small disease populations. In addition, the eligibility criteria of our clinical trials will further limit the pool of available trial participants, as we will require patients to have specific characteristics that we can evaluate based on the primary and secondary endpoints of the study. Further, our product candidates modulate the immune system and carry risks associated with immunosuppression, including the risk of serious infections and other potential serious health risks.

Our clinical trials have and may continue to compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition may further reduce the number and types of patients available to us because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. For example, the large number of competitive studies for the treatment of conditions associated with COVID-19 and the evolving standard of care with overall improvement in the quality of care for patients diagnosed with COVID-19 initially had an impact on the number of eligible patients for our global placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation. Since the number of qualified clinical investigators is limited, we may conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which would reduce the number of patients who are available for our clinical trials at such clinical trial site.

In addition, disruptions to our business operations and the business operations of our CROs or other third parties with whom we conduct business, as well as disruptions in travel into and within the countries in which we conduct our clinical trials, now or in the future, as a result of the impact of the COVID-19 pandemic, may delay or prevent patient enrollment. For example, our CRO for the Phase 1 clinical trial of KPL-404 notified us that, after a temporary pause due to the impact of the COVID-19 pandemic, they resumed certain clinical trial activities, but we also engaged an additional CRO to conduct additional portions of the trial at another clinical trial site.

Accordingly, when we encounter these or other difficulties in enrollment we have and may continue to experience delays or we may be prevented from completing our clinical trials. Patient enrollment depends on many factors, including:

- the size and nature of the patient population;
- the severity of the disease being studied;
- patient referral practices of physicians;
- patient eligibility criteria for the clinical trial and evolving standards of care;
- the proximity of patients to clinical sites;
- the complexity of the design and nature of the clinical protocol and trial;
- the availability and nature of competing clinical trials;

- the availability of standard of care or new drugs approved for the indication the clinical trial is investigating;
- failure to obtain and maintain or timely amend patient consents;
- our ability to recruit clinical trial investigators with applicable competencies and experience;
- the risk that patients enrolled in clinical trials will withdraw from the trials before completion of their treatment or follow-up period (in either case including as a result of trial demands on participants among other things);
- clinicians' and patients' perceptions as to the safety and potential advantages of the product candidate being studied in relation to other available therapies; and
- the occurrence of adverse events, or AEs, or undesirable side effects attributable to our product candidates.

The process of finding and enrolling patients may prove costly, especially since we are looking to identify a subset of the patients eligible for our studies from a relatively small patient population for many of the diseases we are studying, including for the treatment of conditions associated with COVID-19. If patients are unable or unwilling to participate in our clinical trials for any reason, or we experience difficulties in patient enrollment for any other reasons, such as due to the COVID-19 pandemic, our costs may significantly increase and the timeline for recruiting patients, conducting trials and obtaining regulatory approval of our product candidates may be significantly delayed or prevented, the commercial prospects of our product candidates may be harmed, and our ability to commence product sales and generate product revenue from any of these product candidates could be delayed or prevented. Any of these occurrences may harm our business, financial condition, and prospects significantly.

***Our product candidates may cause undesirable side effects or have other safety risks that could delay or prevent their regulatory approval, limit the commercial profile of an approved label or result in significant negative consequences, including withdrawal of approval, following any potential marketing approval.***

Treatment with our product candidates may produce undesirable side effects or adverse reactions or events. Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in more restrictive labels or the delay or denial of regulatory approvals by the FDA or other comparable regulatory authorities outside of the United States.

Our product candidates modulate the immune system and carry risks associated with immunosuppression, including the risk of serious infections and other potential serious health risks. For example, some common side effects of rilonacept include, cold symptoms, nausea, stomach pain, diarrhea, numbness or tingling feeling and injection-site reaction. IL-1 blockade may interfere with immune response to or delay symptomatology and diagnosis of infections. Serious, life-threatening infections have been reported in patients taking rilonacept. In our open-label Phase 2 proof-of-concept clinical trial of rilonacept for recurrent pericarditis, the most common AEs were gastrointestinal disorders and injection site reactions and there was one treatment-related serious AE which resulted in discontinuation: a skin abscess which responded to medical treatment. In our global, pivotal Phase 3 clinical trial, RHAPSODY, the most common AEs were injection site reactions and upper respiratory tract infections and there were four serious AEs on rilonacept, none of which were treatment-related.

For mavrilimumab, there is a theoretical risk for the development of pulmonary alveolar proteinosis, or PAP. PAP is a rare lung disorder in which surfactant-derived lipoproteins accumulate excessively within pulmonary alveoli due to loss of granulocyte macrophage colony stimulating factor, or GM-CSF, function. The disease can range in severity from a sub-clinical reduction in diffusion capacity to significant dyspnea during mild exertion. In preclinical studies conducted by MedImmune, certain effects were observed in the lungs of non-human primates, which led the FDA to issue a clinical hold with respect to MedImmune's proposed clinical trial in RA. Preclinical data generated to-

date suggest mavrilimumab does not reach the lungs in sufficient quantities to induce PAP at clinically relevant doses and human trials thus far have not shown a clinical effect on pulmonary function tests attributable to mavrilimumab.

However, if the results of our clinical trials reveal an unacceptable severity and prevalence of these or other side effects, the FDA or applicable regulatory authority outside of the United States may suspend or terminate our clinical trials, or not authorize us to initiate further trials. In addition, if other anti-GM-CSF molecules in development by third parties show these or similar side effects, it could have an impact on the entire class of anti-GM-CSF molecules in development and the applicable regulatory agency may suspend or terminate our clinical trials, or not authorize us to initiate further trials. The FDA or comparable regulatory authorities outside of the United States could order us to cease further development of, or deny or withdraw any approval of, any of our product candidates for any or all targeted indications.

In addition, subsequent to MedImmune's original IND submission for RA and the availability of additional clinical safety data that MedImmune generated in human clinical trials conducted outside of the United States for RA, the FDA provided feedback that the risk-benefit assessment for investigation of mavrilimumab in a clinical trial may differ depending on the patient population studied. Specifically, the FDA acknowledged that the risk-benefit assessment for initiation of a clinical trial may be considered favorable in a patient population with high morbidity and limited effective treatment options. Further, we anticipate that other potential indications for mavrilimumab would need to be in serious or life-threatening diseases where the burden of the disease is sufficient to justify the risk-benefit of mavrilimumab to be studied in such indications or potentially in indications requiring limited doses where the theoretical risk of PAP is low. In addition, based on FDA feedback we received in connection with its review and authorization of an IND for our global Phase 2 clinical trial of mavrilimumab in GCA, we anticipate that to help inform the risk-benefit profile for the use of mavrilimumab in GCA, we will need to eventually demonstrate the safety and effectiveness of mavrilimumab beyond 26 weeks as well as evaluate its pharmacokinetic profile and the effectiveness of mavrilimumab at different doses in GCA.

In our repeated-single-dose Phase 1b clinical trial of vixarelimab, there were no serious AEs, however, there were more atopic dermatitis flares in the vixarelimab-treated population versus placebo (47.6% versus 4.5%) through the 12-week treatment period; all subjects who experienced a flare were successfully managed with topical corticosteroids.

In addition, the development of any of our product candidates in other potential indications could increase the possibility of identification of adverse safety results that impact our development of such product candidates. For example, the development of mavrilimumab in other potential indications, such as COVID-19 pneumonia and hyperinflammation, could increase the possibility of identification of adverse safety results that impact our development of mavrilimumab for GCA or any other indication.

Further, clinical trials by their nature utilize a sample of the potential patient population. Certain rare and severe side effects associated with our product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidates. If one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by the product, a number of potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may withdraw approvals of such product and require us to take it off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, contraindications or field alerts to physicians and pharmacies;
- we may be required to create a registry or a REMS plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers or other elements to assure safe use;
- we may be required to change the way the product is administered, conduct additional clinical trials or change the labeling of the product;

- we may be subject to limitations on how we promote the product, or sales of the product may decrease significantly;
- we could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

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

***If we cannot replicate positive results from earlier preclinical studies and clinical trials conducted by us or third parties, including the companies from whom we have licensed or acquired or may in the future license or acquire our product candidates, in our later clinical trials, we may be unable to successfully develop, obtain regulatory approval for and commercialize our product candidates.***

Positive results from our preclinical studies and any positive results we may obtain from our earlier clinical trials of our product candidates, or from the clinical trials conducted by third parties, including investigator-initiated studies or the companies from whom we in-licensed or acquired or may in the future in-license or acquire our product candidates, may not be predictive of the results from any required later preclinical studies and clinical trials. Similarly, the positive results from the preclinical studies and earlier clinical trials or investigator initiated studies of our product candidates may not be replicated in our subsequent preclinical studies and clinical trial or investigator initiated study results. The mechanisms of action of our product candidates may not prove to be safe or effective to treat the diseases we are studying. Further, the safety and efficacy of our product candidates have not been determined for the indications in which we are developing them, and we cannot provide any assurance that their development will be successful. For example, although rilonacept is FDA approved for the treatment of CAPS and DIRA, and we announced that our global, pivotal Phase 3 clinical trial, RHAPSODY, with rilonacept in recurrent pericarditis met statistical significance on its primary and all major secondary efficacy endpoints, and mavrilmumab has been studied in Phase 2 clinical trials for the treatment of RA by MedImmune, and we announced that our global Phase 2 clinical trial for the treatment of GCA met achieved statistical significance on both its primary and secondary efficacy endpoints, their safety and efficacy have not been determined in the indications we are pursuing, and each may fail to receive regulatory approval for those indications.

Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in later-stage clinical trials after achieving positive results in early-stage development, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in preclinical studies and clinical trials, including AEs previously unreported in earlier studies and trials and favorable safety and efficacy observed in earlier studies and trials not replicated in later studies or trials. Further, such setbacks may be caused by manufacturing or formulation changes to product candidates or changes in manufacturers or manufacturing processes to produce products as compared to the process or manufacturing methods used in prior preclinical studies and clinical trials. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain FDA or EMA approval. Furthermore, the approval policies or regulations of the FDA or the applicable regulatory authorities outside of the United States may significantly change in a manner rendering our clinical data insufficient for approval, which may lead to the FDA or such other regulatory authorities delaying, limiting or denying approval of our product candidates.

***Interim, preliminary, and “top-line” data from our clinical trials that we announce or publish from time to time may change as more patient data become available following the interim data; preliminary data are subject to audit and verification procedures, and deeper analysis of the data beyond the topline data may provide more color and context to the data, all of which could result in material or other changes in the final data.***

From time to time, we may disclose interim data from our preclinical studies and clinical trials, which are based on an interim analysis of then-available data from ongoing studies or trials. Interim data from our preclinical studies and clinical trials that we may complete are subject to the risk that one or more of the clinical observations may materially change as patient enrollment continues and more patient data become available from the particular study or trial. As a result, interim data should be viewed with caution until final data are available. Adverse differences between interim data and final data could significantly harm the development of our product candidate and our business prospects with respect thereto.

Further, from time to time we may announce or publish preliminary data from our pre-clinical studies or clinical trials, which are based on a preliminary analysis of final data. Preliminary data from our preclinical studies and clinical trials are subject to change following a more comprehensive review of the data from the particular preclinical study or trial. We also make assumptions, estimations, calculations and conclusions as part of our preliminary analyses of the data, and we may not have received, or had the opportunity to fully and carefully evaluate, all of the data. As a result, preliminary data remain subject to audit and verification procedures that may result in the final data being different from the preliminary data we previously announced or published.

From time to time, we may also announce or publish topline data from our preclinical studies and clinical trials, which are a subset of the total data intended to provide the important results from the study or trial. As a result, deeper analysis of the data beyond the topline data may provide more color and context to the results. Any adverse color and context provided by the broader data to the topline data could significantly harm the development of our product candidate and our business prospects with respect thereto.

Further, third parties, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate and our business prospects. In addition, the information we announce or publish regarding a particular preclinical study or clinical trial may represent only a portion of extensive information generated from that study or trial, and our shareholders or other third parties may not agree with what we determine is material, important or otherwise appropriate information to include in our disclosure.

If the interim, preliminary, or topline data that we report differ materially from final results, or if third parties, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business prospects, operating results or financial condition. Further, announcement of preliminary, interim or top-line data by us or differences between that data and the final data could result in volatility in the price of our Class A common shares.

#### **Risks Related to Marketing Approval and Regulatory Matters**

***Regulatory approval processes are lengthy, time consuming and inherently unpredictable. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our product candidates or we fail or otherwise cease to advance their development, we will be delayed in commercializing or will not be able to commercialize, our product candidates and our ability to generate revenue will be materially impaired.***

Our product candidates and the activities associated with their development and commercialization, including their trial design, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, pricing, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Before we can commercialize any of our product candidates, we must obtain marketing approval. We have not received approval or clearance to market any of our product candidates from regulatory authorities in any jurisdiction and it is possible that none of our product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval or clearance. We have limited experience in filing and supporting the applications necessary to gain regulatory approvals and may need to rely on third-party CROs and regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing

regulatory approval also requires the submission of information about the biologic manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. The FDA and other regulatory authorities have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for a product candidate. Even if we believe the data collected from clinical trials are promising, such data may not be sufficient to support approval by the FDA or any other regulatory authority. In addition to the United States, we may seek regulatory approval to commercialize our product candidates in other jurisdictions. While the scope of regulatory approval is similar in many countries, to obtain separate regulatory approval in multiple countries will require us to comply with numerous and varying regulatory requirements of each such country or jurisdiction regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution, and we cannot predict success in any such jurisdictions.

The process of obtaining regulatory approvals, both in the United States and in other countries, is time consuming, expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted BLA, or equivalent application types, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other trials, including with respect to approval for the commercial marketing of riloncept in the United States for recurrent pericarditis.

The FDA accepted the sBLA for riloncept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of riloncept for the approved indications in the United States. However, we must continue to coordinate numerous activities with Regeneron in order for us to take over certain responsibilities and obligations with respect to owning the BLA for CAPS and DIRA. The activities and obligations are complex and resource intensive, and we may not have anticipated all such activities to be coordinated or responsibilities and obligations to be assumed. Further, if Regeneron or we do not perform in accordance with our expectations, or we are not ready to assume the responsibilities and obligations on a timely basis, or either we or Regeneron have critical or major observations during the FDA's potential inspection with respect to our and Regeneron's ability to manufacture riloncept to the requisite level of quality standards and controls could delay FDA approval or our commercialization of riloncept, and our ability to generate revenue from riloncept could be materially impaired. Approval by the FDA in the United States, if obtained, does not ensure approval by regulatory authorities in other countries or jurisdictions. Our product candidates could be delayed in receiving, or fail to receive, regulatory approval or we may fail or cease to advance their development for many reasons, including the following:

- the FDA or comparable regulatory authorities in other jurisdictions may disagree with the number, design or implementation of our clinical trials to support further development or approval;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable regulatory authorities in other jurisdictions that a product candidate is safe and effective for its proposed indication;
- the FDA or comparable regulatory authorities in other jurisdictions could require us to collect additional data or conduct additional clinical trials; for example, based on FDA feedback, we anticipate that to help inform the risk-benefit profile for the use of mavrilimumab in GCA, we will need to eventually demonstrate the safety and effectiveness of mavrilimumab beyond 26 weeks, as well as evaluate its pharmacokinetic profile and the effectiveness of mavrilimumab at different doses;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable regulatory authorities in other jurisdictions that we or our CMOs can manufacture clinical trial material that is deemed to be comparable to the material used in previous clinical trials of our product candidates;

- the results of clinical trials may produce negative, inconclusive or uncompetitive results, which may result in us deciding, or regulators requiring us, to conduct additional clinical trials or to modify or cease development programs for our product candidates;
- the results of clinical trials may not meet the primary or secondary endpoints of the applicable study or the level of statistical significance required by the FDA or comparable regulatory authorities in other jurisdictions;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable regulatory authorities in other jurisdictions may disagree with our interpretation of data from preclinical studies or clinical trials;
- the FDA or comparable regulatory authorities in other jurisdictions may disagree that we have provided sufficient safety data or adequately demonstrated clinical benefit in a patient population or subpopulation studied in the clinical trial;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA, sBLA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable regulatory authorities in other jurisdictions could require us to conduct additional clinical trials to compare our product candidates to other therapies for the treatment of the same indication;
- 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 we may fail to recruit suitable patients to participate in a trial;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- the FDA or comparable regulatory authorities in other jurisdictions may not believe that we have sufficiently demonstrated our ability to manufacture the products to the requisite level of quality standards, or they may fail to approve our manufacturing processes or facilities, or the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies;
- the FDA or comparable regulatory authorities in other jurisdictions may not believe that their on-site inspections and data audits have sufficiently demonstrated the quality and integrity of the clinical trial conduct and of data submitted to the FDA or comparable regulatory authorities in other jurisdictions in support of our new product approvals and marketing applications;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- our product candidates may have undesirable side effects, toxicities or other unexpected characteristics, causing us or our investigators, regulators or IRBs to reject, suspend or terminate the clinical trials; and
- the approval policies or regulations of the FDA or comparable regulatory authorities in other jurisdictions may significantly change in a manner rendering our clinical data, biologic manufacturing process and other supporting information insufficient for approval.

In addition, even if we were to obtain approval for one or more of our product candidates, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request. For example, in connection with our vixarelimab program, regulatory authorities may recognize a narrower patient population as having prurigo nodularis or define the disease differently than we do. Furthermore, regulatory authorities may not approve the price we intend to charge, may grant approval contingent on the performance of costly post-marketing clinical trials, may impose certain post-marketing requirements that impose limits on our marketing and distribution activities, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of or to advance our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenue will be materially impaired.

***Our current product candidates and any of our future product candidates regulated as biologics in the United States may face biosimilar competition sooner than anticipated.***

In the United States, the Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first approved under a BLA by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product for the same therapeutic indication if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning are subject to uncertainty. While it is uncertain when processes intended to implement the BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects of our product candidates.

For example, although rilonacept was approved as a biological product under a BLA for the treatment of CAPS in February 2008, and we believe it qualified for the 12-year period of exclusivity against any biosimilars, such 12-year period of exclusivity has lapsed. The FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of rilonacept for the approved indications in the United States. However, the 12-year exclusivity period does not attach to the approval of an sBLA, potentially creating the opportunity for biosimilar competition, subject to any orphan drug exclusivity under the U.S. Orphan Drug Act (see "Risks Related to Marketing Approval and Regulatory Matters" We received orphan drug designation in the United States for rilonacept for the treatment of pericarditis and for mavrilimumab for the treatment of GCA and may seek orphan drug designation for some of our other product candidates in the United States, as well as for any of our product candidates in the EU, and we may be unsuccessful, or may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity, for any product candidate for which we obtain orphan drug designation"). If we obtain FDA approval for any of our other biological product candidates, we expect any such product candidates to qualify for the 12-year period of exclusivity under the BPCIA. However, there is a risk that this exclusivity could be shortened due to Congressional action or otherwise, or that the FDA will not consider any such approved product candidates, to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated.

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

***Even if we obtain marketing authorization of our product candidates in a major pharmaceutical market such as the United States or the EU, we may not seek or obtain approval or commercialize our product candidates in other markets, which would limit our ability to realize their full market potential.***

In order to market any products in a country or territory, we must establish and comply with numerous and varying regulatory requirements of such country or territory regarding safety and efficacy. Regulatory requirements can vary widely from country to country, and clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation, additional administrative review periods, and additional preclinical studies or clinical trials, which would be costly and time consuming and could delay or prevent the introduction of our product candidates in those countries. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries.

***We may seek orphan drug designation for our other product candidates in the United States, as well as for any of our product candidates in the EU, and we may be unsuccessful, or may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity, for any product candidate for which we obtain orphan drug designation.***

We received orphan drug designations in the United States for rilonacept for the treatment of pericarditis, which includes recurrent pericarditis and for mavrilimumab for the treatment of GCA, and we may seek orphan drug designation for certain of our other product candidates in the United States as well as for any of our product candidates in the EU. We may be unsuccessful in obtaining such designation for any of our other product candidates or unable to maintain the associated benefits for rilonacept or mavrilimumab or any of our other product candidates that are granted orphan drug designation, if any. Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs or biologics intended to treat relatively small patient populations as orphan drug products. Under the U.S. Orphan Drug Act, the FDA may designate a drug or biologic as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States.

In the EU, the European Commission grants orphan drug designation after receiving the opinion of the EMA's Committee for Orphan Medicinal Products on an Orphan Drug Designation application. In the EU, orphan drug designation is intended to promote the development of drugs that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than five in 10,000 persons in the EU and for which no satisfactory method of diagnosis, prevention, or treatment has been authorized (or the product would be a significant benefit to those affected). Additionally, orphan drug designation is granted for drugs intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the EU would be sufficient to justify the necessary investment in developing the drug. In the EU, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers, as well as potential marketing exclusivity.

In addition, if a drug or biologic with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug or biologic is entitled to a period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug and indication for that time period, except in limited circumstances. If our competitors are able to obtain orphan drug exclusivity prior to us, for products that constitute the "same drug" and treat the same indications as our product candidates, we may not be able to have competing products approved by the applicable regulatory authority for a significant period of time. The applicable period is seven years in the United States and ten years in the EU. The EU exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified.

Even if we obtain orphan drug exclusivity for any of our product candidates, that exclusivity may not effectively protect those product candidates from competition because different drugs can be approved for the same condition, and orphan drug exclusivity does not prevent the FDA from approving the same or a different drug in another indication. Even after an orphan drug is approved, the FDA can subsequently approve a later application for the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer in a substantial portion of the target populations, more effective or makes a major contribution to patient care. In addition, 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. Moreover, orphan-drug-exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to manufacture sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. While we received orphan drug designations in the United States for rilonacept for the treatment of pericarditis and for mavrilimumab for the treatment of GCA, and we may seek orphan drug designation for certain of our product candidates, we may never receive such designation for such other product candidates. Even though we received such designation for rilonacept and mavrilimumab and may receive such designation for any of our other product candidates, there is no guarantee that we will enjoy the benefits of such designations.

***We may seek Breakthrough Therapy designation or Fast Track designation by the FDA for one or more of our product candidates, which we may not receive. Such designation may not lead to a faster development or regulatory review or approval process and does not increase the likelihood that our product candidates will receive marketing approval.***

We received Breakthrough Therapy designation for rilonacept for the treatment of recurrent pericarditis, and we may seek Breakthrough Therapy or Fast Track designation for some of our other product candidates. A Breakthrough Therapy is defined as a drug that is intended, alone or in combination with one or more other drugs or biologics, 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. In addition, if a product candidate is intended for the treatment of a serious or life-threatening condition and clinical or preclinical data demonstrate the potential to address unmet medical needs for this condition, the sponsor may apply for Fast Track designation.

The FDA has broad discretion whether or not to grant Fast Track and Breakthrough Therapy designations, and even if we believe a particular product candidate is eligible for this designation, we cannot be certain that the FDA would decide to grant it. Even if we obtain such designations for one or more of our product candidates, we may not experience a faster development process, review or approval compared to non-expedited FDA review procedures. In addition, the FDA may withdraw Fast Track or Breakthrough Therapy designations if it believes that such designations are no longer supported. Although products receiving Fast Track and Breakthrough Therapy designation are generally eligible for the FDA's priority review procedures, receiving such designations does not guarantee that the BLA for such products will receive priority review.

Whether to grant Breakthrough Therapy or Fast Track designation is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for these designations, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of either of these designations for a product candidate may not result in a faster development process, review or approval compared to product candidates considered for approval under non-expedited FDA review procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify for either of these designations, the FDA may later decide that the product candidate no longer meets the conditions for qualification.

***We have never obtained marketing approval for any product candidate, and we may be unable to successfully do so for any of our product candidates. Failure to successfully complete a pivotal clinical trial or obtain marketing approval in a timely manner for any of our product candidates could have a material adverse impact on our business and financial performance.***

Conducting pivotal clinical trials and preparing, and obtaining marketing approval for, a product candidate is a complicated process. Although members of our management team have participated in our global, pivotal Phase 3 clinical trial, RHAPSODY, for riloncept in recurrent pericarditis and members of our management team have obtained marketing approvals for product candidates in the past while employed at other companies, we as a company have not obtained marketing approvals for any of our product candidates. As a result, such activities may require more time than we anticipate. Failure to successfully complete, or delays in, any of our eventual other pivotal trials or related regulatory submissions would prevent us from, or delay us in, obtaining regulatory approval for, or clearance of, our product candidates. It is possible that the FDA or other government agencies may refuse to accept for substantive review any regulatory submissions that we submit for our product candidates or may conclude after review of our applications for riloncept or any of our other product candidates that the submissions are insufficient to obtain marketing approval or clearance of riloncept or any of our other product candidates. While the FDA accepted the sBLA for riloncept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021, if the FDA or other government agencies do not accept our applications for our other product candidates, if any, or the FDA delays or does not issue marketing authorizations for riloncept or any of our other product candidates, the FDA or other regulatory authorities may require that we conduct additional clinical, preclinical or manufacturing validation trials and submit that data before they will reconsider our applications. Depending on the extent of these or any other required trials, approval or receipt of any marketing authorization may be delayed by several years or may require us to expend more resources than we have available. It is also possible that additional trials, if performed and completed, may not be considered sufficient by the FDA or other government agencies to approve or grant marketing authorizations. Any delay in obtaining, or an inability to obtain, marketing approvals would delay or prevent us from commercializing riloncept or any of our other product candidates, generating revenues and achieving and sustaining profitability. If any of these outcomes occur, we may be forced to modify or cease our development efforts for one or more of our product candidates, which could significantly harm our business.

***Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.***

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs and biologics or modifications to approved drugs or biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most inspections of foreign manufacturing facilities, and on March 18, 2020, the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. Subsequently, on July 10, 2020 the FDA announced its intention to resume certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA intends to use this risk-based assessment system to identify the categories of regulatory activity that can occur within a given geographic area, ranging from mission-critical inspections to resumption of all regulatory activities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews,

or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

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

***We contract with third parties for manufacturing our product candidates and for certain research and other preclinical and clinical development and expect to continue to do so for our commercial supply. This reliance on third parties increases the risk that we may not have sufficient quantities of our product candidates or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.***

We do not currently own or operate any late-stage manufacturing facilities. Although we have built a development and manufacturing facility to produce drug substance to support certain research, preclinical and other clinical development for our product candidates, we rely, and expect to continue to rely, on third parties for the manufacture of our late-stage product candidates and certain of our early-stage product candidates for the majority of our clinical development efforts, as well as for the potential commercial manufacture of our product candidates, if approved, as well as label and packaging activities. We rely on these third parties to produce our product candidates at sufficient quality and quantity to support our development and commercialization efforts. Our reliance increases the risk that we will have insufficient quantities of our product candidates or that our product candidates are not produced at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

For example, Regeneron is the sole manufacturer of rilonacept and we have a contract with Regeneron to produce rilonacept on an exclusive basis for a period of time. Regeneron, in turn, relies upon a third-party CMO to conduct fill/finish operations for rilonacept. Under certain circumstances, we or Regeneron could initiate a technology transfer to either us or another CMO to manufacture rilonacept. Finding new CMOs or third-party suppliers to produce rilonacept would add additional cost and require significant time and focus of our management team. The CMO would need to produce rilonacept at a different manufacturing site and potentially using a different process or at a different scale. We cannot provide any assurance that the technology transfer from Regeneron to us or another CMO will be successful in producing rilonacept in sufficient quantities or of acceptable quality, if at all, or that we or another CMO will produce a comparable product to the satisfaction of the FDA or other comparable regulatory authorities, which could delay, prevent or impair the development or commercialization of rilonacept. In addition, there is typically a transition period when a new CMO commences work. Any significant delay or interruption in the supply of rilonacept by Regeneron or otherwise could considerably impact our ability to meet commercial or clinical demand for the product and our ability to generate revenue from rilonacept could be materially impaired.

We also have CMOs manufacture vixarelimab drug substance and drug product and entered into an agreement with a CMO to produce mavrilimumab beyond our current inventory. While we have built a manufacturing facility to support early development for our product candidates, we and our CMOs may not be able to produce sufficient quantities of our product candidates or produce them at an acceptable quality, including as a result of the COVID-19 pandemic, which could delay, prevent or impair our development or commercialization efforts and increase costs.

As a result of the COVID-19 pandemic, existing and any new third-party CMOs or suppliers may be unable to produce or supply our product candidates or the raw materials needed to produce or supply our product candidates or may experience delays, restrictions or limitations in the production, delivery or release of the supply of our product candidates or the raw materials needed to produce our product candidates, including due to disruptions at the respective facilities that produce our product candidates or the raw materials needed to produce our product candidates, staffing shortages or reprioritizations, production slowdowns, stoppages or reprioritizations, including as a result of reprioritization by third parties or the U.S. government for any products or potential products related to the treatment or prevention of COVID-19, or interruptions in global shipping. In addition, there is typically a transition period when a new CMO commences work. Finding new CMOs or third-party suppliers involves additional cost and requires our management's time and focus. Any significant delay in the supply of our product candidates or the raw materials needed to produce our product candidates, could considerably delay conducting our clinical trials and potential regulatory approval of our product candidates. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis.

If we make manufacturing or formulation changes to our product candidates or change manufacturers or manufacturing processes, we may be unsuccessful in producing products comparable to those used in prior clinical trials. Therefore, we may need to conduct additional process development or additional clinical trials to bridge our prior clinical results to those resulting from the new manufacturing process, which could impact the timing and subsequent success of our planned clinical trials. In addition, as we plan to produce clinical trial and potential commercial material at a CMO, the CMO may be required to adopt different manufacturing protocols or processes. For example, although Regeneron has produced rilonecept for commercial use for over ten years, the FDA or other applicable regulatory authorities in other jurisdictions may reevaluate rilonecept's current manufacturing processes or route of administration in connection with evaluating whether to approve rilonecept for a new indication, such as recurrent pericarditis.

The facilities used by our CMOs to manufacture our product candidates may be inspected by the FDA and other comparable regulatory authorities in connection with the submission of our marketing applications to, and review by, the FDA or other comparable regulatory authorities or based on their work for other clinical trial sponsors. While we provide oversight of manufacturing activities, we do not and will not control the manufacturing process of, and will be completely dependent on, our CMOs for compliance with cGMPs and other regulatory requirements in connection with the manufacture of our product candidates. If our CMOs cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other applicable regulatory authorities in other jurisdictions, they will not be able to secure or maintain regulatory approval for their manufacturing facilities. While we may review the compliance history and performance of our CMOs, we have no control over the ability of our CMOs to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or comparable regulatory authorities in other jurisdictions 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, our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates, if approved, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business and supplies of our product candidates.

Although we have entered into certain agreements for the manufacture of clinical material for our product candidates, we may be unable to establish new agreements on acceptable terms, if at all, with third-party manufacturers for those product candidates. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Our product candidates may compete with other product candidates and approved products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us. Furthermore, given the limited number of available manufacturing slots and the long lead times needed to reserve them, manufacturers require monetary commitments in connection with such reservations as well as fees for changes or cancellations in the reserved manufacturing slots. As a result, we may wait to reserve manufacturing slots until we can be informed by data from the clinical trials of our product candidates, which may be several months from the time we request manufacturing slots. Any significant delay in the supply of clinical materials for our product candidates could considerably delay conducting our clinical trials and potential regulatory approval of our product candidates. Alternatively, we may project when we may need additional clinical material for our product candidates and reserve manufacturing time-slots "at-risk" prior to our product candidates having generated data

from their then current clinical trials. Such projections involve risks and uncertainties and may result in additional costs or delays in manufacturing clinical materials for our product candidates when and if we actually need them.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. If our current CMOs cannot perform as agreed, we may be required to replace such manufacturers. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement. Further, Regeneron has an exclusive right to produce rilonacept for a period of time, which could impact our ability to find a replacement manufacturer for rilonacept in a short-period of time if needed.

***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' and suppliers' 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 and suppliers 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 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 biological or hazardous waste insurance coverage.

***Manufacturing issues at our facility and the facilities of our third-party service providers, including as a result of the COVID-19 pandemic, could cause product shortages, disrupt or delay our clinical trials or regulatory approvals, delay or stop commercialization of our product candidates, and adversely affect our business.***

The manufacture of our product candidates is highly regulated, complex and difficult, requiring a multi-step and controlled process, and even minor problems or deviations could result in the product candidates being out-of-spec, failed batches or other failures, such as defective products or manufacturing failures. We have limited experience overseeing the manufacturing processes of mavrilimumab, vixarelimab, and KPL-404 and no experience overseeing the manufacturing process of rilonacept. Due to the highly technical requirements of manufacturing our product candidates and the strict quality and control specifications, we and our third-party providers may be unable to manufacture or supply our product candidates despite our and their efforts. Failure to produce sufficient quantities of our product candidates could delay their development, result in supply shortages for our patients, result in lost revenue, if any, and diminish our potential profitability, which may lead to lawsuits or could delay the introduction of our product candidates to the market.

The manufacture of our product candidates is at high risk of product loss due to contamination, equipment malfunctions, human error or raw material shortages. Deviations from established manufacturing processes could result in reduced production yields, failed batches and other supply disruptions. If microbial, viral or other contaminations are discovered in our product candidates or manufacturing facilities, any related production lot could be lost and the relevant manufacturing facilities may need to close for an extended period of time to investigate and remediate the contaminant.

Many additional factors could cause production interruptions at our facilities or at the facilities of our third-party providers, as well as disruptions in travel, shipping or delivery capabilities into and within the countries in

which we or our manufacturers produce our product candidates or disruptions to production capabilities, including due to the impact of natural disasters, accidents, boycotts, labor disputes, political and economic instability, including acts of terrorism or war, and an epidemic or pandemic or other outbreak of disease, including the COVID-19 pandemic. The occurrence of any such event could adversely affect our ability to satisfy the required supply for any of our product candidates or successfully complete preclinical and clinical development, which would result in additional costs to us or impair our ability to generate revenue and would harm our business, financial condition and prospects significantly.

We and our third-party providers are required to maintain compliance with cGMP and other stringent requirements and are subject to inspections by the FDA and comparable agencies in other jurisdictions to confirm such compliance. If we or any of our third-party providers are not able to establish and maintain procedures and processes sufficient to satisfy cGMP standards, we could experience a delay, interruption or other issues in our manufacture, fill-finish, packaging, storage or delivery of our product candidates, and any related failure of the facilities or operations of third parties to pass any regulatory agency inspection could significantly impair our ability to supply our products and product candidates. Significant noncompliance could also result in the imposition of monetary penalties or other civil or criminal sanctions and damage our reputation.

Any adverse developments affecting the operations of our third-party providers, such as any impact due to the COVID-19 pandemic including shortages or reprioritizations of raw materials, including reprioritization by third parties or the U.S. government for any products or potential products related to the treatment or prevention of COVID-19, could result in a shortage of clinical products or impose commercial product requirements, cause withdrawal of our product candidates or any approved products, shipment delays, lot failures or recalls. We may also have to write off inventory and incur other charges and expenses for products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Such manufacturing issues could increase our cost of goods, cause us to lose potential revenue, reduce our potential profitability or damage our reputation.

***The third parties upon whom we rely for the supply of the drug substance and drug product used in our product candidates are our sole source of supply, and the loss of any of these suppliers could significantly harm our business.***

The drug substance and drug product used in rilonacept, mavrilimumab and vixarelimab are supplied to us from single-source suppliers. Regeneron has a contractual right to be our sole source manufacturer of rilonacept unless they have a persistent failure to satisfy our supply needs. Our ability to successfully develop our product candidates, and to ultimately supply our commercial products in quantities sufficient to meet the market demand, depends in part on our ability to obtain the drug substance and drug product for these product candidates in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing. We do not currently have arrangements in place for a redundant or second-source supply of any such drug substance and drug product in the event any of our current suppliers of such drug substance and drug product cease their operations or stop offering us sufficient quantities of these materials for any reason.

We are not certain that our single-source suppliers will be able to meet our demand for their products, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance. While our suppliers have generally met our demand on a timely basis in the past, they may subordinate our needs in the future to their other customers.

In addition, to manufacturing rilonacept, mavrilimumab and vixarelimab in the quantities that we believe would be required to meet anticipated market demand, our third-party manufacturers may need to increase manufacturing capacity and, in some cases, alternative sources of commercial supply may need to be secured, which could involve significant challenges and may require additional regulatory approvals. In addition, the development of commercial-scale manufacturing capabilities may require us and our third-party manufacturers to invest substantial additional funds and hire and retain the technical personnel who have the necessary manufacturing experience. Neither we nor our third-party manufacturers may successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all.

Moreover, if there is a disruption to our manufacturing operations or one or more of our third-party manufacturers' or suppliers' relevant operations, such as due to the impact of the COVID-19 pandemic, including due to staffing shortages or reprioritizations, production slowdowns or stoppages or interruptions in global shipping, the supply of the related product candidate will be delayed until we or such manufacturer or supplier restores the affected facilities or we or they procure alternative manufacturing facilities or sources of supply. Our ability to progress our preclinical and clinical programs could be materially and adversely impacted if any of the third-party suppliers upon which we rely for preclinical and clinical stage product candidate supply were to experience a significant business challenge, disruption or failure due to issues such as financial difficulties or bankruptcy, issues relating to other customers such as regulatory or quality compliance issues, or other financial, legal, regulatory or reputational issues. Additionally, any damage to or destruction of our third-party manufacturers' or suppliers' facilities or equipment may significantly impair our ability to manufacture our product candidates on a timely basis.

Establishing additional or replacement suppliers for the drug substance and drug product used in our product candidates, if required, is unlikely to be accomplished quickly and can take several years, if at all. Furthermore, despite our efforts, we may be unable to procure a replacement supplier or do so on commercially reasonable terms, which could have a material adverse impact upon our business. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory approval, which could result in further delay. While we seek to maintain adequate inventory of the drug substance and drug product used in our product candidates, any interruption or delay in the supply of components or materials, or our inability to obtain such drug substance and drug product from alternate sources of comparable quality at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

Certain of the materials required in the manufacture and the formulation of our product candidates are derived from biological sources. Such materials are difficult to procure and may be subject to contamination or recall. Access to and supply of sufficient quantities of raw materials which meet the technical specifications for the production process is challenging, and often limited to single-source suppliers. Finding an alternative supplier could take a significant amount of time and involve significant expense due to the nature of the products and the need to obtain regulatory approvals. If we or our manufacturers are unable to purchase the materials necessary for the manufacture of our product candidates on acceptable terms, in a timely manner, at sufficient quality levels, or in adequate quantities, if at all, our ability to produce sufficient quantities of our products for clinical or commercial requirements would be negatively impacted. A material shortage, contamination, recall or restriction on the use of certain biologically derived substances or any other material used in the manufacture of our product candidates could adversely impact or disrupt manufacturing, which would impair our ability to generate revenues from the sale of such product candidates, if approved.

***We rely, and expect to continue to rely, on third parties, including independent investigators and CROs, to activate sites, conduct and otherwise support our research activities, preclinical studies, clinical trials and other trials for our product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates, and our business could be substantially harmed.***

We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to activate sites, conduct or otherwise support our GLP-compliant preclinical studies and GCP-compliant clinical trials for our product candidates properly and on time. We also rely on third parties to conduct other research related to our product candidates. We expect to rely heavily on these parties for such site activation, execution of and otherwise supporting clinical trials for our product candidates. While we have agreements governing their activities, we control only certain aspects of these parties' activities and have limited influence over their actual performance. The third parties with whom we contract for execution of our GLP-compliant preclinical studies and our GCP-compliant clinical trials play a significant role in the conduct of these trials and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely on these third parties to conduct our GLP-compliant preclinical studies and GCP-compliant clinical trials, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on these third parties does not and will not relieve us of our

regulatory responsibilities. For any violations of laws and regulations during the conduct of our preclinical studies or clinical trials, we could be subject to warning letters or enforcement actions that may include civil penalties and criminal prosecution.

We and our CROs are required to comply with regulations, including GCPs, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable regulatory authorities in other jurisdictions for any products in clinical development. The FDA enforces GCP regulations through periodic inspections of clinical trial sponsors, principal investigators and trial sites. If we or our CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable, and the FDA or comparable regulatory authorities in other jurisdictions may require us to perform additional clinical trials before approving our marketing applications. We cannot ensure that, upon inspection, the FDA or comparable regulatory authorities in other jurisdictions will determine that any of our future clinical trials will comply with GCPs. In addition, our clinical trials must be conducted with product candidates produced under cGMPs regulations. Our failure or the failure of our CROs to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process and could also subject us to enforcement action. We also are required to register certain clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so when required can result in fines, adverse publicity and civil and criminal sanctions.

Although we have and intend to continue to design the clinical trials for our product candidates, CROs will activate sites and conduct and oversee all of the clinical trials together with the various clinical trial sites that we engage to conduct the studies. As a result, many important aspects of our development programs for our product candidates, including their conduct and timing, will be outside of our direct control. Our reliance on third parties to activate sites and conduct future clinical trials will also 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 outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may:

- have staffing difficulties;
- have disruptions to their business and operations, including as a result of the impact from an epidemic or pandemic disease outbreak, including COVID-19 (see “Risk Factors — Risks related to product development — The COVID-19 pandemic, and measures taken in response to the pandemic, could have an adverse impact on our current or planned preclinical studies and clinical trials, which could be significant.”);
- fail to comply with contractual obligations;
- have difficulty with or controlling the performance of their subcontractors;
- experience regulatory compliance issues;
- undergo changes in priorities or become financially distressed; or
- form relationships with other entities, some of which may be our competitors.

These factors may materially adversely affect the willingness or ability of third parties to activate sites and conduct and oversee our clinical trials and may subject us to unexpected cost increases that are beyond our control. If the CROs, their subcontractors or the clinical trial sites do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, regulatory approval and commercialization of our product candidates may be delayed, we may not be able to obtain regulatory approval and

commercialize our product candidates, or our development program may be materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, their subcontractors or the clinical trial sites, we could be required to repeat, extend the duration of or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

These third parties are not our employees, and we are not able to control, other than by contract, the amount of resources, including time, which they devote to our clinical trials. If our CROs, their subcontractors or the clinical trial sites fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of our product candidates. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information is misappropriated.

If the third parties conducting our preclinical studies or our clinical trials do not perform their contractual duties or obligations, experience significant business challenges, disruptions or failures, such as due to the impact of the COVID-19 pandemic, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our protocols or to GCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be difficult, costly or impossible, and our preclinical studies or clinical trials may need to be extended, delayed, terminated or repeated. As a result, we may not be able to obtain regulatory approval in a timely fashion, or at all, for the applicable product candidate, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

If any of our relationships with these third-party CROs are suspended or terminate, we may not be able to enter into arrangements with alternative third-party service providers at all or on commercially reasonable terms. If CROs, their subcontractors or the clinical trial sites do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any clinical trials such CROs, subcontractors or clinical trial sites are associated with may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

***Our 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.***

Because we rely on third parties to develop and manufacture our product candidates, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, invention assignment agreements, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees, independent 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, such as 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 would impair our competitive position and may harm our business. To the extent that we share trade secrets of third parties that are licensed to us, unauthorized use or disclosure could expose us to liability.

#### **Risks Related to Commercialization**

***We have no experience as a company commercializing a therapeutic and limited experience establishing sales, marketing, distribution and general infrastructure either directly and/or through agreements with third parties. As a company we have not obtained marketing approvals for any of our product candidates and have never sold, marketed or distributed any therapeutic products. As a result we may not be successful in commercializing rilonecept in***

***recurrent pericarditis, if approved, or any future approved product candidates, thus potentially impairing commercial potential for riloncept and our other product candidates to generate any revenue.***

The FDA accepted the sBLA for riloncept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. If approved by the FDA, we will assume the sales and distribution of riloncept for the approved indications in the United States. While members of our management team have obtained marketing approvals for product candidates in the past while employed at other companies, we as a company have not obtained marketing approvals for any of our product candidates and have never sold, marketed or distributed any therapeutic products. To achieve commercial success for riloncept, if approved, or any future approved product candidate, we have been establishing and expanding our internal capabilities, including but not limited to, sales, marketing, distribution, access and patient support services as well as making arrangements with third parties to perform certain services. We are recruiting and training a specialty cardiology sales force of approximately 30 representatives who will call on high-volume accounts and specialists. We have hired other customer facing teams, including for our medical affairs, payor and patient support services teams to complement the efforts of the sales force, as well as the development of an efficient digital marketing campaign. Our internal capabilities are augmented through contracts with third parties for distribution services, price reporting and aspects of our patient services programs. We are currently undertaking these efforts in order to commercialize riloncept in the United States in anticipation of a potential approval. Each aspect of commercialization on its own can be complex, expensive and time consuming, and collectively the required effort for coordination is intensive. For example, recruiting and training a sales force and establishing marketing, payor and patient support service capabilities is expensive and time consuming and if not completed as planned could delay or reduce the effectiveness of the launch of our product candidates.

Factors that may inhibit our efforts to timely and successfully commercialize riloncept, if approved, or any of our other future product candidates, include:

- our inability to recruit, train and retain adequate numbers of effective sales, marketing, access, and payor and patient support personnel;
- the inability of sales personnel to obtain access, especially within the restrictions of the ongoing COVID-19 pandemic, to physicians and accounts as well as for an adequate number of physicians or accounts to prescribe riloncept or any of our future products, including riloncept, if approved;
- the lack of complementary products to be supported by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines;
- our inability to develop strong scientific-based relationships to drive disease awareness and education;
- our inability to establish the unmet medical need for the disease, and, with respect to riloncept, our inability to enable it to be viewed as the product of choice within the indication in which it is approved, if any;
- our inability or delay in gaining reimbursement and broad patient access at a price that reflects the value of riloncept or any of our other future products;
- our inability to equip customer-facing personnel with effective materials, including medical and sales literature to help them educate physicians and other healthcare providers regarding applicable diseases relevant to our future products;
- our inability to effectively distribute products in a timely manner;
- our inability to provide physicians and patients adequate support and training to build comfort around reconstitution and self-administration process to initiate and continue to use our products;

- our inability to develop robust patient support programs to optimize the patient and customer experience with rilonacept or any of our other future products as well as with the Company;
- our inability to develop or obtain sufficient operational functions and infrastructure to support our commercial activities; and
- unforeseen costs and expenses associated with creating a sales, marketing, and access organization.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties, delays or unforeseen costs. If we have not established effective commercialization infrastructure and capabilities as planned in advance of our anticipated commercial launch of rilonacept in recurrent pericarditis, if approved, either on our own or through arrangements with third parties, or if we experience any of the factors that may inhibit our efforts to commercialize rilonacept or any of our other product candidates, if approved, we will not be successful in commercializing rilonacept or any such future product candidates. Further, our business, results of operations, financial condition and prospects will be materially adversely affected.

***The impact of the COVID-19 pandemic and measures taken in response to the COVID-19 pandemic has resulted in limitations on certain commercial activities, which, if prolonged, may impede the effective commercialization of our product candidates and result in lower than anticipated future revenue.***

As part of our commercial strategy for rilonacept, if approved for the treatment of recurrent pericarditis, we expect to have a focused and targeted launch effort, with a specialty cardiology salesforce of approximately 30 representatives calling on high-volume accounts and high-volume specialists to help ensure that decision-makers view recurrent pericarditis as a serious, debilitating disease with a significant unmet need and view rilonacept as the product of choice for the treatment and prevention of recurrent pericarditis.

The COVID-19 pandemic and measures taken in response to the COVID-19 pandemic, including business and travel restrictions and social-distancing to halt the spread of the pandemic, has had an impact on businesses, healthcare systems, regulatory authorities and other organizations and conferences. These measures may result in limitations on certain aspects of our commercialization strategy, including our specialty cardiology salesforce not being able, or having limited access, to physician offices and other high-volume accounts in person, which if prolonged, may impede the effective commercialization of rilonacept and result in lower than anticipated future revenue.

***Our current or future product candidates may not gain market acceptance by physicians, patients, or third-party payors (e.g., governments and private health insurers), in which case our ability to generate product revenues will be impaired.***

Even if the FDA or any other regulatory authority approves the marketing of rilonacept or any of our other product candidates (whether developed on our own or with a collaborator), physicians, healthcare providers, patients, the medical community or third-party payors may not accept or use rilonacept or any of our other product candidates, or may effectively block or limit their use in the case of third-party payors. For example, the FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of rilonacept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. If rilonacept in recurrent pericarditis or any of our other product candidates do not achieve an adequate level of acceptance, we may not generate the projected level of product revenue or profits from operations, if at all. The degree of market acceptance of rilonacept, if approved, or any of our other product candidates will depend on a variety of factors, including:

- the timing of market introduction;
- disease awareness, including understanding the severity and epidemiology of the disease;

- the number and clinical profile of competing products, whether regulatory approved or not;
- the potential and perceived advantages or disadvantages of our product candidates relative to alternative treatments;
- our ability to provide acceptable evidence of safety and efficacy;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or other regulatory authorities;
- convenience and ease of administration, including relative to alternative therapies;
- pricing (including patient out-of-pocket costs), budget impact, affordability and cost effectiveness, particularly in relation to alternative treatments;
- the effectiveness of our sales, marketing and distribution activities;
- availability of adequate coverage, reimbursement and payment from health maintenance organizations and other insurers, both public and private, and the timing thereof; and
- other potential advantages over alternative treatment methods.

If riloncept in recurrent pericarditis or any of our other product candidates fail to gain market acceptance, our ability to generate revenue will be adversely affected. Even if riloncept or any of our other product candidates achieve market acceptance, the relevant market may prove not to be large enough to allow us to generate significant revenue.

***The successful commercialization of our product candidates will depend in part on the extent to which third-party payors, including governmental authorities and private health insurers, provide funding, establish favorable coverage and pricing policies and set adequate reimbursement levels. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.***

Our ability to commercialize riloncept in recurrent pericarditis or any of our other product candidates successfully, particularly in orphan or rare disease indications, will depend in part on the availability of favorable coverage and the adequacy of reimbursement for the product candidate and alternative treatments from third-party payors (e.g., governmental authorities, private health insurers and other organizations). Although riloncept is approved and marketed for human use for the treatment of CAPS and DIRA in the United States by Regeneron, if riloncept is approved by the FDA for recurrent pericarditis we would need to seek favorable coverage and reimbursement for this indication from third-party payors. Obtaining coverage and adequate reimbursement is contingent on our ability to:

- obtain clinical data that supports payor value/benefit assessments;
- execute formal payor value/benefit assessment processes;
- obtain coverage that enables use in populations reflected in any product candidate's approved product label; and
- effectively negotiate favorable pricing and reimbursement terms.

While in some markets, there is a single payor, in other markets there are multiple payors that can have different ways of assessing prescription drugs and therapeutics. To commercialize rilonacept in recurrent pericarditis, if approved, or any of our other product candidates successfully, we will be required to have sufficient expertise, internally or through a third party, and sufficient resources to execute on the respective product candidate's coverage and reimbursement strategy. We cannot be certain we will be able to effectively execute our coverage and reimbursement strategy in the markets we pursue, which could limit the commercial potential of rilonacept in recurrent pericarditis or any of our other product candidates. As a result, our ability to generate projected revenue from rilonacept or any of our other product candidates could be negatively impacted.

Governmental authorities, private health insurers and other third-party payors have attempted to control costs by delaying the time to reimbursement, and by restricting the breadth of coverage and limiting the amount of reimbursement for particular products in terms of lower pricing and increasing the proportion of the cost for which the patient is responsible. There may be significant delays in obtaining reimbursement for newly approved products or product indications, coverage may be limited to a subset of the patient population for which the treatment is approved by the FDA or similar regulatory authorities outside the United States, and reimbursement rates may vary according to the use of the product and the clinical setting in which it is used. Coverage and reimbursement barriers by payors may materially impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available, or available only at limited levels, or if such coverage will require patient out-of-pocket costs that are unacceptably high, we may not be able to successfully commercialize product candidates for which we obtain marketing approval. Moreover, any coverage or reimbursement that may be obtained may be decreased or eliminated in the future.

Third-party payors continue to introduce new tactics to contain costs, including more rigorous value/benefit assessment processes and criteria. For example, it is possible that third-party payors will select low-cost clinical comparators that serve as benchmarks for determining relative value, including generics, biosimilars and lower cost brands with or without the same approved indication. The result of such a change would be a more challenging value/benefit assessment caused by a more challenging basis for comparison and the potential for a worse relative outcome. Third-party payors may determine that we have failed to generate sufficient evidence to demonstrate the relative benefits of our product candidates and refuse to provide coverage and reimbursement entirely, or many find the evidence not sufficiently compelling to support the desired pricing and reimbursement. Similarly payors may implement coverage criteria that seeks to limit the use of our product candidates to situations where a patient must be proven to not adequately respond to the lower-cost comparator. The potential of third-party payors to introduce more rigorous value/benefit assessment processes and criteria could have a negative impact on our ability to commercialize our product candidates successfully.

Third-party payors are also introducing more challenging price negotiation methodologies, including in re-visiting established coverage and reimbursement parameters when new competitors, including brands, generics and biosimilars enter the market. It is possible that a third-party payor may consider our product candidates as substitutable and only be willing to cover the cost of the alternative product. Even if we show improved efficacy, safety or improved convenience of administration with our product candidates, pricing of competitive products may limit the amount we will be able to charge for our product candidates. Third-party payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in our product candidates. In some cases, when new competitor generic and biosimilar products enter the market, there are mandatory price reductions for the innovator compound, in other cases, payors employ "therapeutic category" price referencing and seek to lower the reimbursement levels for all treatment in the respective therapeutic category. In other cases, new competitor brand drugs can trigger therapeutic category reviews in the interest of modifying coverage and or reimbursement levels. The potential of third-party payors to introduce more challenging price negotiation methodologies could have a negative impact on our ability to commercialize our product candidates successfully.

***The incidence and prevalence for target patient populations of our product candidates have not been established with precision. If the market opportunities for our product candidates are smaller than we estimate, or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability may be materially adversely affected.***

The precise incidence and prevalence for all the conditions we aim to address with our programs are not known with specificity, including with respect to COVID-19 pneumonia and hyperinflammation. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are based largely on our extrapolation from available population studies and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, pharmacy claims analyses, large national surveillance databases or market research, and may prove to be incorrect. Further, new trials and therapeutic options may lead to changes in the estimated incidence or prevalence of these diseases, or relevant subpopulations thereof, including the introduction of a vaccine for the prevention of COVID-19 with respect to COVID-19 pneumonia and hyperinflammation. As a result, the number of patients who may benefit from our product candidates may turn out to be lower than expected.

The total addressable market for any of our product candidates will ultimately depend upon, among other things, the diagnostic criteria and applicable patient population included in the final label for the product candidate approved for sale for its indication, the efficacy, safety and tolerability demonstrated by the product candidate in our clinical trials, acceptance by the medical community and patients, pricing, access and reimbursement. The number of addressable patients in the United States and other major markets outside of the United States may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business. Further, even if we obtain significant market share for our product candidates, because the potential target populations are very small, we may never achieve profitability despite obtaining significant market share.

***Evolving health policy and associated legislative changes related to coverage and reimbursement aimed at lowering healthcare expenditure could impact the commercialization of our product candidates. Pharmaceutical pricing has been, and likely will continue to be, a central component of these efforts.***

The regulations that govern regulatory approvals, pricing and reimbursement for new pharmaceutical products vary widely from country to country. In markets of some of the countries we may pursue outside of the United States for any of our product candidates, the products may be subject to extensive governmental price control or other price regulations. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price negotiations that delay our commercial launch of the product candidate in that country, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product candidate in that country. Adverse pricing and reimbursement limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Net prices for products may be reduced by mandatory discounts or legislated rebates that must be paid in order to participate in government healthcare programs or paid to other third-party payors. Mandatory discounts can be legislated at any time in any market. Similarly, some markets currently have pricing legislation that sets the price of a pharmaceutical product in their market by referencing the price of that product in other markets, known as international reference pricing. International reference pricing has the potential to impact price cut decisions in individual countries and the countries that reference the pricing of certain other individual countries. Expansion of mandatory discounts and international reference pricing, including into the United States, presents a material risk to our ability to achieve favorable pricing and adequate reimbursement.

Drug importation and cross-border trade, both sanctioned and unsanctioned, occurs when a pharmaceutical product from a market where the official price is set lower is shipped and made commercially available in a market where the official price is set higher. Any future relaxation of laws that presently restrict or limit drug importation or

cross-border trade, including in the United States, could have a material negative impact on our ability to commercialize our product candidates, if approved.

We expect to experience pricing pressures in connection with the sale of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and biologics and surgical procedures and other treatments, has become intense. As a result, we may not be able to achieve or sustain favorable pricing for our product candidates and adequate reimbursement.

***If, in the future, we are unable to maintain our sales, marketing and distribution capabilities, infrastructure and organization directly and/or through agreements with third parties to sell and market riloncept in recurrent pericarditis or any future product candidates, if approved, the commercial potential for riloncept and our other product candidates to generate any revenue may be impaired.***

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming and could delay any drug launch. If the commercial launch of a drug candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

If we enter into arrangements with third parties to perform sales, marketing, distribution and other commercial support services, our product revenues or the profitability of these revenues to us are likely to be lower than if we were to market and sell any approved product candidates ourselves. In addition, we may not be successful in entering into arrangements with third parties to market and sell our approved product candidates, if any, or may be unable to do so on terms that are favorable to us. Further, we will likely have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our approved product candidates effectively. However, developing a sales, marketing and access organization requires significant investment, is time consuming and if not completed as planned could delay the launch of our approved product candidates. Furthermore, we may not be able to adequately establish an effective sales, marketing, distribution and access organization in the EU or other key markets in which we have obtained approval for the commercial marketing of our product candidates outside of the United States. If we are unable to maintain or reestablish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our approved product candidates, if any, and approved product candidates ability to generate any revenue may be impaired. Furthermore, our business, results of operations, financial condition and prospects will be materially adversely affected.

***Our future growth may depend, in part, on our ability to penetrate markets outside of the United States, where we would be subject to additional regulatory burdens and other risks and uncertainties.***

Our future profitability may depend, in part, on our ability to commercialize our product candidates in markets outside of the United States for which we may rely on collaborations with third parties.

Although we do not have immediate plans to pursue the commercialization of riloncept for recurrent pericarditis or any other approved indication outside of the United States, we are evaluating the opportunities for the development and commercialization of our product candidates in certain markets outside of the United States. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the applicable regulatory authority in that market, and we may never receive such regulatory approval for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials, manufacturing and commercial sales, pricing and distribution of our product candidates, and we cannot predict success in these jurisdictions. If we obtain approval of our product candidates and ultimately commercialize our product candidates in markets outside of the United States, we would be subject to additional risks and uncertainties, including:

- our ability to obtain reimbursement for our product candidates in such markets;

- our inability to directly control commercial activities because we are relying on third parties;
- the burden of complying with complex and changing regulatory, tax, accounting and legal requirements of such countries;
- different medical practices and customs in such countries affecting acceptance in the marketplace;
- import or export licensing requirements;
- longer accounts receivable collection times;
- longer lead times for shipping;
- language barriers for technical training and the need for language translations;
- reduced protection of intellectual property rights in such countries;
- the existence of additional potentially relevant third-party intellectual property rights;
- foreign currency exchange rate fluctuations; and
- the interpretation of contractual provisions governed by laws of such country in the event of a contract dispute.

Sales of our product candidates outside of the United States could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

In some countries, particularly the countries in Europe, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, price negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug. To obtain adequate reimbursement or favorable pricing approval in some countries, we may be required to conduct a clinical trial that compares our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially.

***The United Kingdom's withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business.***

Following a national referendum and enactment of legislation by the government of the United Kingdom, the United Kingdom formally withdrew from the European Union and ratified a trade and cooperation agreement governing its future relationship with the European Union. The agreement, which is being applied provisionally from January 1, 2021 until it is ratified by the European Parliament and the Council of the European Union, addresses trade, economic arrangements, law enforcement, judicial cooperation and a governance framework including procedures for dispute resolution, among other things. Because the agreement merely sets forth a framework in many respects and will require complex additional bilateral negotiations between the United Kingdom and the European Union as both parties continue to work on the rules for implementation, significant political and economic uncertainty remains about how the precise terms of the relationship between the parties will differ from the terms before withdrawal.

These developments, or the perception that any related developments could occur, have had and may continue to have a material adverse effect on global economic conditions and the financial markets, and may significantly reduce global market liquidity, restrict the ability of key market participants to operate in certain financial markets or restrict our access to capital. Any of these factors could have a material adverse effect on our business, financial condition and results of operations and reduce the price of our shares.

***We are currently subject to ongoing obligations, regulatory requirements, and review, and if we receive regulatory approval for any of our product candidates, will be subject to additional ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.***

If the FDA or a comparable regulatory authorities outside of the United States approves any of our product candidates, we will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, distribution, storage, advertising, promotion, sampling, record-keeping, AE reporting, conduct of post-marketing trials and submission of safety, efficacy and other post-market information for our approved product candidates, including both federal and state requirements in the United States and requirements of comparable regulatory authorities outside of the United States. For example, the FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. While we hold the BLA for rilonacept in CAPS, we will only assume the sales and distribution of rilonacept for approved indications in the United States upon approval from the FDA, if any, of the sBLA for the commercial marketing of rilonacept in the United States for recurrent pericarditis, at which time we would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. As we assume the sales and distribution responsibilities of rilonacept for the approved indications in the United States and begin commercializing rilonacept for the treatment of recurrent pericarditis or any of our other product candidates, if approved, we will be subject to additional ongoing obligations and continued regulatory review, which may result in significant additional expense.

Manufacturers and their facilities are required to comply with extensive requirements of the FDA and comparable regulatory authorities outside of the United States, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our CMOs will be subject to user fees and continual review and inspections to assess compliance with cGMP and adherence to commitments made in any BLA or MAA. Accordingly, we and our CMOs and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. We will be required to report certain adverse reactions and production problems, if any, to the FDA and comparable regulatory authorities outside of the United States. Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance.

While our current clinical and medical affairs activities are subject to certain ongoing regulatory requirements concerning appropriate exchange of medical and scientific information, if the FDA or a comparable regulatory authority outside of the United States approves any of our product candidates we will have to comply with additional requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs and biologics are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have approval.

The holder of an approved BLA or MAA must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval were obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our products. An unsuccessful post-marketing trial or failure to complete such a trial could result in the withdrawal of marketing approval. The FDA also may place other conditions on approvals including the requirement for a REMS, to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS before it can obtain approval. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

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

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our CMOs' facilities; or
- seize or detain products, or require a product recall.

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

If there are changes in the application of legislation or regulatory policies, or if problems are discovered with a product or the manufacture of a product, or if we or one of our distributors, licensees, co-marketers or other third-parties operating on our behalf fails to comply with regulatory requirements, the regulatory authorities could take various actions. These include imposing fines on us, imposing restrictions on our product or its manufacture and requiring us to recall or remove the product from the market. The regulatory authorities could also suspend or withdraw our marketing authorizations, or require us to conduct additional clinical trials, change our product labeling or submit additional applications for marketing authorization. If any of these events occurs, our ability to sell our product may be impaired, and we may incur substantial additional expense to comply with regulatory requirements.

The policies of the FDA and other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. 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, Europe or in other jurisdictions. For example, the previous U.S. presidential administration took 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 oversight activities such as implementing statutes through rulemaking, issuance of guidance and review and approval of marketing applications. It is difficult to predict whether or how these Executive Orders will be implemented by the current U.S. presidential administration, if at all, and the extent to which they may impact the FDA's ability to exercise its regulatory authority. If these executive actions impose restrictions on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. Further, the policies and priorities of the new administration are unknown and could materially impact the regulations governing our product candidates. In addition, 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 be subject to enforcement actions and we may not achieve or sustain profitability.

***Our business operations and current and future relationships with investigators, healthcare professionals, consultants, customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse, physician and other healthcare provider payment and price transparency, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.***

Although we do not currently have any products in the market, the FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon receipt of FDA approval, if any, of the sBLA, we will assume the sales and distribution of rilonacept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. As we assume the sales and distribution responsibilities of rilonacept for the approved indications in the United States and begin commercializing rilonacept for the treatment of recurrent pericarditis or any of our other product candidates, if approved, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the United States federal and state governments and the governments of other countries or jurisdictions in which we conduct our business.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our product candidates for which we obtain marketing approval.

Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. The U.S. federal 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 hand;
- the U.S. federal False Claims Act and civil monetary penalties laws, which, among other things, impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the federal government. In addition, manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. Moreover, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- the U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or service. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal physician payment transparency requirements, sometimes referred to as the “Sunshine Act” created under Section 6002 of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Affordable Care Act, which requires manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid or the Children’s Health Insurance Program to report to the Department of Health and Human Services information related to certain financial interactions with physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), additional categories of healthcare practitioners beginning in 2022, and teaching hospitals, as well as the ownership and investment interests of physicians and their immediate family members; and
- analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures and pricing information.

These laws and regulations, among other things, may constrain our business, marketing and other promotional activities by limiting the kinds of financial arrangements we may have with hospitals, prescribers or other potential purchasers of our product candidates, if approved. We have entered into consulting and advisory board agreements with physicians, some of whom are paid in the form of shares or options to acquire our common shares. We could be adversely affected if regulatory agencies determine our financial relationships with such prescribers to be in violation of applicable laws or the appearance of a conflict of interest. For example, 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. The FDA or other regulatory authorities may conclude that a financial relationship between us and a principal investigator or a clinical trial site has created a conflict of interest or otherwise affected interpretation of a study. The FDA or other regulatory authorities 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, which could result in a delay in approval, or rejection, of our marketing applications by the FDA or other regulatory authorities and may ultimately lead to the denial of marketing approval of our product candidates. Furthermore, investigators for our clinical trials may become debarred by FDA or other regulatory authorities, which may impact the integrity of our studies and the utility of the clinical trial itself may be jeopardized. Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under such laws, it is possible that some of our business activities could be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations.

Interactions between biopharmaceutical companies and healthcare professionals are also governed by strict laws, regulations, industry self-regulation codes of conduct and healthcare professionals’ codes of professional conduct in the individual EU member states. The provision of any inducements to healthcare professionals to prescribe, recommend, endorse, order, purchase, supply, use or administer a drug product is prohibited. A number of EU member states have established additional rules requiring pharmaceutical companies to publicly disclose their interactions with physicians and other healthcare professionals and to obtain approval from employers, professional organizations or competent authorities before entering into agreements with healthcare professionals.

Ensuring that our future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do 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, including anticipated activities to be conducted by our sales team, were to be 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 the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, additional reporting

requirements or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. Further, defending against any such actions can be costly, time consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

#### **Risks Related to Competition, Executing our Strategy, Retaining Key Employees and Managing Growth**

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

The development and commercialization of new drugs and biologics is highly competitive. We face competition with respect to our current product candidates, and will face competition with respect to any 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 biologics or are pursuing the development of therapies in the fields in which we are interested. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. 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.

While we are not aware of any therapies currently approved or actively continuing clinical trials in recurrent pericarditis, there is one product that modulates the signaling of IL-1 $\alpha$  and IL-1 $\beta$ , anakinra (KINERET), marketed by Swedish Orphan Biovitrum AB, and one product that modulates the signaling of IL-1 $\beta$ , canakinumab (ILARIS), marketed by Novartis Pharmaceuticals Corporation. There are other therapies which modulates IL-1 $\alpha$  in preclinical and clinical development for diseases other than recurrent pericarditis from Johnson & Johnson and XBIOTECH USA, INC.

We expect mavrilimumab, if approved for the treatment of GCA, to experience competitive pressure from tocilizumab (ACTEMRA), marketed by Genentech USA, Inc., which was approved in 2017 for use in GCA as an adjunct to steroid taper. Additional competition may be experienced from Eli Lilly and Company and AbbVie Inc., which are conducting clinical trials for oral janus kinase inhibitors, Sanofi S.A. and Regeneron, which are recruiting a Phase 3 clinical trial with their anti-IL-6 program, Novartis International AG, which is recruiting a trial with its IL-17 antagonist secukinumab (Cosentyx) and Janssen Biotech, Inc., which is testing ustekinumab (STELARA) in two small studies for GCA. There are multiple other programs targeting GM-CSF antagonism not currently pursuing GCA in clinical trials that could decide in the future to engage in development of therapies for GCA, including GlaxoSmithKline plc, Izana Bioscience, Roivant Sciences Ltd., I-Mab Biopharma Co., Ltd., and Humanigen, Inc.

We are also pursuing mavrilimumab development for the treatment of COVID-19 pneumonia and hyperinflammation. There are currently hundreds of active, industry sponsored clinical trials testing many different mechanisms of action for the treatment of COVID-19 related therapeutic areas in addition to the approved vaccines, and the many other clinical trials testing vaccines for the prevention of COVID-19.

Multiple therapies are in development for prurigo nodularis, and any that receive FDA approval for this indication will be likely competitors to vixarelimab. These products include nemolizumab, dupilumab and nalbuphine ER. There are multiple agents targeting antagonism of the CD40/CD40L interaction across a variety of clinical uses including, Novartis International AG, Biogen Inc., or Biogen, and UCB, Inc., C.H. Boehringer Sohn AG & Ko. KG and AbbVie Inc., Annelixis Therapeutics LLC, ImmuNext Inc. and Sanofi S.A., Viela Bio and Astellas Pharma Inc.

Further, the results of clinical trials for our product candidates may produce negative, inconclusive or uncompetitive results compared to those produced by any of these or other companies in the indications we are studying, which may result in us deciding, or regulators requiring us, to conduct additional clinical trials or modify or cease development programs for our product candidates. We may also determine that the potential product and commercial profile of any of our product candidates may not ultimately be commercially successful or even if they have the potential

to ultimately be successful, we may not have sufficient recourses, which in either case could lead us to discontinue its development, or we may determine to not support further development of any of our product candidates at any time for any reason.

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

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any drugs that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics in guiding the use of related products, market acceptance by physicians and patients, the level of generic competition and the availability of reimbursement from government and other third-party payors.

***We may not be successful in executing our growth strategy to identify, discover, develop, in-license or acquire additional product candidates or technologies, and our growth strategy may not deliver the anticipated results or we may refine or otherwise alter our growth strategy. We may seek to acquire businesses or undertake business combinations, collaborations or other strategic transactions which may not be successful or on favorable terms, if at all, and we may not realize the intended benefits of such transactions.***

We have acquired or in-licensed our existing product candidates, and as part of our strategy we plan to identify new product candidates or technologies that we believe are complementary to our existing product candidates. We may do this through our internal discovery program, or by acquiring the rights to product candidates and technologies through a variety of transaction types, including in-licensing, strategic transactions, mergers or acquisitions. If we are unable to identify, discover, develop, in-license or otherwise acquire and integrate product candidates, or their related companies, in accordance with this strategy, our ability to pursue this component of our growth strategy would be limited and we may need to refine or otherwise alter this strategy. We cannot be certain that we will be successful in such efforts, and even if we are successful in such efforts, we cannot be certain that such discovery or transaction will be on favorable terms, or that, following any such discovery or transaction, we will be able to realize the intended benefits of it.

Research programs and business development efforts to identify new product candidates and technologies require substantial technical, financial and human resources. We may focus our efforts and resources on potential product candidates, technologies or businesses that ultimately prove to be unsuccessful. In-licensing and acquisitions of product candidates, technology or businesses often require significant payments and expenses and consume additional resources. We will need to continue to devote a substantial amount of time and personnel to research, develop and commercialize any such in-licensed or acquired product candidate or technology, or integrate any new business, and we may decide to reprioritize our efforts even after having expended resources on a particular prospect. Our research programs and business development efforts, including businesses or technology acquisitions, collaborations or licensing attempts, may fail to yield additional complementary or successful product candidates for clinical development and commercialization or successful business combinations for a number of reasons, including, but not limited to, the following:

- our research or business development methodology or search criteria and process may be unsuccessful in identifying potential product candidates or businesses with a high probability of success for development progression;

- we may not be able or willing to assemble sufficient resources or expertise to in-license, acquire or discover additional product candidates or acquire businesses or undertake business combinations, collaborations, or other strategic transactions;
- for product candidates we seek to in-license or acquire or for businesses we seek to acquire or undertake business combinations, collaborations or other strategic transactions with, we may not be able to agree to acceptable terms with the licensor or owner of those product candidates or businesses;
- we may not succeed in formulation or process development;
- any product candidates to which we acquire the rights or that we discover may not succeed in preclinical studies or clinical trials or may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive regulatory approval;
- competitors may develop alternatives that render any product candidates or technologies to which we acquire the rights or that we discover, obsolete or less attractive;
- any product candidates or technologies to which we acquire the rights may be covered by third-party patents or other exclusive rights;
- any product candidates or technologies to which we acquire the rights or that we discover may not allow us to leverage our expertise and our development and commercial infrastructure as currently expected;
- any product candidates or technologies to which we acquire the rights or that we discover will take substantial additional financial resources to develop and commercialize and we may not have sufficient funds to do so;
- the market for any product candidates or technologies to which we acquire the rights or that we discover may change during our program so that such a product or technology may become unreasonable to continue to develop;
- any product candidate to which we acquire the rights or that we discover may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- any product candidate to which we acquire the rights or that we discover may not be accepted as safe and effective by patients, the medical community or third-party payors.

If any of these events occurs, we may not be successful in executing our growth strategy to identify, discover, develop, in-license or acquire additional product candidates or technologies or to acquire businesses or undertake business combinations, collaborations, or other strategic transactions, or our growth strategy or strategic transactions may not deliver the anticipated results or we may refine or otherwise alter this strategy.

The consummation or performance of any acquisition, business combination, collaboration or other strategic transaction we may undertake in furtherance of our growth strategy or any refined or otherwise altered strategy, may involve additional risks, such as difficulties in assimilating different cultures, retaining personnel and integrating operations, which may be geographically dispersed, increased costs, exposure to liabilities, incurrence of indebtedness, or use a substantial portion of our available cash for all or a portion of the consideration or cause dilution to our existing shareholders if we issue equity securities for all or a portion of the consideration. If any of these events occurs or we are unable to meet our strategic objectives for any such transaction, we may not be able to achieve the expected benefits from the transaction and our business may be materially harmed.

***We may seek to enter into collaboration, licensing or other strategic transactions or arrangements to further develop, commercialize or otherwise attempt to realize value from one or more of our product candidates, and any such***

***transactions or arrangements that we may enter into may not be successful or be on favorable terms, which could adversely affect our ability to develop, commercialize or attempt to realize value from our product candidates.***

We may seek to enter into collaboration, licensing or other strategic transactions or arrangements to further develop, commercialize or otherwise attempt to realize value from one or more of our product candidates depending on the merits of retaining rights to develop or commercialize the product candidates ourselves as compared to entering into such transactions or arrangements. In addition, we may seek to jointly develop, commercialize or otherwise exploit one or more of our product candidates with a third party. To the extent that we decide to enter into such transactions or arrangements, we will face significant competition in seeking appropriate collaborators, licensees or other strategic parties. Moreover, these transactions and arrangements are complex and time consuming to negotiate, document, implement and to close or maintain. We may not be successful in our efforts to establish collaborations, licenses or other strategic transactions or arrangements should we so chose to do so. The terms of any such transactions or arrangements that we may establish may have unfavorable tax consequences for our shareholders in the United States. In addition, our right to grant a sublicense of intellectual property licensed to us under certain of our current agreements requires the consent of the applicable licensor.

Any current or future collaborations, licenses or other strategic transactions or arrangements that we enter into may not be successful. The success of these potential collaboration, license arrangements and other strategic transactions or arrangements may depend heavily on the efforts and activities of our collaborators, sublicensees or other strategic parties. For example, in December 2019, we entered into a clinical collaboration with Kite to initiate a Phase 2 clinical trial evaluating the combination of Yescarta (axicabtagene ciloleucel) and mavrilimumab in relapsed or refractory large B-Cell lymphoma. Kite was to be the sponsor of this study and responsible for its conduct, but Kite later informed us that our clinical collaboration was discontinued due to a portfolio strategy review that impacted our trial as it had not started recruiting. Collaborations, licenses or other strategic transactions or arrangements are subject to numerous risks, which may include risks that the collaborator, licensee or other strategic party, as applicable:

- may have significant discretion in determining the efforts and resources that they will apply;
- may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out its activities;
- may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- may own or co-own intellectual property covering products that results from our arrangement with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property, and even if we are able to license such exclusive rights, we may have to enter into a license agreement that include obligations to make milestone, royalty or other payments under such agreement; and
- may conduct sales and marketing activities or other operations that may not be in compliance with applicable laws, resulting in civil or criminal proceedings.

In addition, disputes may arise with respect to the ownership of any intellectual property developed pursuant to these arrangements. These arrangements may also be terminated, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

***Our future success depends on our ability to retain key executives and senior management as well as to attract, retain and motivate qualified personnel.***

We are highly dependent on the research and development, clinical, regulatory, manufacturing, commercial and business development expertise of members of our executive and senior management teams, as well as the other members of our management, scientific and clinical teams. Although we have entered into employment agreements with our executive officers and certain members of senior management, each of them or we may terminate their employment

with us at any time. We do not maintain “key person” insurance for any of our executives, senior management or other employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel is also critical to our success. The failure to recruit, or the loss of the services of our executive officers, senior management or other key employees could impede the achievement of our research, development and commercialization objectives, including with respect to our establishing and expanding sales, marketing and distribution capabilities, infrastructure and organization to commercialize products for which we may obtain marketing approval, including our lead program, rilonacept in recurrent pericarditis, if approved and for its other approved indications in the United States, which would seriously harm our ability to successfully implement our business strategy and potential commercial launch of rilonacept. Furthermore, replacing executive officers, senior management and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. For example, our Senior Vice President, Operations and Chief Commercial Officer departed the Company in January 2021, and we may not seek to find a replacement or may experience difficulties or delays in identifying a qualified replacement if we do seek to do so. This or other changes in our senior management may be disruptive to our business, and, if we are unable to manage an orderly transition of responsibilities, our business may be adversely affected. 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. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific and clinical personnel. If we are not able to continue to attract and retain, on acceptable terms, the qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or growth.

***We need to continue to develop our company and expand our scope of operations, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.***

We expect to continue to develop our company and expand the scope of our operations. To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational and financial systems and infrastructure, expand our facilities over time and continue to recruit and train qualified personnel. Also, our executive and senior management teams have and may continue to divert a disproportionate amount of their attention away from their day-to-day activities and devote a substantial amount of time to managing these development and expansion activities. For example in January 2021, we implemented select components of a new ERP system that will enable the organization to more efficiently manage the complexity of operating a commercial organization. As with any implementation this new system will require specific skills and expertise to setup, maintain and utilize the system. We may not be able to develop these skills internally or in sufficient time and capacity, which could require us to expend additional resources to acquire them. Due to our limited resources, certain employees have and may continue to perform activities that are beyond their regular scope of work, and we may not be able to effectively manage the development of our company, expansion of our operations or recruit and train qualified personnel. This may result in weaknesses of our systems and infrastructure, give rise to managerial, operational and financial mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The development of our company and expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of one or more of our product candidates. If our executive and senior management teams are unable to effectively manage our anticipated development and expansion, our expenses may increase more than expected, our ability to generate revenue could be reduced and we may not be able to implement our business strategy as planned, including with respect to our commercial launch of rilonacept in recurrent pericarditis, if approved. Our future financial performance and our ability to commercialize our product candidates, if approved, and to compete effectively will depend, in part, on our ability to effectively manage the future development of our company and expansion of our operations.

#### Risks Related to Intellectual Property

***If we are unable to adequately protect our proprietary technology or obtain and maintain patent protection for our technology and products, if the scope of the patent protection obtained is not sufficiently broad, or if the terms of our patents are insufficient to protect our product candidates for an adequate amount of time, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be materially impaired.***

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection in the United States and other countries for our product candidates, including rilonacept, mavrilimumab and vixarelimab. We seek to protect our proprietary and intellectual property position by, among other methods, filing patent applications in the United States and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. 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 and manufacture 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 a license agreement with Regeneron to patent applications and patents relating to rilonacept, an exclusive license under a license agreement with MedImmune, or the MedImmune Agreement, to patent applications and patents relating to mavrilimumab, and an exclusive license under our license agreement with Beth Israel Deaconess Medical Center to patent applications and patents related to KPL-404.

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 or our licensors have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our products in every country or territory in which we may sell our products. 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. Further, the USPTO, international trademark offices or judicial bodies may deny our trademark applications and, even if published or registered, these trademarks may not effectively protect our brand and goodwill. Like patents, trademarks also may be successfully opposed or challenged.

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. The degree of patent protection we require to successfully commercialize our product candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our owned or in-licensed patents have, or that any of our owned or in-licensed pending patent applications that mature into issued patents will have, claims with a scope sufficient to protect rilonacept, mavrilimumab, vixarelimab, KPL-404 or our other product candidates. In addition, the laws of other countries may not protect our rights to the same extent as the laws of the United States. Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions and adjustments may be available; however, the life of a patent, and the protection it affords, is limited. The actual protection afforded by a patent varies on a product-by-product basis, from country to country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

Patents may be eligible for limited patent term extension in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. Similar patent extensions exist in the EU and Japan, subject to the applicable laws in those jurisdictions. We may not receive an extension if we fail to apply within applicable deadlines or fail to apply prior to expiration of relevant patents. For example, no patent term extension was obtained in the United States following the FDA's approval of rilonacept for the treatment of CAPS in 2008, and the deadline for applying for such extension has passed. Accordingly, patent term extension in the United States based on the FDA's approval of rilonacept for CAPS, or any other indication for which the FDA may grant approval in the future, is unavailable. Further, while patent term extension was awarded for relevant patents in certain European countries following the EMA's approval of rilonacept for the treatment of CAPS, in 2012 the marketing authorization for CAPS was withdrawn. Patent term extensions may no longer be in effect or available, subject to the applicable laws in those countries as well as other factors, such as whether a marketing approval for rilonacept is reissued and whether such reissuance is prior to the expiration of the patent's natural 20-year patent term. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened and our competitors may obtain approval to market competing products sooner, impacting our revenue.

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, thereby limiting protection such patent would afford the respective product and any competitive advantage such patent may provide. In some cases, an in-licensed patent portfolio may have undergone a considerable loss of patent term prior to our initiation of development and commercialization of the product candidate. For example, the patents in the United States covering rilonacept as a composition of matter have expired, and patents covering rilonacept as a composition of matter in Europe have a term that expires in 2023, not including any patent term extensions, and the patents covering mavrilimumab as a composition of matter have a term that expires in 2027 in the United States, not including any patent term adjustments (an adjustment to the term of the U.S. patent to compensate the patentee for delays caused by the USPTO during the examination process) or patent term extensions, and in 2027 in Europe, not including any patent term extensions. As a result, our owned and in-licensed patent portfolio may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing products similar or identical to our product candidates. In such cases, we expect to rely on regulatory exclusivity for our product candidates, such as orphan drug exclusivity, which generally grants seven years of marketing exclusivity under the Federal Food, Drug, and Cosmetic Act, and up to ten years of marketing exclusivity in Europe. While, we obtained orphan drug designations from the FDA for rilonacept for the treatment of pericarditis, which includes the treatment of recurrent pericarditis, and for mavrilimumab for the treatment of GCA, we may pursue orphan drug designation for our other product candidates in the United States and we may not be successful in obtaining such designation, or we may not be able to maintain the benefits of the designation for rilonacept or mavrilimumab or any of our other product candidates. Even if we obtain orphan drug exclusivity for any of our product candidates, that exclusivity may not effectively protect those product candidates from competition because different drugs can be approved for the same condition, and orphan drug exclusivity does not prevent the FDA from approving the same or a different drug in another indication. Even after an orphan drug is approved, the FDA can subsequently approve a later application for the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer in a substantial portion of the target populations, more effective or makes a major contribution to patient care. In addition, 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. See "Risk Factors — Risks related to marketing approval and regulatory matters."

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 the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights cannot be predicted with any certainty.

In addition, 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. Patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO is often significantly narrowed by the time they issue, if at all. The claims of our issued patents or patent applications when issued may not cover our product candidates, proposed commercial technologies or the future products that we develop, or even if such patents provide coverage, the coverage obtained may not provide any competitive advantage. Further, 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, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. In the case of our field-limited license from Regeneron, another licensee may have the right to enforce patents covering the product in their field. As a result, we may need to coordinate enforcement with another party, and the other party could enforce the patents in a manner adverse to our interests or otherwise put the patents at risk of invalidation.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or license may fail to result in issued patents in the United States or in other countries. Even if we acquire patent protection that we expect should enable us to maintain a competitive advantage, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. The issuance of a patent is not conclusive as to its inventorship, scope, validity, enforceability or term, 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. We may become involved in contested proceedings challenging our patent rights or the patent rights of others from whom we have obtained licenses to such rights. For example, patents granted by the USPTO may be subject to third-party challenges such as (without limitation) derivation, re-examination, interference, post-grant review or *inter partes* review proceedings, and patents granted by the European Patent Office may be challenged by any person in an opposition proceeding within nine months from the publication of the grant. Similar proceedings are available in other jurisdictions, and in some jurisdictions third parties can raise questions of validity with a patent office even before a patent has granted. Competitors may claim that they invented the inventions claimed in our issued patents or patent applications prior to us, or may file patent applications before we do. In such case, we may have to participate in interference or derivation proceedings in the USPTO, to determine which party is entitled to a patent on the disputed invention. We may also become involved in similar opposition proceedings in the European Patent Office or similar offices in other jurisdictions regarding our intellectual property rights with respect to our products and technology.

Such proceedings can be expensive, time consuming and may divert the efforts of our technical and managerial personnel, which could in turn harm our business, whether or not we receive a determination favorable to us. We may not be able to correctly estimate or control our future operating expenses in relation to such proceedings, which could affect operating expenses. Our operating expenses may fluctuate significantly in the future as a result of a variety of factors, including the costs of such proceedings.

Since patent applications are confidential for a period of time after filing, we cannot be certain that we or our licensors were the first to file any patent application related to our product candidates. Competitors may also contest our patents, if issued, by showing the patent examiner that the invention was not original, was not novel or was obvious. In litigation, a competitor could claim that our patents, if issued, are not valid or enforceable for a number of reasons. If a court agrees, rights to those challenged patents may be diminished or lost.

In addition, we may in the future be subject to claims by our or our licensors' former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our or their behalf, respectively. Although we generally require all of our employees and consultants and any other partners or collaborators who have access to our proprietary know-how, information or technology to assign or grant similar rights to their inventions to us, we cannot be certain that we or our licensors have executed such agreements with all parties who may have contributed to our intellectual property, nor can we be certain that our agreements with such parties will

be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy.

An adverse determination in any such submission or proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, without payment to us, or could limit the duration of the patent protection covering our technology and product candidates. Such challenges may also result in our inability to manufacture or commercialize our product candidates without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

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.

***Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. If we breach any of the agreements related to our product candidates, we could lose the ability to continue the development and commercialization of the related product. Additionally, our current licensing and acquisition agreements contain limitations and restrictions that could limit or adversely affect our ability to develop and commercialize other products in the future.***

We entered into agreements to acquire the rights to develop or commercialize our product candidates, rilonacept, mavrilimumab, vixarelimab and KPL-404. In September 2017, we entered into a license agreement with Regeneron to obtain an exclusive license under certain intellectual property rights controlled by Regeneron to develop and commercialize rilonacept. In December 2017, we entered into the MedImmune Agreement to obtain exclusive worldwide rights to research, develop, manufacture, market and sell mavrilimumab and any other products covered by the licensed patent rights. In September 2016, pursuant to an asset purchase agreement with Biogen, or the Biogen Agreement, we acquired all of Biogen's right, title and interest in and to certain assets used in or relating to vixarelimab, including patents and other intellectual property rights, clinical data, know-how and inventory. In connection with our acquisition of Primatope Therapeutics, Inc., or Primatope, in March 2019, we acquired an exclusive world-wide license with Beth Israel Deaconess Medical Center for certain patent applications and patents related to KPL-404. Each of these agreements requires us to use commercially reasonable efforts to develop and commercialize the related product candidates, make timely milestone and other payments, provide certain information regarding our activities with respect to such product candidates and indemnify the other party with respect to our development and commercialization activities under the terms of the agreements. These agreements and any future such agreements that we enter into impose a variety of obligations and related consequences.

We are a party to license and acquisition agreements of importance to our business and to our current product candidates, and we expect to be subject to additional such agreements in the future. Disputes may arise between us and any of these counterparties regarding intellectual property subject to and each parties' obligations under such agreements, including:

- 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 scope of rights granted under the agreement and other interpretation-related issues;
- our obligations to make milestone, royalty or other payments under those agreements;
- 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;
- 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 the license; and
- the effects of termination.

These or other disputes over our obligations or intellectual property that we have licensed or acquired 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 a material respect, the respective licensor/seller would have the right to terminate the respective agreement and upon the effective date of such termination, have the right to re-obtain the related technology as well as aspects of any intellectual property controlled by us and developed during the period the agreement was in force that relate to the applicable technology. This means that the licensor/seller to each of these agreements could effectively take control of the development and commercialization of our product candidates after an uncured, material breach of the agreement by us. This would also be the case if we voluntarily elected to terminate the relevant agreement, which we have the right to do under each of these agreements. While we would expect to exercise our rights and remedies available to us in the event we fail to meet our obligations under these agreements in any material respect, 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. Any uncured, material breach under the 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. Termination of one of these agreements for any reason, and the related discontinuation of the development or commercialization of a product candidate could impair our ability to raise additional capital, generate revenue and may significantly harm our business, financial condition and prospects.

Regeneron has rights to develop rilonacept in its retained fields of local administration to the eye and ear, oncology, deficiency of the IL-1 receptor, and CAPS, as well as for the treatment of Deficiency of the Interleukin-1 Receptor Antagonist, or DIRA, which was recently approved by the FDA. Regeneron may also develop rilonacept in fields to which we have licensed the rights, but we retain the commercial benefit related to that development upon approval of rilonacept in any field that we have licensed. We and Regeneron communicate with each other concerning our related development activities, and we have approval rights over Regeneron's development in the fields that we have licensed, including pericarditis. The FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon receipt of FDA approval for rilonacept in recurrent pericarditis, if any, we would assume the sales and distribution of rilonacept for the other approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. We must continue to coordinate numerous activities with Regeneron in order for us to take over certain responsibilities and obligations with respect to owning the BLA. Outside of the United States and Japan, Regeneron has granted a third-party licensee the right to develop and commercialize rilonacept in CAPS and certain periodic fever syndromes. The development of rilonacept in other fields could increase the possibility of identification of adverse safety results that impact our development of rilonacept for recurrent pericarditis. In addition, if approved, commercialization of rilonacept in other fields could result in an increased threat of off-label use to compete

with the sale of riloncept to treat these indications, which may diminish sales of riloncept in fields licensed exclusively to us.

Certain of our agreements 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. For example, under the MedImmune Agreement, we cannot sublicense the rights licensed or sublicensed to us without the consent of MedImmune and certain applicable third-party licensors, if required by agreements between MedImmune and such third-party licensors. Under the Biogen Agreement, Biogen has a right of first negotiation under certain circumstances to purchase the assets we acquired from Biogen or to obtain a license to exploit the applicable products. This right of first negotiation remains in effect until the earlier of 12 years from the date of the agreement or the first commercial sale of a product under the agreement, and applies to a variety of transactions, including licensing transactions and the sale of our company. In addition, under the Biogen Agreement, we are subject to an exclusivity obligation, pursuant to which we may not conduct any activity alone or through a third party related to a product that modulates the oncostatin M receptor (other than for the development and commercialization of products that are the subject of the Biogen Agreement). This exclusivity obligation runs from the earlier of the eighth anniversary of the agreement or the first commercial sale of a product that is the subject of the Biogen Agreement.

***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 material adverse effect on the success of our business.***

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our 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 frequent litigation regarding patents and other intellectual property rights. We cannot assure you that our product candidates or any future product candidates, including methods of making or using these product candidates, will not infringe existing or future third-party patents. We may in the future become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and technology, including contested proceedings before the USPTO. Our competitors or other third parties may assert infringement claims against us, alleging that our products are covered by their patents.

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 have filed, and continue to file, patent applications related to immunomodulation. Some of these patent applications have already been allowed or issued, and others may issue in the future. For example, we are aware of third-party patents that contain claims potentially relevant to mavrimumab and vixarelimab. If the claims of any of these patents are asserted against us, we do not believe our proposed activities related to mavrimumab and vixarelimab would be found to infringe any valid claim of these patents. 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. If we were to challenge the validity of any issued U.S. patent in court, we would need to overcome a statutory presumption of validity that attaches to every U.S. patent. This means that in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent's claims. In order to avoid infringing these or any other third-party patents, we may find it necessary or prudent to obtain licenses to such patents from such third-party intellectual property holders. However, we may be unable to secure such licenses or otherwise acquire or in-license any compositions, methods of use processes or other intellectual property rights from third parties that we identify as necessary for our current or future product candidates. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several 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 or maintain the existing intellectual property rights we have, we may have to cease 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.

Since our product candidates are being developed for use in fields that are competitive and of strong interest to pharmaceutical and biotechnology companies, we will likely seek to file additional patent applications and may have additional patents granted in the future, based on our future research and development efforts. 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 product candidate that is the subject of the actual or threatened suit.

If we are found to infringe a third-party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our product candidates and technology. Under any such license, we would most likely be required to pay various types of fees, milestones, royalties or other amounts. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain such a license, it could be granted on non-exclusive terms, thereby providing our competitors and other third parties access to the same technologies licensed to us. Without such a license, we could be forced, including by court order, to cease developing and commercializing the infringing technology or product candidate, or forced to redesign it, or to cease some aspect of our business operations. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed such third-party patent rights. We may be required to indemnify collaborators or contractors against such claims. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some 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. Any of these events could harm our business significantly.

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

Competitors and other third parties may infringe, misappropriate or otherwise violate our patents and other intellectual property rights, whether owned or in-licensed. To counter infringement or unauthorized use, we or our current or future collaborators may be required to file infringement claims against these infringers. A court may disagree with our allegations, however, and may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the third-party technology in question. Further, such third parties could counterclaim that we infringe their intellectual property or that a patent we have asserted against them is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims challenging the validity, enforceability or scope of asserted patents are commonplace. In addition, third parties may initiate legal proceedings against us to assert such challenges to our intellectual property rights. The outcome of any such proceeding is generally unpredictable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Patents may be unenforceable if someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. It is possible that prior art of which we or our licensors and the patent examiner were unaware during prosecution exists, which could render our patents invalid. Moreover, it is also possible that prior art may exist that we are aware of but do not believe is relevant to our current or future patents, but that could nevertheless be determined to render our patents invalid.

Some of our competitors may be able to devote significantly more resources to intellectual property litigation, and may have significantly broader patent portfolios to assert against us if we assert our rights against them. Further, because of the substantial discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be disclosed or otherwise compromised during litigation.

An adverse result in any litigation proceeding could put one or more of our patents, whether owned or in-licensed, at risk of being invalidated or interpreted narrowly. If a defendant were to prevail on a legal assertion of invalidity or unenforceability of our patents covering one of our product candidates, we would lose at least part, and perhaps all, of the patent protection covering such product candidate. Competing products may also be sold in other countries in which our patent coverage might not exist or be as strong. If we lose a patent lawsuit outside of the United States, alleging our infringement of a competitor's patents, we could be prevented from marketing our products in one or more such countries. Any of these outcomes would have a materially adverse effect on our business.

***Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.***

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally 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. 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. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our Class A common shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to 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.

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

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

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

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive. The requirements for patentability may differ in certain countries, particularly in developing countries. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in intellectual property laws outside of the United States. In addition, the patent laws of some such

countries do not afford intellectual property protection to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain jurisdictions outside of the United States. Varying filing dates in international countries may also permit intervening third parties to allege priority to patent applications claiming certain technology. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many countries outside of the United States have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against certain parties, including government agencies or government contractors. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Proceedings to enforce our patent rights, whether owned or in-licensed, in jurisdictions outside of the United States, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Furthermore, while we intend to pursue protection for our intellectual property rights in the major markets for our product candidates, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate. In addition, changes in the law and legal decisions by courts in the United States and other countries may affect our ability to obtain and enforce adequate intellectual property protection for our technology.

***Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.***

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act, or Leahy-Smith Act, signed into law on September 16, 2011, could increase those uncertainties and costs. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. In addition, the Leahy-Smith Act has transformed the U.S. patent system into a first-to-file system. The first-to-file provisions, however, only became effective on March 16, 2013. Accordingly, it is not yet 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 make it more difficult to obtain patent protection for our inventions, whether owned or in-licensed, and increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, in each case whether owned or in-licensed, all of which could harm our business, results of operations and financial condition.

Among some of the other changes introduced by the Leahy-Smith Act are changes that limit where a patentee may file a patent infringement suit and provide new opportunities for third parties to challenge issued patents in the USPTO. We may be subject to the risk of third-party prior art submissions on pending applications or become a party to opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our patents. There is a lower standard of evidence necessary to invalidate a patent claim in a USPTO proceeding relative to the standard in U.S. district or federal court. This could lead third parties to challenge and successfully invalidate our patents that would not otherwise be invalidated if challenged through the court system.

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, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain or maintain patent protection for our proprietary technology or our ability to

enforce our proprietary technology. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents; enforce or shorten the term of our existing patents and patents that we might obtain in the future; shorten the term that has been lengthened by patent term adjustment of our existing patents or patents that we might obtain in the future; or challenge the validity or enforceability of our patents that may be asserted against us by our competitors or other third parties. Any of these outcomes could have a material adverse effect on our business.

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

In addition to the protection afforded by patents, we may rely upon unpatented trade secret protection, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. Although we seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our collaborators, scientific advisors, contractors, employees, independent contractors and consultants, and invention assignment agreements with our independent contractors, consultants, scientific advisors and employees, 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.

We cannot be certain that the steps we have taken will prevent unauthorized use or unauthorized reverse engineering of our technology. Monitoring unauthorized use of our intellectual property is difficult and costly. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. The steps we have taken to protect our proprietary rights may not be adequate to prevent misappropriation of our intellectual property.

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. 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. We may in the future rely on trade secret protection, which would be subject to the risks identified above with respect to confidential information.

Our trade secrets could otherwise become known or be independently discovered by our competitors. Competitors could purchase our product candidates and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If 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 our trade secrets are not adequately protected so as to protect our market against competitors' products, our competitive position could be adversely affected, as could our business.

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

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names in the United States or jurisdictions outside of the United States, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and prospects.

***We have not yet registered trademarks for a commercial trade name for our product candidates in the United States or jurisdictions outside of the United States and failure to secure such registrations could adversely affect our business.***

We have not yet registered trademarks for a commercial trade name for some of our product candidates in the United States or any jurisdiction outside of the United States. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many jurisdictions outside of the United States, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Moreover, any name we propose to use with our product candidates 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 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 substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

#### **Other Risks Related to Our Business**

***The COVID-19 pandemic, and measures taken in response to the pandemic or the easing of such measures, could have an adverse impact that is significant on our business and operations as well as the business or operations of our manufacturers, CROs and other third parties with whom we conduct business or otherwise engage, including the FDA and other regulatory authorities, and has impacted and could continue to impact the global economy, which may have a material adverse effect on our business, operations and financial position.***

The COVID-19 pandemic, and measures taken in response to the pandemic or the easing of such measures, could cause significant disruption in our business and operations and could cause significant disruption the business and operations of our manufacturers, CROs upon whom we rely to conduct our clinical trials, and other third parties with whom we conduct business or otherwise engage, including the FDA and other regulatory authorities. For example, our CRO for the Phase 1 clinical trial of KPL-404 notified us that, after a temporary pause due to the impact of the COVID-19 pandemic, they resumed certain clinical trial activities, but we also engaged an additional CRO to conduct additional portions of the trial at another clinical trial site.

The federal and state governments in the United States and the governments of other countries around the globe have implemented various measures in response to the COVID-19 pandemic, including significant restrictions on businesses as well as travel into and within the countries in which our manufacturers produce our product candidates or where we conduct our clinical trials or otherwise conduct business or engage with other third parties. In response to the COVID-19 pandemic and measures introduced by state and federal governments in the United States, we implemented

workplace protocols at our facilities. While the majority of our employees are able to carry out their responsibilities working outside of our physical locations, for our essential workers and those choosing to return to our offices to carry out their responsibilities, we implemented additional safety measures, including occupancy limits, restricting business travel, providing and requiring the use of personal protective equipment, self-screening prior to accessing our facilities, and others. We continue to monitor the developments, restrictions and requirements in jurisdictions where we have offices, and plan to update the protocols for our offices as applicable. If the COVID-19 pandemic and measures undertaken in response to the pandemic are prolonged, or the easing of any of such measures has significant adverse consequences, we may experience and our manufacturers, CROs or other third parties with whom we conduct business or otherwise engage, may experience or continue to experience staffing shortages or reprioritizations, production slowdowns or stoppages, and disruptions in delivery systems now or in the future. For example, the COVID-19 pandemic and measures taken in response to the pandemic, including business and travel restrictions and social-distancing to halt the spread of the pandemic, has had an impact on certain aspects of our commercialization strategy, including interacting with third-party payors, physicians and patient advocacy groups to build disease awareness, and conducting in-person market research as well as recruiting qualified candidates to enhance our commercial operations and support commercialization, which, if prolonged, may impede the effective commercialization of our product candidates and result in lower than anticipated future revenue.

The COVID-19 pandemic may also have a significant adverse impact our preclinical studies and clinical trials, which could significantly impede, delay, limit or prevent the clinical development of our product candidates and ultimately lead to the delay or denial of regulatory approval of our product candidates, which would materially adversely affect our business and operations, including our ability to generate revenue. See “Risk Factors — Risks related to product development — The COVID-19 pandemic, and measures taken in response to the pandemic, could have an adverse impact our current or planned preclinical studies and clinical trials, which could be significant.”

Moreover, the COVID-19 pandemic is impacting the global economy, and the U.S. economy in particular, with the potential for the economic downturn to be severe and prolonged. A severe or prolonged economic downturn could result in a variety of risks to our business, including disruptions in the financial markets. For example, the trading prices of biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. These disruptions could adversely impact our ability to raise additional capital when needed or on acceptable terms, if at all.

The COVID-19 pandemic and measures undertaken in response to the pandemic continue to rapidly evolve. There is uncertainty relating to the potential effect of COVID-19 on our business and operations. The extent of the impact on our business and operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the pandemic, business and travel restrictions, quarantines, shelter-in-place orders and social distancing in the United States and other countries, business closures or business disruptions, the availability and efficacy of vaccines, the effectiveness of other actions taken in the United States and other countries to contain and treat the disease, and the impact of any easing of such measures.

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

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any product candidates that we may develop. If we cannot successfully defend ourselves against claims that our 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 candidates that we may develop;
- injury to our reputation and significant negative media attention;
- regulatory investigations that could require costly recalls or product modifications;
- withdrawal of clinical trial participants;

- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of potential revenue;
- the diversion of management's attention away from managing our business; and
- the inability to commercialize any product candidates that we may develop.

Although we maintain product liability insurance coverage, it may not be adequate to cover all liabilities that we may incur and is subject to deductibles and coverage limitations. We anticipate that we will need to increase our insurance coverage when 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. If we are unable to obtain insurance at acceptable cost or otherwise protect against potential product liability claims, we will be exposed to significant liabilities, which may materially and adversely affect our business and financial position. These liabilities could prevent or interfere with our commercialization efforts.

***Enacted and future healthcare legislation may have a material adverse effect on our business and results of operations.***

In the United States, EU and other jurisdictions, there have been and we expect there will continue to be a number of legislative and regulatory initiatives and proposed changes to the healthcare system that could affect our future operations. For example, in the United States, the Affordable Care Act substantially changes the way healthcare is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things, subjects biologic products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs and biologics that are inhaled, infused, instilled, implanted or injected, increases 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, establishes annual fees and taxes on manufacturers of certain branded prescription drugs and biologics, and a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts which, through subsequent legislative amendments, was increased to 70%, off negotiated prices of applicable brand drugs and biologics to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient products to be covered under Medicare Part D.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act. For example, the Tax Cuts and Jobs Act was enacted, which, among other things, removes penalties for not complying with the Affordable Care Act's individual mandate to carry health insurance. On December 14, 2018, a U.S. District Court Judge in Texas ruled that the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the district court's decision that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether the remaining provisions of the Affordable Care Act are invalid as well. The U.S. Supreme Court is currently reviewing the case, although it is unclear when a decision will be made or how the Supreme Court will rule. In addition, there may be other efforts to challenge, repeal or replace the ACA, or portions thereof, which will affect our business. It is possible that the ACA, as currently enacted or as it may be amended in the future, and other healthcare reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and on our ability to successfully commercialize our product candidates, if approved.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. The Budget Control Act of 2011, among other things, led to aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension

from May 1, 2020 through March 31, 2021, unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several types of providers.

Additionally, 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 Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug and biologic pricing, reduce the cost of prescription drugs and biologics under Medicare, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs and biologics. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019. Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

Individual states and municipalities in the United States have also become increasingly active in 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. Legally mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates, if approved, or put pressure on our product pricing.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize our product candidates, if approved.

In markets outside of the United States and the EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States, the EU or elsewhere. For example, the new presidential administration may change governmental policies and regulations that affect our operations and business, including our clinical trials, regulatory approval, pharmaceutical pricing and reimbursement. If we or any third party we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third party are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

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

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, the COVID-19 pandemic is impacting the global economy with the potential for the economic downturn to be severe and prolonged. A severe or prolonged economic downturn caused by the economic

impact from the COVID-19 pandemic could result in a variety of risks to our business, such as disruptions to our operations and the operations of our manufacturers, CROs or other third parties with whom we conduct business or engage, including as a result of disruptions in travel into and within the countries in which we conduct our clinical trials or our manufacturers produce our product candidates or we conduct business or otherwise engage with such other third parties. These disruptions could adversely affect our ability to satisfy the required supply for any of our product candidates or successfully complete preclinical and clinical development of our product candidates, which could require us to incur additional costs, and impair our ability to obtain regulatory approval of our product candidates and generate revenue. A severe or prolonged economic downturn could also impair our ability to raise additional capital when needed or on acceptable terms, if at all. Doing business internationally involves a number of other risks, including but not limited to:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions;
- employment laws, regulatory requirements and other governmental approvals, permits and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing operations outside of the United States;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism, political unrest, outbreak of disease and boycotts;
- curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its books and records provisions or its anti-bribery provisions.

Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

***Our internal technology systems, or those of our third-party CMOs, CROs or other contractors, consultants and service providers, may fail or suffer cyber-attacks or security breaches, which could result in a material disruption of our or such third-party's business or operations and our development programs for our product candidates' or loss of other assets, including funds.***

Despite the implementation of security measures and cyber-security insurance, our internal technology systems and those of our third-party CMOs, CROs and other contractors, consultants and service providers as well as employees that are working outside of our facilities are vulnerable to damage from viruses, unauthorized access and attacks, theft, natural disasters, terrorism, war and telecommunication and electrical failures. As a result of the COVID-19 pandemic, we may experience increased cybersecurity risks due to the impacts from prolonged remote work arrangements. Attacks upon information technology systems 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 and expertise. As a result of the COVID-19 pandemic, we may also face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. If such an event were to occur and cause interruptions in our business and operations or those of our third-party CMOs, CROs and other contractors, consultants and service providers as well as employees that are working outside of our facilities, it could result in a material disruption of our or such third-party's business or operations and our development programs of our product candidates' or loss of other assets, including funds. For example, the loss of clinical trial data for our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology or product candidates, or inappropriate disclosure or theft of confidential or proprietary information, we could incur liabilities not covered by our cyber-security insurance and the further development of our product candidates could be delayed.

***Actual or perceived failures to comply with applicable data protection, privacy and security laws, regulations, standards and other requirements could adversely affect our business, results of operations, and financial condition.***

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

In addition, certain state laws govern the privacy and security of health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. For example, California enacted the California Consumer Privacy Act, or the CCPA, on June 28, 2018, which went into effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability. Further, the California Privacy Rights Act, or CPRA, recently passed in California. The CPRA will impose additional data protection

obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required.

Our clinical trial programs outside the United States may implicate international data protection laws, including the EU General Data Protection Regulation and legislation of the EU member states implementing it, or GDPR, and legislation of the EU and EEA member states implementing it. The GDPR went into effect in May 2018 and imposes strict requirements for processing the personal data of individuals within the EEA. Companies that must comply with the GDPR face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance of up to €20 million or 4% of the annual global revenues of the noncompliant company, whichever is greater. Further from January 1, 2021, we may be subject to the GDPR and also the UK GDPR, which, together with the amended UK Data Protection Act 2018, retains the GDPR in UK national law. The UK GDPR mirrors the fines under the GDPR, e.g. fines up to the greater of €20 million (£17.5 million) or 4% of global turnover. The relationship between the United Kingdom and the European Union in relation to certain aspects of data protection law remains unclear, and it is unclear how UK data protection laws and regulations will develop in the medium to longer term, and how data transfers to and from the United Kingdom will be regulated in the long term. Currently there is a four to six-month grace period agreed in the EU and UK Trade and Cooperation Agreement, ending June 30, 2021 at the latest, whilst the parties discuss an adequacy decision. However, it is not clear whether (and when) an adequacy decision may be granted by the European Commission enabling data transfers from EU member states to the United Kingdom long term without additional measures. These changes will lead to additional costs and increase our overall risk exposure. Our activities outside the United States impose additional compliance requirements and generate additional risks of enforcement for noncompliance. Failure by our CROs and other third-party contractors to comply with the strict rules on the transfer of personal data outside of the EU into the United States may result in the imposition of criminal and administrative sanctions on such collaborators, which could adversely affect our business.

Furthermore, certain health privacy laws, data breach notification laws, consumer protection laws and genetic testing laws may apply directly to our operations or those of our collaborators and may impose restrictions on our collection, use and dissemination of individuals' health information. Moreover, patients about whom we or our collaborators obtain health information, as well as the providers who share this information with us, may have statutory or contractual rights that limit our ability to use and disclose the information. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could harm our business.

If we or third-party CMOs, CROs or other contractors or consultants fail to comply with applicable regulatory requirements, we could be subject to a range of regulatory actions that could affect our or our contractors' ability to develop and commercialize our product candidates and could harm or prevent sales of any affected products that we are able to commercialize, or could substantially increase the costs and expenses of developing, commercializing and marketing our products. Any threatened or actual government enforcement action could also generate adverse publicity and require that we devote substantial resources that could otherwise be used in other aspects of our business.

***Securities class action and derivative lawsuits and other legal proceedings are often brought against companies, which could result in substantial costs and divert management's attention.***

Securities class action and derivative lawsuits and other legal proceedings are often brought against companies following a decline in the market price of their securities. There can be significant fluctuations in market price for the securities of early-stage biotechnology companies, such as us. As a result, we may be more susceptible to these types of lawsuits and legal proceedings than other companies with more stable security prices. In connection with any litigation or other legal proceedings, we could incur substantial costs, and such costs and any related settlements or judgments may not be covered by insurance. We could also suffer an adverse impact on our reputation and a diversion of management's attention and resources, which could have a material adverse effect on our business.

Although we maintain director and officer liability insurance coverage, it may not be adequate to cover all liabilities that we may incur and is subject to deductibles and coverage limitations. 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. If we are unable to obtain insurance at acceptable cost or otherwise protect against potential class action and derivative lawsuits and other legal proceedings or claims often brought against companies following a decline in the market price of their securities, we will be exposed to significant liabilities, which may materially and adversely affect our business and financial position.

***We and our employees and third parties with whom we contract are increasingly utilizing social media tools as a means of communication both internally and externally, and noncompliance with applicable requirements, policies or contracts due to social media use or negative posts or comments could have an adverse effect on our business.***

Despite our efforts to monitor evolving social media communication guidelines and comply with applicable rules, there is risk that the use of social media by us or our employees to communicate about our product candidates or business may cause us to be found in violation of applicable requirements. In addition, our employees or third parties with whom we contract, such as our CROs or CMOs, may knowingly or inadvertently make use of social media in ways that may not comply with our social media policy or other legal or contractual requirements, which may give rise to liability, lead to the loss of trade secrets or other intellectual property or result in public exposure of personal information of our employees, clinical trial patients, customers and others or information regarding our product candidates or clinical trials. Clinical trial patients may also knowingly or inadvertently make use of social media in ways that may not comply with legal or contractual requirements for participation in a clinical trial, including with respect to any AEs they may experience, which may give rise to liability and regulatory risk. Furthermore, negative posts or comments about us or our product candidates in social media could seriously damage our reputation, brand image and goodwill. Any of these events could have a material adverse effect on our business, prospects, operating results and financial condition and could adversely affect the price of our Class A common shares.

***Our employees, principal investigators, CROs, consultants and other third-party service providers may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.***

We are exposed to the risk that our employees, principal investigators, CROs, consultants and other third-party service providers may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately.

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 may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including off-label promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation.

It is not always possible to identify and deter misconduct by employees and other third parties. The precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits

and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

#### **Risks Related to Our Common Shares**

***The concentration of ownership of our Class B common shares, which are held primarily by our executive officers and certain other members of our senior management, and the conversion rights of the holders of our Class A1 common shares, which shares are held primarily by entities affiliated with certain of our directors, and Class B1 common shares, all of which shares are held by entities affiliated with certain of our directors means that such persons are, and such entities may in the future be, able to influence certain matters submitted to our shareholders for approval; and such concentration and conversion rights and resulting concentration of control may have an adverse effect on the price of our Class A common shares and may result in our Class A common shares being undervalued.***

Each Class A common share is entitled to one vote per Class A common share and each Class B common share is entitled to ten votes per Class B common share. Our Class A1 common shares and Class B1 common shares have no voting rights. As a result, all matters submitted to our shareholders are decided by the vote of holders of our Class A common shares and Class B common shares. As a result of the multi-class voting structure of our common shares, the holders of our Class B common shares, which consist primarily of our executive officers and certain other members of our senior management, collectively control over a majority of the combined voting power of our common shares and therefore are able to control the outcome of certain matters submitted to our shareholders for approval. As of January 31, 2021, the holders of Class A common shares accounted for approximately 59% of our aggregate voting power and the holders of Class B common shares accounted for approximately 41% of our aggregate voting power. Our executive officers and certain other members of our senior management hold Class A common shares and Class B common shares representing approximately 37% of our aggregate voting power as of January 31, 2021 and may have the ability to influence the outcome of certain matters submitted to our shareholders for approval.

However, this percentage may change depending on any conversion of our Class B common shares, Class A1 common shares or Class B1 common shares. Each holder of our Class B common shares has the ability to convert any portion of its Class B common shares into Class B1 common shares or Class A common shares at any time with advance notice to us. Each holder of our Class B1 common shares has the ability to convert any portion of its Class B1 common shares into Class A common shares or Class B common shares at any time with advance notice to us, and each holder of our Class A1 common shares has the ability to convert any portion of its Class A1 common shares into Class A common shares at any time with advance notice to us. Our Class A1 common shares and Class B1 common shares cannot be converted if, immediately prior to or following such conversion, the holder and its affiliates beneficially own, or would beneficially own, more than 4.99% of our issued and outstanding Class A common shares unless such holder provides us with 61-days' prior notice that it intends to increase, decrease or waive such threshold upon conversion. As of January 31, 2021, entities affiliated with certain members of our directors could convert their Class A1 common shares and Class B1 common shares upon 61-days' prior written notice into Class A common shares and Class B common shares, respectively, which in the aggregate would result in such entities holding approximately 77% of our aggregate voting power and having the ability to control the outcome of certain matters submitted to our shareholders for approval.

Due to these conversion rights, holders of our Class A1 common shares and our Class B1 common shares could, at any time with appropriate advance notice to us, significantly increase their voting control of us, which could result in their ability to significantly influence or control matters submitted to our shareholders for approval and would decrease the ability of the current holders of our Class A common shares and Class B common shares to influence or control matters submitted to our shareholders for approval. In addition, the conversion of Class B common shares to Class A or Class B1 common shares will have the effect of increasing the relative voting power of the holders of Class B common shares who retain their shares in the long term.

These conversion rights as well as concentrated control that limit certain shareholders' ability to influence corporate matters may have an adverse effect on the price of our Class A common shares, including our Class A common shares being undervalued. Holders of our Class B common shares collectively control our management and affairs and are able to influence or control the outcome of certain matters submitted to our shareholders for approval.

including the election of directors. Due to the conversion rights of the holders of our Class A1 and B1 common shares, entities affiliated with certain of our directors could significantly increase their voting control of us, which could result in their ability to significantly influence or control matters submitted to our shareholders for approval. As of January 31, 2021, entities affiliated with certain of our directors held 71% of our Class A1 common shares and 100% of our Class B1 common shares. Upon 61-days' prior written notice, these entities could convert their Class A1 common shares and Class B1 common shares into Class A common shares and Class B common shares, which in the aggregate would result in such entities holding approximately 77% of the voting power of our outstanding share capital. In addition, this concentration of control might adversely affect certain corporate actions that some of our shareholders may view as beneficial, for example, by:

- delaying, deferring or preventing a change of control of us;
- impeding a merger, consolidation, takeover or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

***The price of our Class A common shares is likely to continue to be volatile and fluctuate substantially, which could result in substantial losses for holders of our Class A common shares.***

Our share price is likely to continue to be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility, including as a result of the COVID-19 pandemic, that has often been unrelated to the operating performance of particular companies. As a result of this volatility, our shareholders may not be able to sell their Class A common shares at or above the price they paid for their shares. The market price for our Class A common shares may be influenced by many factors, including:

- the results of clinical trials for our product candidates;
- delays in the commencement, enrollment and the ultimate completion of clinical trials;
- delays in approvals of our product candidates from the PDUFA goal date or failures in obtaining approval of our product candidates;
- the results and potential impact of competitive products or technologies;
- our ability to manufacture and successfully produce our product candidates;
- our ability to commercialize our product candidates, if approved;
- the size of the market for our product candidates;
- actual or anticipated changes in estimates as to financial results, capitalization, development timelines or recommendations by securities analysts;
- the level of expenses related to any of our product candidates or clinical development programs;
- variations in our financial results or those of companies that are perceived to be similar to us;
- financing or other corporate transactions, or our inability to obtain additional funding;
- failure to meet or exceed the expectations of the investment community;

- regulatory or legal developments in the United States and other countries;
- the recruitment or departure of key personnel;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or from our entering into entering collaborations or other strategic transaction agreements;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions, including as a result of the COVID-19 pandemic and measures taken in response to the pandemic;
- changes in voting control of, or sales of our shares by, our executive officers and certain other members of our senior management or entities affiliated with certain of our directors that hold our shares; and
- the other factors described in this “Risk Factors” section.

In addition, given the limited trading history of our Class A common shares, there is a risk that an active trading market for our shares will not be sustained, which could put downward pressure on the market price of our common shares and thereby affect the ability of our shareholders to sell their shares. An inactive trading market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

Additionally, the trading prices of biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. The COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business in the future, including our preclinical studies and clinical trials, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence. Such factors include but are not limited to the ultimate geographic spread of the disease, the duration of the pandemic, business and travel restrictions, quarantines, shelter-in-place orders and social distancing in the United States and other countries, business closures or business disruptions, the availability and efficacy of vaccines, the effectiveness of other actions taken in the United States and other countries to contain and treat the disease and the impact of any easing of such measures.

***If securities or industry analysts cease publishing or publish unfavorable research or reports about us, our business or our market, our shares price and trading volume could decline.***

The trading market for our Class A common shares is influenced by the research and reports that equity research analysts publish about us and our business. We do not have any control over the analysts or the content and opinions included in their reports. The price of our Class A common shares could decline if one or more equity research analysts downgrades our shares or issues other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our Class A common shares could decrease, which in turn could cause the price of our Class A common shares or its trading volume to decline.

***Sales of a number of our Class A common shares in the public market, including Class A common shares issuable upon conversion of our Class B, Class A1 and Class B1 common shares, could cause the share price of our Class A common shares to fall.***

A significant number of our Class A common shares are issuable upon conversion of our Class B, Class A1, and Class B1 common shares. Our Class B and Class B1 common shares automatically convert into Class A common shares upon transfer by a holder of such shares to persons or entities not affiliated with such holder. In addition, each holder of our Class B common shares has the ability to convert any portion of its Class B common shares into Class B1 common shares or Class A common shares at any time with advance notice to us, each holder of our Class B1 common shares has the ability to convert any portion of its Class B1 common shares into Class A common shares or Class B common shares at any time with advance notice to us and each holder of our Class A1 common shares has the ability to convert any portion of its Class A1 common shares into Class A common shares at any time with advance notice to us. However, our Class A1 common shares and Class B1 common shares cannot be converted if, immediately prior to or following such conversion, the holder and its affiliates beneficially own, or would beneficially own, more than 4.99% of our issued and outstanding Class A common shares unless such holder provides us with 61-days' prior notice that it intends to increase, decrease or waive such threshold upon conversion.

As of January 31, 2021 upon conversions of our Class B, Class A1, and Class B1 common shares, approximately 2.3 million of additional Class A common shares were issuable and eligible for resale in the public market to the extent permitted by the provisions of Rule 144 promulgated under the Securities Act of 1933, as amended, or the Securities Act, and such rule, Rule 144. In addition, as of January 31, 2021, there were approximately 10.2 million Class A common shares subject to outstanding share options and restricted share units under our equity incentive plans that may become eligible for sale in the public market to the extent permitted by the provisions of applicable vesting schedules and Rule 144 and Rule 701 under the Securities Act.

Over a majority of our common shares are held by our executive officers and other members of our senior management together with entities affiliated with certain of our directors. As of January 31, 2021, on an as-converted to Class A common shares basis, these shareholders collectively held approximately 34.4 million of our Class A common shares. If any of these shareholders sell, convert or transfer, or indicate an intention to sell, convert or transfer, a substantial amount of their common shares (after certain restrictions on conversion or resale lapse), the market price of our Class A common shares could decline.

Pursuant to our amended and restated investor rights agreement, or our investors rights agreement, certain shareholders are entitled to certain registration rights with respect to our Class A common shares, including Class A common shares issuable upon conversions of our Class B, Class A1, and Class B1 common shares and upon the exercise of certain rights to acquire Class A common shares, or collectively registerable securities, under the Securities Act. As of January 31, 2021, on an as-converted to Class A common shares basis, we have registered approximately 31.8 million Class A common shares held by certain holders affiliated with certain of our directors as well as certain other shareholders pursuant to our investor rights agreement, which are freely tradable without restriction under the Securities Act, to the extent permitted by Rule 144. Further, pursuant to the investors rights agreement (a) the holders affiliated with certain of our directors are entitled to certain registration rights under the Securities Act with respect to registrable securities they may own now or in the future and (b) our executive officers are also entitled to certain registration rights under the Securities Act with respect to registrable securities they may own now or in the future, including, on an as-converted to Class A common shares basis, the approximately 1.9 million Class A common shares held by our executive officers as of January 31, 2021. If any of these Class A common shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our Class A common shares could decline.

***Future sales or issuances of our common shares or rights to purchase common shares, including under our shelf registration statement or pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our shareholders and could cause our Class A common share price to fall.***

We will need additional capital in the future to continue our planned operations. To the extent we raise additional capital by issuing additional Class A common shares, Class B common shares, Class A1 common shares, Class B1 common shares or other equity securities, our shareholders may experience substantial dilution. We may sell common shares, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time under our shelf registration statement or otherwise. If we sell common shares, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent

sales. These sales may also result in material dilution to our existing shareholders, and new investors could gain rights superior to our existing shareholders.

In addition, the consummation or performance of any acquisition, business combination, collaboration or other strategic transaction we may undertake in furtherance of our growth strategy may cause dilution to our existing shareholders if we issue equity securities for all or a portion of the consideration. For example, we acquired the outstanding securities of Primatope in exchange for (a) upfront consideration of \$10.0 million paid at closing in March 2019 as well as milestone payments of \$5.0 million that had been achieved and was also paid at closing and (b) a milestone payment of \$3.0 million that had been achieved after the closing and was paid in June 2019, all of which paid in a combination of cash and our Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the terms and conditions of our stock purchase option agreement with Primatope, or the Primatope Agreement. In June 2020, we released the escrow and in June and September of 2020 we issued all of the shares held back in connection with the acquisition.

***We will continue to incur increased costs as a result of operating as a public company, including in connection with becoming a large accelerated filer, and our management will be required to devote substantial time to new compliance initiatives.***

As a public company, we incur significant legal, accounting and other expenses. In addition, the Sarbanes-Oxley Act of 2002 and rules subsequently implemented by the SEC and The Nasdaq Global Select Market, or Nasdaq, where our Class A common shares are listed, impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly, which we expect to increase in connection with our becoming a large accelerated filer and no longer qualifying as an emerging growth company effective December 31, 2020 and smaller reporting company effective January 1, 2021. In addition, we expect our costs to increase as we comply with requirements that we were previously exempt from as an emerging growth company and smaller reporting company and cause management and other personnel to divert attention from operational and other business matters to devote substantial time to public company reporting requirements. However, for this Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and the executive compensation disclosure in our proxy statement for our 2021 annual meeting of shareholders, we are permitted to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. We may choose to take advantage of some, but not all, of the available exemptions for smaller reporting companies.

Pursuant to Section 404, we are 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. To maintain compliance with Section 404, we engage 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, engage outside consultants and refine and revise a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude 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 financial statements.

***We have anti-takeover provisions in our amended and restated bye-laws that may discourage a change of control.***

Our amended and restated bye-laws contain provisions that could make it more difficult for a third party to acquire us. These provisions provide for:

- a classified board of directors with staggered three-year terms;
- directors only to be removed for cause;

- an affirmative vote of 66 2/3% of the voting power of our voting shares for certain “business combination” transactions that have not been approved by our board of directors;
- our multi-class common share structure, which provides our holders of Class B common shares with the ability to significantly influence the outcome of matters requiring shareholder approval, even if they own less than a majority of our outstanding Class A common shares;
- restrictions on the time period in which directors may be nominated; and
- our board of directors to determine the powers, preferences and rights of our preferred shares and to issue the preferred shares without shareholder approval.

These anti-takeover defenses could discourage, delay or prevent a transaction involving a change in control of our company and may prevent our shareholders from receiving the benefit from any premium to the market price of our Class A common shares offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our Class A common shares if the provisions are viewed as discouraging takeover attempts in the future. These provisions could also discourage proxy contests, make it more difficult for our shareholders to elect directors of their choosing and cause us to take corporate actions other than those our shareholders desire.

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

We have never declared or paid cash dividends on our shares. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. Additionally, the proposal to pay future dividends to shareholders will effectively be at the sole discretion of our board of directors after taking into account various factors our board of directors deems relevant, including our business prospects, capital requirements, financial performance and new product development. As a result, capital appreciation, if any, of our Class A common shares will be the sole source of gain for our shareholders for the foreseeable future.

#### **Risks Related to Owning Shares in a Bermuda Exempted Company and Certain Tax Risks**

***We are a Bermuda company and it may be difficult for our shareholders to enforce judgments against us or our directors and executive officers.***

We are a Bermuda exempted company. As a result, the rights of holders of our Class A common shares will be governed by Bermuda law and our memorandum of association and amended and restated bye-laws. The rights of shareholders under Bermuda law may differ from the rights of shareholders of companies incorporated in other jurisdictions. It may be difficult for investors to enforce in the United States judgments obtained in U.S. courts against us based on the civil liability provisions of the U.S. securities laws. It is doubtful whether courts in Bermuda will enforce judgments obtained in other jurisdictions, including the United States, against us or our directors or officers under the securities laws of those jurisdictions or entertain actions in Bermuda against us or our directors or officers under the securities laws of other jurisdictions.

***Our amended and restated bye-laws designate the Supreme Court of Bermuda as the choice of jurisdiction for disputes that arise concerning the Bermuda Companies Act 1981, as amended, or the Companies Act, or out of or in connection with our amended and restated bye-laws, which could limit our shareholders’ ability to choose the judicial forum for disputes with us or our directors or officers.***

Our amended and restated bye-laws provide that, unless we consent in writing to the selection of an alternative jurisdiction, any dispute that arises concerning the Companies Act, or out of or in connection with our amended and restated bye-laws, including any question regarding the existence and scope of any bye-law or whether there has been a breach of the Companies Act or the amended and restated bye-laws by any of our officers or directors (whether or not

such a claim is brought in the name of a shareholder or in the name of our company) shall be subject to the jurisdiction of the Supreme Court of Bermuda.

Any person or entity purchasing or otherwise acquiring any interest in any of our shares shall be deemed to have notice of and consented to this provision. This choice of jurisdiction provision may limit a shareholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or our directors or officers, which may discourage lawsuits against us and our directors and officers. If a court were to find either choice of jurisdiction provision in our amended and restated bye-laws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our results of operations.

***Bermuda law differs from the laws in effect in the United States and may afford less protection to our shareholders.***

We are organized under the laws of Bermuda. As a result, our corporate affairs are governed by the Companies Act, which differs in some material respects from laws typically applicable to U.S. corporations and shareholders, including the provisions relating to interested directors, amalgamations, mergers and acquisitions, takeovers, shareholder lawsuits and indemnification of directors. Generally, the duties of directors and officers of a Bermuda company are owed to the company only. Shareholders of Bermuda companies typically do not have rights to take action against directors or officers of the company and may only do so in limited circumstances. Shareholder class actions are not available under Bermuda law. The circumstances in which shareholder derivative actions may be available under Bermuda law are substantially more proscribed and less clear than they would be to shareholders of U.S. corporations. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company's memorandum of association or bye-laws. Furthermore, consideration would be given by a Bermuda court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requires the approval of a greater percentage of the company's shareholders than those who actually approved it.

When the affairs of a company are being conducted in a manner that is oppressive or prejudicial to the interests of some shareholders, one or more shareholders may apply to the Supreme Court of Bermuda, which may make such order as it sees fit, including an order regulating the conduct of the company's affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company. Additionally, under our amended and restated bye-laws and as permitted by Bermuda law, each shareholder has waived any claim or right of action against our directors or officers for any action taken by directors or officers in the performance of their duties, except for actions involving fraud or dishonesty. In addition, the rights of our shareholders and the fiduciary responsibilities of our directors under Bermuda law are not as clearly established as under statutes or judicial precedent in existence in jurisdictions in the United States, particularly the State of Delaware. Therefore, our shareholders may have more difficulty protecting their interests than would shareholders of a corporation incorporated in a jurisdiction within the United States.

***There are regulatory limitations on the ownership and transfer of our common shares.***

Common shares may be offered or sold in Bermuda only in compliance with the provisions of the Companies Act and the Bermuda Investment Business Act 2003, as amended, which regulates the sale of securities in Bermuda. In addition, the Bermuda Monetary Authority must approve all issues and transfers of shares of a Bermuda exempted company. However, the Bermuda Monetary Authority has, pursuant to its statement of June 1, 2005, given its general permission under the Exchange Control Act 1972 and related regulations for the issue and free transfer of our common shares to and among persons who are non-residents of Bermuda for exchange control purposes as long as the shares are listed on an appointed shares exchange, which includes Nasdaq. This general permission would cease to apply if we were to cease to be listed on Nasdaq.

***We may become subject to unanticipated tax liabilities.***

Although we are incorporated under the laws of Bermuda, we may become subject to income, withholding or other taxes in certain other jurisdictions by reason of our activities and operations, and it is also possible that taxing

authorities in any such jurisdictions could assert that we are subject to greater taxation than we currently anticipate. Any such non-Bermudan tax liability could materially adversely affect our results of operations.

***Taxing authorities could reallocate our taxable income among our subsidiaries, which could increase our overall tax liability.***

We are incorporated under the laws of Bermuda and currently have subsidiaries in the United States, the United Kingdom, Germany, Switzerland and France. If we succeed in growing our business, we expect to conduct increased operations through our subsidiaries in various tax jurisdictions subject to transfer pricing arrangements between us and such subsidiaries. If two or more affiliated companies are located in different countries, the tax laws or regulations of each country generally will require that transfer prices be the same as those between unrelated companies dealing at arms' length and that appropriate documentation is maintained to support the transfer prices. While we believe that we operate in compliance with applicable transfer pricing laws and intend to continue to do so, our transfer pricing procedures are not binding on applicable tax authorities.

If tax authorities in any of these countries were to successfully challenge our transfer prices as not reflecting arms' length transactions, they could require us to adjust our transfer prices and thereby reallocate our income to reflect these revised transfer prices, which could result in a higher tax liability to us. In addition, if the country from which the income is reallocated does not agree with the reallocation, both countries could tax the same income, resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it would increase our consolidated tax liability, which could adversely affect our financial condition, results of operations and cash flows.

***Changes in laws related to tax practices and substance requirements in Bermuda and other jurisdictions could adversely affect our operations.***

Our tax position could be adversely impacted by changes in tax rates, tax laws, tax practice, tax treaties or tax regulations or changes in the interpretation thereof by the tax authorities in Europe (including the United Kingdom), the United States, Bermuda and other jurisdictions, as well as being affected by certain changes currently proposed by the Organization for Economic Co-operation and Development and their action plan on Base Erosion and Profit Shifting. Such changes may become more likely as a result of recent economic trends in the jurisdictions in which we operate, particularly if such trends continue. If such a situation was to arise, it could adversely impact our tax position and our effective tax rate. Failure to manage the risks associated with such changes, or misinterpretation of the laws providing such changes, could result in costly audits, interest, penalties and reputational damage, which could adversely affect our business, results of operations and our financial condition. Our actual effective tax rate may vary from our expectation and that variance may be material. A number of factors may increase our future effective tax rates, including:

- the jurisdictions in which profits are determined to be earned and taxed;
- the resolution of issues arising from any future tax audits with various tax authorities;
- changes in the valuation of our deferred tax assets and liabilities;
- changes to and increases in expenses not deductible for tax purposes, including transaction costs and impairments of goodwill in connection with acquisitions;
- changes in the taxation of share-based compensation;
- changes in tax laws or the interpretation of such tax laws, and changes in generally accepted accounting principles; and
- challenges to the transfer pricing policies related to our structure.

In late 2017, the EU Economic and Financial Affairs Council, or ECOFIN, released a list of non-cooperative jurisdictions for tax purposes. The stated aim of this list, and accompanying report, was to promote the EU's view for good governance worldwide in order to maximize efforts to prevent tax fraud and tax evasion. While Bermuda was not on the original EU list of non-cooperative jurisdictions, it committed to address EU concerns relating to economic substance by December 31, 2018. In accordance with that commitment, Bermuda enacted the Economic Substance Act 2018, which was amended as recently as December 24, 2019, or the Substance Act, and issued Economic Substance Regulations in 2018, which were amended as recently as December 24, 2019). Pursuant to the Substance Act and Economic Substance Regulations, certain entities in Bermuda engaged in "relevant activities" are required to maintain physical presence in Bermuda and to satisfy economic substance requirements commencing as of January 1, 2019, with a six-month transition period until July 1, 2019. The list of "relevant activities" includes carrying on as a business in any one or more of the following categories: banking, insurance, fund management, financing, leasing, headquarters, shipping, distribution and service center, intellectual property and holding entities. Under the Substance Act, any relevant entity must satisfy economic substance requirements locally or face financial penalties, restriction or regulation of its business activities or may be struck off as a registered entity from the Bermuda Registrar of Companies. Because we do not report gross revenue attributable to any such relevant activity, under Section 6 of the Revised Final Guidance Notes issued on September 18, 2020, we believe that we are not obliged to meet the economic substance requirements. We will continue to monitor our status with respect to the Substance Act based on our results of operations, and may become subject to the Substance Act in future.

***We believe we may be classified as a passive foreign investment company for U.S. federal income tax purposes for the year ended December 31, 2020, which could result in adverse U.S. federal income tax consequences to U.S. investors in our common shares.***

Because our sole source of income has been and currently is interest on bank accounts held by us, we believe we may be classified as a "passive foreign investment company," or PFIC, for the taxable year ended December 31, 2020. We believe that none of our subsidiaries will be classified as a PFIC for the year ended December 31, 2020. A non-U.S. company will be considered a PFIC for any taxable year if (i) at least 75% of its gross income is passive (including interest income), or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during a taxable year) is attributable to assets that produce or are held for the production of passive income. If we are classified as a PFIC in any year with respect to which a U.S. Holder owns our Class A common shares, we will continue to be treated as a PFIC with respect to such U.S. Holder in all succeeding years during which the U.S. Holder owns the Class A common shares, regardless of whether we continue to meet the PFIC test described above, unless we cease to be a PFIC and (i) the U.S. Holder made a "qualified electing fund" election or "mark-to-market" election for the first taxable year the U.S. Holder was treated as owning our shares while we were a PFIC or (ii) the U.S. Holder made a "deemed sale" election or was qualified to and made a "deemed dividend" election. A "U.S. Holder" is a beneficial owner of our Class A common shares that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the U.S. Internal Revenue Code of 1986, as amended), or (ii) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds our Class A common shares, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder, including (i) the treatment as ordinary income of all or a portion of any gain realized on a disposition of our shares and on the receipt of distributions on our shares to the extent such gain or distribution is treated as an "excess distribution", (ii) the application

of a deferred interest charge on the tax on such gain and distributions and (iii) the obligation to comply with certain reporting requirements.

***If a U.S. Holder is treated as owning at least 10% of our shares, by vote or by value, such holder may be subject to adverse U.S. federal income tax consequences.***

We believe we will likely be classified as a controlled foreign corporation for the taxable year ended December 31, 2020. Even if we were not classified as a controlled foreign corporation, certain of our non-U.S. subsidiaries could be treated as controlled foreign corporations because our group includes one or more U.S. subsidiaries. If a U.S. Holder is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our shares, such U.S. Holder may be treated as a "United States shareholder" with respect to us (if we are classified as a controlled foreign corporation) and each controlled foreign corporation in our group (if any). A United States shareholder of a controlled foreign corporation may be required to annually report and include in its U.S. taxable income its pro rata share of "Subpart F income," "global intangible low-taxed income," or GILTI, and investments in U.S. property by such controlled foreign corporation, regardless of whether such corporation makes any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. Failure to comply with these reporting obligations may subject such shareholder to significant monetary penalties and may prevent the statute of limitations with respect to such shareholder's U.S. federal income tax return for the year for which reporting was due from starting. We cannot provide any assurances that we will assist investors in determining whether such investor is treated as a United States shareholder with respect to us or any of our non-U.S. subsidiaries. Further, we cannot provide any assurances that we will furnish to any United States shareholders information that may be necessary to comply with the reporting and tax paying obligations discussed above. U.S. Holders should consult their tax advisors regarding the potential application of these rules to any investment in our Class A common shares.

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

**ITEM 2. PROPERTIES.**

Our U.S. headquarters are located in Lexington, Massachusetts, where Kiniksa US has leased approximately 55,924 square feet of office and laboratory space, under a lease which expires in August 2023. Kiniksa US has also leased approximately 4,400 square feet of office space in San Diego, California which expires in January 2022. Further, Kiniksa UK has leased approximately 164 square meters of office space in London, UK which expires in November 2025 with an option for early termination in November 2023. We believe that our offices are sufficient to meet our current needs and that suitable additional space will be available as and when needed.

**ITEM 3. LEGAL PROCEEDINGS.**

We are not party to any material legal proceedings.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

## EXECUTIVE OFFICER AND DIRECTOR BIOGRAPHIES

### **Directors of the Registrant**

*Sanj K. Patel* has served as our Chief Executive Officer and Chairman of our Board of Directors since our formation in July 2015. In June 2008, Mr. Patel formed Synageva BioPharma Corp., or Synageva, a biotechnology company focused on rare diseases, where he served as President and Chief Executive Officer and was a member of its board of directors until Synageva's sale to Alexion Pharmaceuticals, Inc., or Alexion, in June 2015. Prior to Synageva, Mr. Patel held various roles at Genzyme Corporation, or Genzyme, from 1999 to 2008, most recently as head of U.S. Sales, Marketing and Commercial Operations for the Genzyme Therapeutics franchise. Mr. Patel previously served as a member of the boards of directors of Syros Pharmaceuticals, Inc., BioCryst Pharmaceuticals, Inc., and Intercept Pharmaceuticals, Inc. He is also the founder and director of the Sanj K. Patel and Family Foundation, a philanthropic organization that supports charities for patients with rare and devastating diseases. Mr. Patel holds a B.Sc. with Honors from the University of the South Bank, London and completed his management and business studies at Ealing College, London and his Pharmacology research program at the Wellcome Foundation.

*Felix J. Baker, Ph.D.*, has served as our Lead Independent Director and on our Board of Directors since October 2015. Dr. Baker is a Managing Member of Baker Bros. Advisors LP, a registered investment adviser focused on long-term investments in life-sciences companies, or Baker Bros. Advisors. Dr. Baker founded Baker Bros. Advisors., together with his brother Julian Baker, in 2000. Dr. Baker currently serves on the boards of directors of Alexion, Seagen, Inc., and Kodiak Sciences Inc., or Kodiak Sciences, and previously served on the boards of directors of Genomic Health, Inc., or Genomic Health, Seattle Genetics, Inc., and Synageva. Dr. Baker holds a B.S. and a Ph.D. in Immunology from Stanford University, where he also completed two years of medical school.

*Stephen R. Biggar, M.D., Ph.D.*, has served as a member of our Board of Directors since October 2015. Dr. Biggar is a Partner at Baker Bros. Advisors. Dr. Biggar joined Baker Bros. Advisors in 2000. Dr. Biggar is currently chairman of the board of directors of ACADIA Pharmaceuticals Inc. and previously served on the board of directors of Synageva. Dr. Biggar received an M.D. and a Ph.D. in Immunology from Stanford University and a B.S. in Genetics from the University of Rochester.

*G. Bradley Cole* has served as a member of our Board of Directors since July 2020. He served as Executive Advisor of Exact Sciences Corporation, or Exact Sciences, from April 2020 to September 2020, and from November 2019 until April 2020 he served as its GM, Precision Oncology. Prior to that, Mr. Cole served as Chief Financial Officer of Genomic Health, Inc., or Genomic Health, a molecular diagnostics company, from July 2014 to November 2019 and from July 2004 to January 2011, and as Chief Operating Officer of Genomic Health from January 2009 until March 2018, which was acquired by Exact Sciences. Mr. Cole served as Secretary of Genomic Health from February 2005 until July 2012. From December 1997 to May 2004, he served in various roles at Guidant Corporation, a medical device company, most recently serving as Vice President, Finance and Business Development for the Endovascular Solutions Group. From January 2001 until May 2004 he served as Vice President, Finance and Chief Financial Officer of Endovascular Technologies, Inc., a medical device company that was acquired by Guidant Corporation. Previously, Mr. Cole served as Vice President, Finance and Chief Financial Officer of Applied Biosystems Incorporated, a life sciences systems company. Mr. Cole currently serves on the board of directors of Castle Biosciences, a skin cancer diagnostics company. He also serves on the Genomic Life, Inc., or Genomic Life, board of directors, a private company, and as Vice Chairman of the Board of Trustees of Biola University. Mr. Cole holds a B.S. in Business from Biola University and an M.B.A. from San Jose State University.

*Richard S. Levy, M.D.* has served on our Board of Directors since March 2019. Dr. Levy served as a Senior Advisor at Baker Bros. Advisors from December 2016 to May 2019. Prior to that, Dr. Levy served as Executive Vice President and Chief Drug Development Officer at Incyte Corporation, a biopharmaceutical company, from January 2009 until June 2016, and as Senior Vice President of Drug Development from August 2003 to January 2009. Dr. Levy currently serves on the boards of directors of Madrigal Pharmaceuticals, Inc., Protara Therapeutics, Inc. (f/k/a ArTara Therapeutics, Inc.), Constellation Pharmaceuticals Inc. and Kodiak Sciences, and previously served on the board of directors of Aquinox Pharmaceuticals, Inc. Dr. Levy is Board Certified in Internal Medicine and Gastroenterology and holds an A.B. in Biology from Brown University and an M.D. from the University of Pennsylvania School of Medicine.

and completed his training in Internal Medicine at the Hospital of the University of Pennsylvania and a fellowship in Gastroenterology and Hepatology at UCLA.

*Thomas R. Malley* has served as a member of our Board of Directors since December 2016. Since May 2007, Mr. Malley has served as the President of Mossrock Capital, LLC, a private investment firm. Mr. Malley serves on the boards of directors of BeiGene, Ltd. and Kura Oncology, Inc., and previously served on the boards of directors of OvaScience, Inc., Cougar Biotechnology, Inc., Puma Biotechnology, Inc. and Synageva. Mr. Malley holds a B.S. degree in Biology from Stanford University. Mr. Malley is also a Chartered Financial Analyst.

*Tracey L. McCain* has served as a member of our Board of Directors since February 2018. Since September 2016, Ms. McCain has served as Executive Vice President and Chief Legal and Compliance Officer of Blueprint Medicine Corporation, or Blueprint, a biotechnology company. Prior to Blueprint, from January 2016 to September 2016, Ms. McCain was Senior Vice President and Head of Legal for Sanofi Genzyme, a global business unit of Sanofi S.A., or Sanofi. From May 1997 to September 2016, Ms. McCain held various roles at Genzyme, including as General Counsel following Genzyme's acquisition by Sanofi in 2011. Ms. McCain holds a J.D. from Columbia University School of Law and a B.A. from the University of Pennsylvania.

*Kimberly J. Popovits* has served as a member of our Board of Directors since February 2018. Ms. Popovits served as Genomic Health's Chairman of the Board from 2012 through 2019, and Chief Executive Officer and President from 2009 through 2019. She was President and Chief Operating Officer upon joining the company in 2002. Prior to leading Genomic Health, Ms. Popovits served as Senior Vice President, Marketing and Sales at Genentech, Inc. During her 15 years at Genentech, Ms. Popovits led the successful commercialization of 14 new therapies, including Herceptin. Ms. Popovits currently serves on the board of directors of 10x Genomics, Inc. and previously served on the boards of directors of MyoKardia, Inc. and ZS Pharma, Inc. She also serves on the boards of directors of the Coalition for 21<sup>st</sup> Century Medicine, the Personalized Medicine Coalition, Talis Inc., Wamberg Genomic Advisors, and Genomic Life. She also serves as an Executive Advisor to Blackstone Life Sciences and is an Advisor to the Healthcare Businesswomen's Association (HBA). Ms. Popovits holds a Bachelor of Arts degree in Business from Michigan State University.

*Barry D. Quart, Pharm.D.*, has served as a member of our Board of Directors since October 2015. Since 2013, Dr. Quart has served as the Chief Executive Officer and a member of the board of directors of Heron Therapeutics, Inc., a biotechnology company. In 2006, Dr. Quart co-founded Ardea Biosciences, Inc., a biotechnology company, and served as its President and Chief Executive Officer, and on its board of directors, from its inception through May 2013. Dr. Quart previously served on the board of directors of Synageva. Dr. Quart holds a Pharm.D. degree from the University of California, San Francisco.

#### **Executive Officers of the Registrant**

*Sanj K. Patel* has served as our Chief Executive Officer and Chairman of our Board of Directors since our formation in July 2015. See "—Directors of the Registrant" for Mr. Patel's biography.

*Thomas Beetham* has served as our Executive Vice President, Corporate Development and Operations, Chief Legal Officer and Secretary since November 2019. Previously, Mr. Beetham served as our Executive Vice President, Corporate Development, Chief Legal Officer and Secretary since December 2015, and previously as Senior Vice President in the same roles since our formation in July 2015. Prior to that, Mr. Beetham held various roles at Synageva from October 2013 to June 2015, most recently serving as the Chief Legal Officer and Senior Vice President of Corporate Development, where he led the legal department and was responsible for business development activities. Prior to joining Synageva, from 2011 to 2013, Mr. Beetham was the General Legal Counsel for New England Biolabs, Inc., or Biolabs, where he was responsible for all legal matters and was a member of Biolabs' global business development team. Before Biolabs, Mr. Beetham held various roles at Genzyme, most recently as the lead corporate attorney responsible for Genzyme's hematology/oncology and multiple sclerosis products, and before that was a business and transactional attorney with the law firm of Palmer & Dodge, LLP. Mr. Beetham holds a J.D. from Boston College Law School, an M.B.A. from Boston College's Carroll School of Management, and a B.A. from the University of Rochester.

*Mark Ragosa* has served as our Vice President and Interim Chief Financial Officer since December 2020, at which point he also assumed the role of principal financial officer. As our Interim Chief Financial Officer, Mr. Ragosa oversees our Finance and Investor Relations organizations. Prior to that, Mr. Ragosa served as our Vice President, Investor Relations and Finance since May 2020 having served as our Vice President, Investor Relations since May 2018. In these roles Mr. Ragosa oversaw the development and execution of our strategic investor-relations plan aligned with our long-term goals and contributed to our capital raise strategy. Prior to that, Mr. Ragosa served as Director, Investor Relations from February 2018 to May 2018 and Associate Director from September 2016 to February 2018 at Ironwood Pharmaceuticals Inc, a biotechnology company, or Ironwood, where he managed relationships with investors and analysts and served as an external spokesperson. Prior to joining Ironwood, Mr. Ragosa served as a Vice President within the equities division at Goldman Sachs Group, Inc. from March 2012 to June 2016 where, among other things, he facilitated capital raises for private and public companies and conducted financial analyses. Prior to that Mr. Ragosa held roles within the equities divisions at Morgan Stanley and Bank of America Securities. Mr. Ragosa received his bachelor's degree in History and Government at Bowdoin College and is a Chartered Financial Analyst.

*John F. Paolini, M.D., Ph.D.*, has served as our Chief Medical Officer since August 2016. From August 2015 to August 2016, Dr. Paolini was Clinical Research Head of the Cardiovascular and Metabolic Diseases Research Unit at Pfizer Inc., a pharmaceutical company, or Pfizer, where he was responsible for bringing forward programs from pre-clinical through early clinical development and proof of concept. Prior to Pfizer, from August 2011 to July 2015, Dr. Paolini served as Chief Medical Officer of Cerenis Therapeutics, a biotechnology company focused on cardiovascular and metabolic diseases, where he was responsible for designing and executing clinical trials and regulatory strategy for a portfolio of products. Dr. Paolini holds an M.D. and a Ph.D. from Duke University School of Medicine, a B.A. and a B.S. from Tulane University, and completed his internship, residency and fellowship in Internal Medicine and Cardiology at Brigham and Women's Hospital, Boston.

**PART II**

**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.**

***Principal Market***

Our Class A common shares are listed on The Nasdaq Global Select Market under the symbol "KNSA."

***Holder***

As of January 31, 2021, there were 16 holders of record of our Class A common shares, five holders of record of our Class B common shares, four holders of record of our Class A1 common shares and two holders of record of our Class B1 common shares. The actual number of shareholders is greater than this number of record holders, and includes shareholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. The number of holders of record also does not include shareholders whose shares may be held in trust by other entities.

***Dividends Policy***

We have never declared or paid any cash dividends on our common shares. We intend to retain all of our future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare and pay dividends to holders of our common shares will be made at the discretion of our board of directors, which may take into account several factors, including general economic conditions, our financial condition and results of operations, available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax and regulatory restrictions, the implications of the payment of dividends by us to our shareholders and any other factors that our board of directors may deem relevant. In addition, pursuant to the Bermuda Companies Act 1981, as amended, a company may not declare or pay dividends if there are reasonable grounds for believing that (1) the company is, or would after the payment be, unable to pay its liabilities as they become due or (2) that the realizable value of its assets would thereby be less than its liabilities. Under our amended and restated bye-laws, each of our common shares is entitled to dividends if, as and when dividends are declared by our board of directors, subject to any preferred dividend right of the holders of any preferred shares.

***Recent Sales of Unregistered Securities***

On May 18, 2020, we issued and sold an aggregate of 1,600,000 Class A1 common shares to existing investors at price of \$18.25 per share, resulting in aggregate gross proceeds to us of approximately \$29.2 million. These securities were issued under Section 4(a)(2) of the Securities Act in a transaction not involving a public offering.

On June 6, 2020, we issued an aggregate of 59,469 Class A common shares to the former shareholders of Primatope, having an aggregate value of approximately less than \$0.1 million, in connection with the release and issuance of the shares held back at the closing of the acquisition of Primatope, in accordance with the Primatope Agreement. These securities were issued under Section 4(a)(2) and Rule 506 of the Securities Act in a transaction not involving a public offering.

On July 24, 2020, we issued and sold an aggregate of 1,428,572 Class A1 common shares to existing investors at a price of \$21.00 per share, resulting in aggregate gross proceeds to us of approximately \$30.0 million. These securities were issued under Section 4(a)(2) of the Securities Act in a transaction not involving a public offering.

On September 4, 2020, we issued an aggregate of 16,634 Class A common shares to the former shareholders of Primatope, having an aggregate value of approximately \$0.3 million, as payment, in part, for the achievement of a milestone in accordance with the Primatope Agreement. These securities were issued under Section 4(a)(2) and Rule 506 of the Securities Act in a transaction not involving a public offering.

**Use of Proceeds from Registered Securities**

On May 29, 2018, we issued and sold 8,477,777 Class A common shares to the underwriters in our initial public offering, or IPO, and on June 22, 2018, we issued and sold an additional 1,006,425 Class A common shares pursuant to the exercise by the underwriters of their over-allotment option to purchase additional shares. Our Class A common shares were sold at a price to the public of \$18.00 per share. We received aggregate gross proceeds from the IPO inclusive of the underwriters' over-allotment option of approximately \$170.7 million and aggregate net proceeds of approximately \$155.5 million after deducting underwriting discounts and commissions of approximately \$12.0 million and other offering expenses. The offer and sale of all of the shares in our IPO inclusive of the underwriters' over-allotment option were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-224488), which was declared effective by the Securities and Exchange Commission, or SEC, on May 23, 2018, and a registration statement on Form S-1 to register additional shares (File No. 333-225159), which was automatically effective upon filing with the SEC on May 23, 2018. There has been no material change in our planned use of the net proceeds from the IPO as described in our final prospectus filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on May 24, 2018. As of December 31, 2020, we had used all of the net proceeds from our initial public offering.

**ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA.**

You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this Annual Report and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this Annual Report. We have derived the consolidated statement of operations data for the years ended December 31, 2020, 2019 and 2018 and the consolidated balance sheet data as of December 31, 2020 and 2019 from our audited consolidated financial statements included elsewhere in this Annual Report. Our historical results are not necessarily indicative of results that may be expected in any future period.

	Years Ended December 31,		
	2020	2019	2018
	(in thousands, except share and per share data)		
<b>Consolidated Statement of Operations Data:</b>			
Operating expenses:			
Research and development	\$ 112,042	\$ 135,001	\$ 86,597
Selling, general and administrative	45,321	34,962	21,563
Total operating expenses	157,363	169,963	108,160
Loss from operations	(157,363)	(169,963)	(108,160)
Interest income	1,134	6,049	4,719
Loss before (provision) benefit for income taxes	(156,229)	(163,914)	(103,441)
(Provision) benefit for income taxes	(5,152)	2,047	214
Net loss	\$ (161,381)	\$ (161,867)	\$ (103,227)
Net loss per share attributable to common shareholders—basic and diluted <sup>(1)</sup>	\$ (2.61)	\$ (2.99)	\$ (3.49)
Weighted average common shares outstanding—basic and diluted <sup>(1)</sup>	61,842,722	54,049,477	29,547,427

<sup>(1)</sup> See Note 12 to our consolidated financial statements included elsewhere in this Annual Report for further details on the calculation of basic and diluted net loss per share attributable to common shareholders.

	As of December 31, 2020	As of December 31, 2019	As of December 31, 2018
<b>Consolidated Balance Sheet Data:</b>		(in thousands)	
Cash, cash equivalents and short-term investments	\$ 323,482	\$ 233,380	\$ 307,304
Working capital <sup>(1)</sup>	301,403	213,797	271,196
Total assets	349,464	254,534	321,965
Accumulated deficit	(517,473)	(356,092)	(194,225)
Total shareholders' equity	311,935	225,423	279,267

<sup>(1)</sup> We define working capital as current assets less current liabilities.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K, or Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve risks and uncertainties. As a result of many factors, including those factors set forth in the risks identified in Part I-Item 1A "Risk Factors" section of this Annual Report and our other filings with the Securities and Exchange Commission, or SEC, our actual results could differ materially from the results, performance or achievements expressed in or implied by these forward-looking statements.*

### Overview

We are a biopharmaceutical company focused on discovering, acquiring, developing and commercializing therapeutic medicines for patients with significant unmet medical need. Our product candidates, riloncept, mavrilimumab, vixarelimab and KPL-404, are based on strong biologic rationale or validated mechanisms, target underserved conditions and offer the potential for differentiation. This pipeline of product candidates are designed to modulate immunological pathways across a spectrum of diseases.

Riloncept is a protein cytokine trap for inhibiting interleukin-1alpha, or IL-1 $\alpha$ , and interleukin-1beta, or IL-1 $\beta$ . Cytokines are small proteins that play a role in cell signaling. Riloncept was discovered and developed by Regeneron Pharmaceuticals, Inc., or Regeneron, and is approved by the U.S. Food and Drug Administration, or FDA, under the brand name ARCALYST for the treatment of CAPS, specifically familial cold autoinflammatory syndrome and muckle-wells syndrome, and for the treatment of deficiency of IL-1 receptor antagonist, or DIRA. We licensed riloncept from Regeneron in 2017.

We are initially developing riloncept for the potential treatment of recurrent pericarditis, a painful inflammatory cardiovascular disease with an estimated U.S. prevalent population of approximately 40,000 patients seeking and receiving medical treatment. Currently there is no FDA-approved therapy for the treatment of recurrent pericarditis. We received Breakthrough Therapy designation from the FDA for riloncept for the treatment of recurrent pericarditis in 2019 and Orphan Drug designation from the FDA for riloncept for the treatment of pericarditis, which includes the treatment of recurrent pericarditis, in 2020. In June 2020, we reported final results from RHAPSODY, our global, double-blind, placebo-controlled, randomized-withdrawal design, pivotal Phase 3 clinical trial of riloncept in subjects with recurrent pericarditis. RHAPSODY met its prescribed primary and all major secondary efficacy endpoints with statistical significance, showing that riloncept improved clinically meaningful outcomes associated with unmet medical need in recurrent pericarditis. RHAPSODY data were also published in The New England Journal of Medicine simultaneously with a late-breaking scientific presentation at the American Heart Association's Scientific Sessions 2020.

The FDA accepted the supplemental Biologics License Application, or sBLA, for riloncept in recurrent pericarditis and assigned a Prescription Drug User Fee Act, or PDUFA, goal date of March 21, 2021 with priority review. If approved by the FDA for recurrent pericarditis, we expect the potential commercial launch of riloncept in recurrent pericarditis in the first half of 2021 and consequently would take responsibility for sales and distribution of riloncept for all approved indications in the United States and evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits.

Mavrilimumab is a fully-human monoclonal antibody that antagonizes granulocyte-macrophage colony stimulating factor, or GM-CSF. We licensed mavrilimumab from MedImmune Limited, or MedImmune, in 2017.

We are evaluating mavrilimumab for the potential treatment of giant cell arteritis, or GCA, a chronic inflammatory disease of the medium-to-large arteries with an estimated U.S. prevalence of approximately 75,000 to 150,000 patients. There is only one FDA-approved therapy for GCA, which is an adjunct to corticosteroid therapy, and

we believe that an unmet need persists. We received Orphan Drug designation from the FDA for mavrilimumab for the treatment of GCA in 2020. In November 2020, we presented results from our randomized, double-blind, placebo-controlled, global Phase 2 proof-of-concept trial of mavrilimumab in subjects with GCA at the late-breaking abstracts session during the American College of Rheumatology Convergence 2020. The Phase 2 trial met both its prescribed primary and secondary efficacy endpoints with statistical significance. In addition, while the trial was not powered for individual disease cohorts, there was a consistent trend of efficacy across the new onset and relapsing/refractory cohorts. Mavrilimumab was well-tolerated in the Phase 2 trial; there were no drug-related serious adverse events, and the rates of drug-related treatment-emergent adverse events between mavrilimumab recipients and placebo recipients were similar. Data from the Phase 2a trial were presented at the European Academy of Dermatology and Venereology Virtual Congress in 2020.

We are also evaluating mavrilimumab for the potential treatment of severe coronavirus 2019 disease, or COVID-19, pneumonia and hyperinflammation. In June 2020, we announced 28-day clinical outcomes from an open-label investigator-initiated treatment protocol with mavrilimumab conducted in Italy in 13 non-mechanically ventilated patients with severe COVID-19 pneumonia and hyperinflammation. Mavrilimumab-treated patients experienced earlier and improved clinical outcomes compared to control-group patients, including earlier weaning from supplemental oxygen, shorter hospitalizations, and no deaths. These data were published in *The Lancet Rheumatology*. In December 2020, we reported results from a randomized, double-blind, placebo-controlled investigator-initiated study in the same patient population across a consortium of academic sites in the United States showing encouraging trends of reduced mortality and duration of mechanical ventilation in patients treated with mavrilimumab on top of standard of care therapy. There was no difference in serious adverse events between the mavrilimumab arm and the placebo arm in the investigator-initiated study. We are conducting a global, randomized, double-blind, placebo-controlled Phase 2/3 clinical trial of mavrilimumab in severe COVID-19 pneumonia and hyperinflammation. We expect to provide data from the Phase 2 portion of the trial in the first half of 2021. We expect to provide next steps for mavrilimumab, including in GCA, in the first half of 2021.

Vixarelimab is a fully-human monoclonal antibody that simultaneously inhibits the signaling of the cytokines interleukin 31 and oncostatin M by targeting their common receptor subunit, oncostatin M receptor beta. We believe vixarelimab is the only monoclonal antibody in development that simultaneously targets both pathways. We licensed vixarelimab from Biogen MA, Inc., or Biogen, in 2016.

We are evaluating vixarelimab for the potential treatment of prurigo nodularis, a chronic inflammatory skin condition with an estimated U.S. prevalence of approximately 300,000 patients. We received Breakthrough Therapy designation for vixarelimab for the treatment of pruritus associated with prurigo nodularis in 2020. In April 2020, we reported results from our randomized, double-blind, placebo-controlled Phase 2a trial of vixarelimab in prurigo nodularis. The Phase 2a trial met its primary efficacy endpoint, as there was a statistically significant reduction in weekly-average Worst-Itch Numeric Rating Scale, or WI-NRS, from baseline at Week 8 in vixarelimab recipients compared to placebo recipients. In addition, the majority of vixarelimab recipients showed a clinically meaningful greater-than-or-equal-to 4-point weekly-average WI-NRS reduction at Week 8 and a statistically significant percentage of vixarelimab recipients achieved a prurigo nodularis-investigator's global assessment score of 0/1 at Week 8 compared to placebo recipients. We are conducting a randomized, double-blind, placebo-controlled Phase 2b dose ranging study designed to investigate the efficacy, safety, and pharmacokinetics of vixarelimab in patients with prurigo nodularis.

KPL-404 is a humanized monoclonal antibody that is designed to inhibit the CD40-CD40 ligand, or CD40L, interaction, a central control node of T-cell-dependent, B-cell-mediated humoral adaptive immunity. We believe that disrupting the CD40-CD40L interaction is an attractive approach for multiple autoimmune disease pathologies such as rheumatoid arthritis, Sjogren's syndrome, Graves' disease, systemic lupus erythematosus and solid organ transplant graft rejection. We acquired all of the outstanding securities of Primatope Therapeutics, Inc., or Primatope, the company that owned or controlled the intellectual property related to KPL-404 in 2019.

We are conducting a randomized, double-blind, placebo-controlled single-ascending-dose Phase 1 clinical trial of KPL-404 in healthy volunteers to evaluate the safety and tolerability of KPL-404 as well as to pharmacokinetics, CD40 receptor occupancy, the immune response to the novel test antigen keyhole limpet hemocyanin, or KLH, in clinically relevant dose cohorts, and T-cell dependent antibody response, or TDAR, in these subjects. The study is

divided into two parts: a single dose of KPL-404 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg, 3 mg/kg or 10 mg/kg intravenously, or IV, and a single dose of KPL-404 1 mg/kg or 5 mg/kg subcutaneously, or SC. In November 2020, we reported preliminary data from the Phase 1 trial. All dose escalations occurred as per protocol with no dose limiting safety findings. All 6 subjects dosed with KPL-404 3 mg/kg IV showed full receptor occupancy through Day 29, which corresponded with complete suppression of TDAR to KLH through Day 29. Consistent dose relatedness was shown in the lower dose level cohorts, including 0.03 mg/kg, 0.3 mg/kg, 1 mg/kg IV and 1 mg/kg SC. We believe that these data support subsequent study in patients, including potential IV or SC monthly administration. Further, we expect final data and safety follow-up from all cohorts of the Phase 1 trial in the first half of 2021.

Our future success is dependent on our ability to develop, obtain regulatory approval for and successfully commercialize one or more of our product candidates. The FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the commercial marketing of rilonacept in the United States for recurrent pericarditis, we will assume the sales and distribution of rilonacept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. However, we have not yet demonstrated our ability to successfully obtain regulatory approvals, manufacture a commercial scale drug, or conduct sales and marketing activities. We currently generate no revenue from sales of any products, and we may never be able to develop or commercialize a marketable product.

On February 4, 2019, we completed a follow-on offering of 2,654,984 Class A common shares and concurrent private placement of 2,000,000 Class A1 common shares, both at \$18.26 per share for aggregate gross proceeds of \$85.0 million. In addition, on March 1, 2019, we completed the sale of 161,126 Class A common shares to the underwriters of the follow-on offering following the exercise in part of their option to purchase additional shares at \$18.26 per share for gross proceeds of \$2.9 million. The aggregate net proceeds to us from the follow-on offering and concurrent private placement, inclusive of the option exercise, was \$83.0 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On May 18, 2020, we completed a follow-on offering of 2,760,000 Class A common shares, inclusive of the exercise of the underwriters' option to purchase additional shares at a public offering price of \$18.25 and a concurrent private placement of 1,600,000 Class A1 common shares at an offering price of \$18.25 per share for aggregate gross proceeds of \$79.6 million. The aggregate net proceeds to us from the follow-on offering and concurrent private placement, inclusive of the option exercise, was \$74.5 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On July 24, 2020, we completed a follow-on offering of 5,952,381 Class A common shares, at a public offering price of \$21.00 and a concurrent private placement of 1,428,572 Class A1 common shares at an offering price of \$21.00 per share for aggregate gross proceeds of \$155.0 million. The aggregate net proceeds to us from the follow-on offering and concurrent private placement was \$146.0 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

We have incurred significant operating losses since inception. 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. Our net losses were \$161.4 million and \$161.9 million for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020, we had an accumulated deficit of \$517.5 million. We expect to continue to incur significant operating losses for at least the next several years as we advance our product candidates through preclinical and clinical development, manufacture our product candidates for clinical or commercial use, and, ultimately, seek regulatory approval. In addition, if we obtain marketing approval for any of our product candidates, including rilonacept, we expect to continue to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. We may also incur expenses in connection with the in-licensing or acquisition of additional product candidates.

As a result, until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through public or private securities offerings, debt financings or other sources, which may include licensing, collaborations or other strategic transactions or arrangements, and a lesser extent through projected revenue

from riloncept if approved in recurrent pericarditis or any of our other product candidates. We may be unable to raise additional funds or enter into such other transactions or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such transactions or arrangements as and when needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions.

Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. Typically, it takes many years to develop one new product from the time it is discovered to when it is available for treating patients, and development may cease for a number of reasons. Because of the numerous risks and uncertainties associated with product development, including any impact from the COVID-19 pandemic, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

As of December 31, 2020, we had cash, cash equivalents and short-term investments of \$323.5 million. We believe that our existing cash, cash equivalents and short-term investments will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months from the date of issuance of the consolidated financial statements included in this Annual Report. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. See “— Liquidity and Capital Resources.” Our future viability beyond that point is dependent on our ability to raise additional capital to finance our operations.

## **Components of Our Results of Operations**

### ***Revenue***

To date, we have not generated any revenue from any products, and may never be able to develop and commercialize a marketable product. If our development efforts for our product candidates are successful and result in regulatory approval, we may generate revenue in the future from product sales. The FDA accepted the sBLA for riloncept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of riloncept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits.

### ***Operating Expenses***

#### ***Research and Development Expenses***

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

- expenses incurred to conduct the necessary preclinical studies and clinical trials required to obtain regulatory approval;
- expenses incurred under agreements with contract research organizations, or CROs, that are primarily engaged in the oversight and conduct of our clinical trials and contract manufacturing organizations, or CMOs, that are primarily engaged to provide preclinical and clinical drug substance and product for our research and development programs for our product candidates;
- other costs related to acquiring and manufacturing preclinical and clinical trial materials, including manufacturing validation batches, as well as investigative sites and consultants that conduct our clinical trials, preclinical studies and other scientific development services;

- payments made in cash or equity securities under third-party licensing, acquisition and other similar agreements;
- employee-related expenses, including salaries and benefits, travel and share-based compensation expense for employees engaged in research and development functions;
- costs related to compliance with regulatory requirements; and
- allocated facilities-related costs, depreciation and other expenses, which include rent and utilities.

We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered or the services rendered.

Our direct research and development expenses are tracked on a program-by-program basis for our product candidates and consist primarily of external costs, such as fees paid to outside consultants, CROs, CMOs and research laboratories in connection with our preclinical development, process development, manufacturing and clinical development activities. Our direct research and development expenses by program also include fees incurred under license, acquisition and other similar agreements. We do not allocate employee costs or facility expenses, including depreciation or other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to conduct our research and discovery activities as well as for managing our preclinical and clinical development, process development and manufacturing activities.

The table below summarizes our research and development expenses incurred by program:

	Years Ended		2020/2019				2019/2018	
	December 31,		Comparison				Comparison	
	2020	2019	Increase/(Decrease)		Increase/(Decrease)			
			\$	%	\$	%		
	(in thousands)		(in thousands, except percentages)					
Rilonacept <sup>(1)</sup>	\$ 25,729	\$ 25,677	\$ 13,446	\$ 52	0%	\$ 12,231	91%	
Mavrilimumab <sup>(2)</sup>	25,862	13,840	15,260	12,022	87%	(1,420)	(9)%	
Vixarelimab <sup>(3)</sup>	8,796	28,772	25,562	(19,976)	(69)%	3,210	13%	
KPL-404 <sup>(4)</sup>	3,738	22,848	5,967	(19,110)	(84)%	16,881	283%	
Unallocated research and development expenses	47,917	43,864	26,362	4,053	9%	17,502	66%	
Total research and development expenses	\$ 112,042	\$ 135,001	\$ 86,597	\$ (22,959)	(17)%	\$ 48,404	56%	

<sup>(1)</sup> The amount for the year ended December 31, 2020 includes \$7.5 million related to a milestone payment for the achievement of a specified regulatory milestone event due under the Regeneron License Agreement.

<sup>(2)</sup> The amount for the year ended December 31, 2018 includes \$5.0 million related to a pass-through payment due upon the achievement of a specified clinical milestone event due under our license agreement with MedImmune.

<sup>(3)</sup> The amount for the year ended December 31, 2019 includes expense of \$10.0 million related to an accrued milestone under our asset purchase agreement with Biogen associated with the achievement of a specified clinical milestone event.

<sup>(4)</sup> The amount for the year ended December 31, 2019 includes expense of \$18.0 million related to our acquisition of outstanding securities of Primatope and milestone achievements, paid in a combination of cash and Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the stock purchase option agreement with Primatope, or the Primatope Agreement. The amount for the year ended December 31, 2018 includes expense of \$0.8 million related to the extension of the option period under the Primatope Agreement.

Research and development activities are central to our business. Product candidates in later stages of clinical development generally have higher costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. As a result, we expect that our research and development expenses will be substantial over the next several years as we conduct our ongoing and/or planned clinical trials for rilonacept, mavrilimumab, vixarelimab and KPL-404, as well as conduct other preclinical and clinical development, and make regulatory filings for our product candidates. As a result, our related personnel costs will increase, including costs associated with share-based compensation. We also expect to incur additional expenses related to milestone and royalty payments payable to third parties with whom we have entered into license, acquisition and other similar agreements to acquire the rights to our product candidates.

The FDA accepted the sBLA for rilonacept in recurrent pericarditis with priority review and assigned a PDUFA goal date of March 21, 2021. Upon approval from the FDA, if any, of the sBLA, we will assume the sales and distribution of rilonacept for the approved indications in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. However, we have not yet demonstrated our ability to successfully obtain regulatory approvals, manufacture a commercial scale drug, or conduct sales and marketing activities. As such, the successful development and commercialization of rilonacept and our other product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the clinical development our product candidates or when, if ever, material net cash inflows may commence from any of our product candidates, including rilonacept if approved. This uncertainty is due to the numerous risks and uncertainties associated with product development and commercialization, including the uncertainty of:

- the potential impact of the COVID-19 pandemic on our business, including our preclinical studies, clinical trials, regulatory actions, commercials launch activities and operations;
- the scope, progress, outcome and costs of our research and preclinical development activities, clinical trials and other development activities;

- establishing an appropriate safety and efficacy profile with IND enabling and clinical studies;
- the successful enrollment and initiation, performance and completion of preclinical studies and clinical trials;
- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities, including the FDA;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- increasing clinical and commercial manufacturing capabilities or making arrangements with additional third-party manufacturers to successfully manufacture our product candidates;
- development and timely delivery of clinical-grade and commercial-grade drug formulations that can be used in our clinical trials and for commercial launch;
- establishing a sales, marketing and distribution infrastructure to commercialize products for which we may obtain marketing approval;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others;
- making milestone or other payments under any current or future license, acquisition, collaboration or other strategic transaction agreements;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulation; and
- maintaining a continued acceptable safety profile of our product candidates following approval, if any, of our product candidates.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses consist primarily of salaries and benefits, travel and share-based compensation expense for personnel in executive, business development, finance, human resources, legal, pre-commercial and support personnel functions. Selling, general and administrative expenses also include insurance and professional fees for legal, patent, consulting, accounting and audit services.

We expect that our selling, general and administrative expenses will continue to increase in the future as we continue to prepare for potential commercialization activities and increase our headcount to support our business objectives. We also anticipate that we will continue to incur significant costs associated with being a public company, including accounting, audit, legal, compliance and director and officer insurance costs as well as investor and public relations expenses, and that such costs will increase over time especially as we are a large accelerated filer and are no longer permitted to rely on exemptions from certain requirements that are applicable to public companies that are not emerging growth companies or smaller reporting companies.

**Interest Income**

Interest income consists of income recognized from investments in money market funds and U.S. Treasury notes.

**Income Taxes**

As an exempted company incorporated under the laws of Bermuda, we are principally subject to taxation in Bermuda. Under the current laws of Bermuda, tax on a company's income is assessed at a zero percent tax rate. As a result, we have not recorded any income tax benefits from our losses incurred in Bermuda during each reporting period, and no net operating loss carryforwards are currently available to us for those losses, while our assets remain in Bermuda. Our wholly owned U.S. subsidiaries, Kiniksa Pharmaceuticals Corp., or Kiniksa U.S., and Primatope are subject to federal and state income taxes in the United States. Our wholly owned subsidiary Kiniksa Pharmaceuticals (UK), Ltd., and its wholly owned subsidiaries, Kiniksa Pharmaceuticals (Germany) GmbH, Kiniksa Pharmaceuticals (France) SARL, and Kiniksa Pharmaceuticals GmbH are subject to taxation in their respective countries. Our provision for income taxes relates mainly to U.S. taxable income, generated by our wholly owned subsidiary Kiniksa US. If riloncept is approved by the FDA for the treatment of recurrent pericarditis in the United States, the commercial launch will be made out of Kiniksa UK. In connection with its launch readiness activities, the Company transferred all of its rights, title and interest in, among other things, certain contracts (including the Regeneration Agreement), intellectual property rights, product filings and approvals and other information, plans and materials owned or controlled by the Company insofar as they related exclusively or primarily to riloncept to Kiniksa UK in January 2021 pursuant to an asset transfer agreement between the Company and Kiniksa UK for the consideration described therein.

As of December 31, 2020 and 2019, we had federal research and development tax credit carryforwards of approximately \$1.4 million and \$0.2 million respectively, available to reduce future tax liabilities, which begin to expire in 2040. As of December 31, 2020 and 2019, we had state research and development tax credit carryforwards of approximately \$0.8 million and \$0.3 million respectively, available to reduce future tax liabilities, which begin to expire in 2035.

**Results of Operations**

**Comparison of the Years Ended December 31, 2020, 2019 and 2018**

The following table summarizes our results of operations for the years ended December 31, 2020, 2019 and 2018:

	Years Ended			2020/2019		2019/2018	
	December 31,			Comparison		Comparison	
	2020	2019	2018	Increase/(Decrease)		Increase/(Decrease)	
	(in thousands)			\$	%	\$	%
	(in thousands, except percentages)						
Operating expenses:							
Research and development	\$ 112,042	\$ 135,001	\$ 86,597	\$ (22,959)	(17)%	\$ 48,404	56%
Selling, general and administrative	45,321	34,962	21,563	10,359	30%	13,399	62%
Total operating expenses	157,363	169,963	108,160	(12,600)	(7)%	61,803	57%
Loss from operations	(157,363)	(169,963)	(108,160)	12,600	(7)%	(61,803)	57%
Interest income	1,134	6,049	4,719	(4,915)	(81)%	1,330	28%
Loss before (provision) benefit for income taxes	(156,229)	(163,914)	(103,441)	7,685	(5)%	(60,473)	58%
(Provision) benefit for income taxes	(5,152)	2,047	214	(7,199)	(352)%	1,833	857%
Net loss	\$ (161,381)	\$ (161,867)	\$ (103,227)	\$ 486	0%	\$ (58,640)	57%

*Research and Development Expenses*

	Years Ended December 31,			2020/2019 Comparison		2019/2018 Comparison	
	2020	2019	2018	Increase/(Decrease) \$	%	Increase/(Decrease) \$	%
Direct research and development expenses by program:							
Rilonacept	\$ 25,729	\$ 25,677	\$ 13,446	\$ 52	0%	\$ 12,231	91%
Mavrilimumab	25,862	13,840	15,260	12,022	87%	(1,420)	(9)%
Vixarelimab	8,796	28,772	25,562	(19,976)	(69)%	3,210	13%
KPL-404	3,738	22,848	5,967	(19,110)	(84)%	16,881	283%
Unallocated research and development expenses:							
Personnel related (including share-based compensation)	33,489	29,019	15,032	4,470	15%	13,987	93%
Other	14,428	14,845	11,330	(417)	(3)%	3,515	31%
Total research and development expenses	<u>\$ 112,042</u>	<u>\$ 135,001</u>	<u>\$ 86,597</u>	<u>\$ (22,959)</u>	<u>(17)%</u>	<u>\$ 48,404</u>	<u>56%</u>

Research and development expenses were \$112.0 million for the year ended December 31, 2020, compared to \$135.0 million for the year ended December 31, 2019, or a decrease of \$23.0 million.

During the year ended December 31, 2020, the research and development expenses incurred related to external spend with respect to our product candidates of \$64.1 million, including \$32.4 million of costs related to our clinical trials, \$15.6 million of costs related to the manufacturing of our clinical drug supply, and \$7.5 million for the achievement of a specified regulatory milestone event under the Regeneron Agreement which was achieved in the fourth quarter of 2020. In addition, we incurred unallocated research and development expenses of \$47.9 million, including \$33.5 million of personnel costs and \$14.4 million of other operating costs including costs associated with our laboratory including costs related to preclinical and discovery research.

During the year ended December 31, 2019, expenses incurred related to the acquisition of all of the outstanding securities of Primatope for aggregate upfront and contingent payments of \$18.0 million, paid in a combination of cash and Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the Primatope Agreement, \$10.0 million for an accrued milestone under the Biogen Agreement, associated with the achievement of a specified clinical milestone event, and expenses for external spend with respect to our product candidates of \$63.2 million, including \$34.1 million of costs related to our clinical trials and \$19.2 million of costs related to the manufacturing of our clinical drug supply. In addition, we incurred unallocated research and development expenses of \$43.9 million, including, \$29.0 million of personnel costs and \$14.8 million of other operating costs including costs associated with our laboratory and other facility costs including costs related to preclinical and discovery research.

During the year ended December 31, 2018, the research and development expenses incurred related to external spend with respect to our product candidates of \$60.2 million, including \$26.7 million of costs related to our preclinical and clinical trials and \$20.7 million of costs related to manufacturing of our clinical drug supply. In addition, we incurred unallocated research and development expenses of \$26.4 million, including \$15.0 million of personnel costs and \$11.3 million of other operating costs including costs associated with the first year of operations of our laboratory and costs related to preclinical studies and discovery research.

Direct costs for our rilonacept program were \$25.7 million, \$25.7 million and \$13.4 million for the years ended December 31, 2020, 2019 and 2018, respectively. During the year ended December 31, 2020, expenses incurred primarily related to conducting RHAPSODY, our global, pivotal Phase 3 clinical trial in recurrent pericarditis, including the long-term extension, a milestone payment of \$7.5 million for the achievement of a specified regulatory milestone event under the Regeneron Agreement, and supply chain costs. During the year ended December 31, 2019, expenses incurred primarily related to our clinical research and development for RHAPSODY, including \$6.6 million related to

purchases of drug materials under our clinical supply agreement with Regeneron, as well as for our open-label Phase 2 proof-of-concept clinical trial. During the year ended December 31, 2018, expenses incurred primarily related to clinical research and development for our Phase 2 open-label clinical trial and the initiation of RHAPSODY.

Direct costs of our mavrilimumab program were \$25.9 million, \$13.8 million and \$15.3 million for the years ended December 31, 2020, 2019 and 2018, respectively. During the year ended December 31, 2020, expenses incurred primarily related to conducting our global Phase 2 clinical trial in GCA, including manufacturing costs for our clinical drug supply, and initiation of our Phase 2/3 clinical trial in COVID-19 pneumonia and hyperinflammation. During the year ended December 31, 2019, expenses incurred primarily related to costs related to our global Phase 2 clinical trial in GCA. During the year ended December 31, 2018, expenses incurred primarily related to a \$5.0 million pass-through payment due upon the achievement of a specified clinical milestone event due under our license agreement with MedImmune as well as expenses related to preparation for our planned global Phase 2 clinical trial in GCA and manufacturing process development expenses.

Direct costs for our vixarelimab program were \$8.8 million, \$28.8 million and \$25.6 million for the year ended December 31, 2020, 2019 and 2018, respectively. During the year ended December 31, 2020, expenses incurred related primarily related to conducting our Phase 2a clinical trial in prurigo nodularis and our exploratory Phase 2 clinical trial in diseases characterized by chronic pruritus, which concluded earlier in the year. During the year ended December 31, 2019, expenses incurred primarily related to a milestone payment of \$10.0 million under the Biogen Agreement associated with the achievement of a specified clinical milestone event as well as expenses incurred for our Phase 2a clinical trial in prurigo nodularis, our exploratory Phase 2 clinical trial in diseases characterized by chronic pruritus and our Phase 1b clinical trial, as well as approximately \$2.1 million of manufacturing and development costs for our clinical drug supply. During the year ended December 31, 2018 expenses incurred related to manufacturing and development costs for our clinical drug supply, our Phase 1a/1b clinical trial, and our LOTUS-PN observational study.

Direct costs for our KPL-404 program were \$3.7 million, \$22.8 million and \$6.0 million for the years ended December 31, 2020, 2019 and 2018, respectively. During the year ended December 31, 2020, expenses incurred primarily related to preclinical and clinical trial costs for our Phase 1 trial of KPL-404 in healthy volunteers, including toxicology costs. During the year ended December 31, 2019, expenses incurred primarily related to the acquisition of all of the outstanding securities of Primatope for aggregate upfront and contingent payments of \$18.0 million paid in a combination of cash and Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the Primatope Agreement. The Primatope acquisition was accounted for as an asset acquisition in 2019 as it did not meet the definition of a business. We recorded the upfront payment, milestone payments and the accrued milestone as research and development expense in the consolidated statement of operations and comprehensive loss because the acquired technology represented in-process research and development and had no alternative future use. During the year ended December 31, 2018, expenses incurred primarily related to pre-clinical research and development, including manufacturing development costs as well as \$0.8 million related to the extension of the option period under our stock purchase option agreement with Primatope.

Unallocated research and development expenses were \$47.9 million, \$43.9 million and \$26.4 million for the years ended December 31, 2020, 2019 and 2018, respectively. The increase of \$4.0 million in unallocated research and development expenses in 2020 from 2019 was due to increases of \$2.9 million in operating costs of our laboratory and \$4.5 million in personnel-related costs primarily related to share-based compensation and additional personnel in our research and development functions to support our ongoing clinical trials, partially offset by decreases of \$2.0 million related to the cessation of our development of a pre-clinical product candidate and \$1.4 million in other operating expenses including costs related to our internal lab and costs related to preclinical studies and discovery research. The increase of \$17.5 million in unallocated research and development expenses in 2019 from 2018 was due to an increase of \$13.9 million in personnel-related costs, including share-based compensation, and an increase of \$3.5 million in other operating expenses, including costs related to our laboratory and to preclinical studies and discovery research. The increase in personnel-related costs was primarily due to additional personnel in our research and development functions to support our ongoing clinical trials, including development and manufacture of clinical supply and regulatory filings. Personnel-related costs for the years ended December 31, 2020, 2019 and 2018 included share-based compensation of \$8.9 million, \$5.7 million and \$2.3 million, respectively.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses were \$45.3 million, \$35.0 million and \$21.6 million for the years ended December 31, 2020, 2019 and 2018. The increase of \$10.3 million in 2020 from 2019 was primarily due to increases of \$5.2 million in personnel-related costs and \$6.7 million in marketing costs associated with the pre-commercialization of our rilonacept program partially offset by a decrease \$1.6 million of other expenses primarily due to a decrease in travel costs due to the travel restrictions associated with the COVID-19 pandemic and other miscellaneous professional fees. The increase of \$13.4 million in 2019 from 2018 was primarily due to increases of \$11.7 million in personnel-related costs and \$2.1 million in professional fees, partially offset by a decrease of \$0.4 million in other general expenses. The increase in personnel-related costs was due to additional personnel, primarily in our commercial and corporate departments, including legal, finance and human resources. In 2019, expenses related to professional fees increased due to costs related to commercial preparations, including market research as well as legal costs incurred in connection with maintaining and registering worldwide patents and costs associated with our ongoing business operations, as well as expenses for higher recruiting, accounting and other costs incurred as a public company for a full fiscal year. Personnel-related costs for the years ended December 30, 2020, 2019 and 2018 included share-based compensation of \$12.0 million, \$9.3 million and \$3.4 million, respectively.

*Interest Income*

Interest income was \$1.1 million for the year ended December 31, 2020 compared to \$6.0 million for the year ended December 31, 2019. The decrease was primarily due to lower interest rates on U.S. Treasury notes.

Interest income was \$6.0 million for the year ended December 31, 2019 compared to \$4.7 million for the year ended December 31, 2018. The increase was largely due to higher average invested balances during the year ended December 31, 2019.

*(Provision) Benefit for Income Taxes*

For the year ended December 31, 2020, we recorded a provision for income taxes of \$5.2 million relating primarily to the recognition of the valuation allowance and the current year tax expense. The current year expense is reduced by the favorable impact of the Foreign Derived Intangible Income, or FDII, deduction, equity compensation and U.S. federal and state research and development tax credit utilization. For the year ended December 31, 2019, we recorded a \$2.0 million benefit for income taxes relating primarily to the impact of the FDII deduction, and U.S. federal and state research and development tax credits. For the year ended December 31, 2018, we recorded an insignificant benefit for income taxes.

**Liquidity and Capital Resources**

Since our inception, we have not generated any revenue from any sources, including from product sales, and have incurred significant operating losses and negative cash flows from our operations.

On February 4, 2019, we completed a follow-on offering of 2,654,984 Class A common shares at a public offering price of \$18.26 per share and concurrent private placement of 2,000,000 Class A1 common shares at an offering price of \$18.26 per share for aggregate gross proceeds of \$85.0 million. In addition, on March 1, 2019, we completed the sale of 161,126 Class A common shares to the underwriters of the follow-on offering following the exercise in part of their option to purchase additional shares at a public offering price of \$18.26 per share for gross proceeds of \$2.9 million. The aggregate net proceeds to us from the follow-on offering and concurrent private placement, inclusive of the option exercise, was \$83.0 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On May 18, 2020, we completed a follow-on offering of 2,760,000 Class A common shares, inclusive of the exercise of the underwriters' over-allotment option at a public offering price of \$18.25 per share and a concurrent private placement of 1,600,000 Class A1 common shares at an offering price of \$18.25 per share for aggregate gross proceeds of \$79.6 million. The aggregate net proceeds to us from the follow-on offering and concurrent private placement, inclusive

of the option exercise, was \$74.5 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On July 24, 2020, we completed a follow-on offering of 5,952,381 Class A common shares, at a public offering price of \$21.00 and a concurrent private placement of 1,428,572 Class A1 common shares at an offering price of \$21.00 per share for aggregate gross proceeds of \$155.0 million. The estimated aggregate net proceeds to us from the follow-on offering and concurrent private placement was \$146.0 million after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

As of December 31, 2020, we had cash, cash equivalents and short-term investments of \$323.5 million.

#### Cash Flows

The following table summarizes our cash flows for each of the periods presented:

	Years Ended December 31,		
	2020	2019	2018
	(in thousands)		
Net cash used in operating activities	\$ (136,532)	\$ (158,369)	\$ (81,012)
Net cash (used in) provided by investing activities	(23,444)	49,214	(239,198)
Net cash provided by financing activities	227,086	84,107	346,736
Net increase (decrease) in cash and cash equivalents and restricted cash	\$ 67,110	\$ (25,048)	\$ 26,526

#### Operating Activities

During the year ended December 31, 2020, operating activities used \$136.5 million of cash, primarily resulting from our net loss of \$161.4 million and net cash used in our operating assets and liabilities of \$4.3 million, partially offset by non-cash charges of \$29.2 million. Net cash used in our operating assets and liabilities for the year ended December 31, 2020 consisted of a \$5.0 million decrease in accounts payable primarily due to the timing of vendor invoicing and payments, a \$8.8 million increase in accrued expenses and other liabilities primarily due to increases in the accrued costs for our clinical trials and pre-commercialization activities for our rilonacept program, a \$0.5 million increase in other long-term liabilities, a \$1.7 million decrease in operating lease liabilities due to monthly payments for our right-of-use assets, a \$5.6 million increase in other long term assets due to payments associated with minimum balance requirements of our clinical trials which are not expected to be completed within a year, and \$1.3 million increase in prepaid expenses and other current assets.

During the year ended December 31, 2019, operating activities used \$158.4 million of cash, primarily resulting from our net loss of \$161.9 million and net cash used by changes in our operating assets and liabilities of \$17.0 million partially offset by non-cash charges of \$20.5 million. Net cash used by changes in our operating assets and liabilities for the year ended December 31, 2019 consisted of a \$15.0 million decrease in accrued milestones, a \$4.7 million decrease in accounts payable, and a \$1.3 million decrease in operating lease liabilities partially offset by a \$1.0 million increase in prepaid expenses and other current assets, a \$0.3 million increase in other long-term liabilities and a \$4.6 million increase in accrued expenses. The decrease in accrued milestones resulted from the payment of outstanding milestones for which the expense was recognized in prior years. The decrease in accounts payable was primarily due to the timing of vendor invoicing and payments. The increase in prepaid expenses and other current assets was due to increases in prepaid insurance expenses and prepaid expenses to CROs related to our clinical trials. The decrease in operating lease liabilities is due to monthly payments for our right-of-use assets.

During the year ended December 31, 2018, operating activities used \$81.0 million of cash, primarily resulting from our net loss of \$103.2 million, partially offset by net non-cash charges of \$3.9 million and net cash provided by changes in our operating assets and liabilities of \$18.3 million. Net cash provided by changes in our operating assets and liabilities for the year ended December 31, 2018 consisted of a \$14.3 million increase in accrued expenses and other

liabilities and a \$8.8 million increase in accounts payable, partially offset by a \$4.8 million increase in prepaid expenses and other current assets. The increase in accrued expenses was primarily due to our increased level of operating activities and the timing of vendor invoicing and payments, an increase in accrued milestones as well as an increase in accrued employee compensation expense. The increase in accounts payable was primarily due to increased operating activities as well as the timing of vendor invoicing and payments. The increase in prepaid expenses and other current assets was due to increases in prepaid insurance expenses, interest receivable and prepaid expenses to CMOs related to manufacturing development and CROs related to our clinical trials.

*Investing Activities*

During the year ended December 31, 2020 investing activities used \$23.4 million of cash, consisting of \$430.2 million of purchases of short-term investments and \$0.3 million of purchases of property and equipment, partially offset by \$407.1 million from proceeds of maturities of short-term investments.

During the year ended December 31, 2019, investing activities provided \$49.2 million of cash, consisting of \$541.2 million from proceeds of maturities of short-term investments partially offset by \$488.8 million of purchases of short-term investments and \$3.2 million of purchases of property and equipment.

During the year ended December 31, 2018, investing activities used \$239.2 million of cash, consisting of \$5.3 million of purchases of property and equipment and \$402.0 million of purchases of short-term investments partially offset by \$168.1 million from proceeds of maturities of short-term investments.

*Financing Activities*

During the year ended December 31, 2020, net cash provided by financing activities was \$227.1 million, consisting of net proceeds of \$220.5 million in aggregate from our issuance and sale of Class A common shares in two follow-on public offerings, inclusive of the exercise of the underwriters' option to purchase additional Class A common shares, as applicable, and the concurrent issuances and sales of Class A1 common shares in two private placements, after the deduction of underwriting discounts and commissions, placement agent fees and other offering costs, and \$6.6 million of proceeds primarily from the exercise of share options and our employee share purchase plan.

During the year ended December 31, 2019, net cash provided by financing activities was \$84.1 million, consisting of net proceeds of \$83.0 million from our issuance and sale of Class A common shares in a follow-on public offering, inclusive of the concurrent issuance and sale of Class A1 common shares in a private placement, and exercise in part of the underwriters' option to purchase additional Class A common shares after the deduction of underwriting discounts and commissions, placement agent fees and other offering costs.

During the year ended December 31, 2018, net cash provided by financing activities was \$346.7 million, primarily consisting of net proceeds of \$159.2 million from our issuance and sale of Class A common shares, after the deduction of underwriting discounts and commissions, inclusive of the over-allotment option exercise, and \$190.8 million in net proceeds from our issuance and sale of Series C preferred shares, partially offset by \$3.7 million of payments of other offering costs associated with our IPO.

*Funding Requirements*

We expect to incur significant expenses in connection with our ongoing and planned activities as we advance our product candidates through preclinical and clinical development, seek regulatory approval and prepare for commercial operations. In addition, if we obtain marketing approval for any of our product candidates, including rilonacept, we expect to continue to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. We may also incur expenses in connection with the in-licensing or acquisition of additional product candidates. As a result, our related personnel costs will increase, including costs associated with share-based compensation. We also expect to incur additional expenses related to milestone and royalty payments payable to third parties with whom we have entered into license, acquisition and other similar agreements to acquire the rights to our product candidates. For example, under the Regeneron Agreement, we are obligated to make payments to

Regeneration of \$20.0 million upon the achievement of a specified regulatory milestone which may be met in the first quarter of 2021. Additionally, we expect to continue to incur costs associated with operating as a public company, including significant legal, accounting, investor relations and other expenses. We expect to incur expenses as we:

- conduct our current and planned clinical trials for mavrilimumab, vixarelimab and KPL-404, as applicable;
- increase clinical and commercial manufacturing capabilities or make arrangements with additional third party manufacturers to successfully manufacture our product candidates;
- develop and timely deliver clinical grade and commercial grade product formulations that can be used in our clinical trials and for commercial launch;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish and expand a sales, marketing, medical affairs and distribution capabilities and infrastructure to commercialize any product candidates, including rilonacept, for which we may obtain marketing approval and intend to commercialize on our own;
- launch commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others;
- make milestone or other payments under any current or future license, acquisition, collaboration or other strategic transaction agreements;
- hire additional sales, marketing, clinical, quality and research and development personnel;
- expand our operational, financial and management systems and increase personnel globally to support our clinical development, manufacturing and commercialization efforts and our operations as a public company;
- maintain, expand and protect our intellectual property portfolio; and
- in-license or acquire other product candidates and technologies or their related businesses, if we determine to do so.

We believe that our existing cash, cash equivalents and short-term investments will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We anticipate that we may require additional capital if we choose to pursue in-licenses or acquisitions of other product candidates and technologies or their related businesses. If we receive regulatory approval for rilonacept or our other product candidates or pursue additional indications for our existing product candidates, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution, depending on where we choose to commercialize.

Because of the numerous risks and uncertainties associated with research, development and commercialization of biologic products, we are unable to estimate the exact amount of our working capital requirements. Our future funding requirements will depend on and could increase significantly as a result of many factors, including:

- any impact of the COVID-19 pandemic on our business, including our preclinical studies and clinical trials, regulatory actions, commercial launch activities and operations;
- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical and clinical trials;

- the costs, timing and outcome of regulatory review of our product candidates;
- the costs, timing and ability to manufacture our product candidates to supply our clinical and preclinical development efforts and our clinical trials;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing, pricing and reimbursement, distribution and compliance, for any of our product candidates for which we receive marketing approval;
- the costs of manufacturing commercial-grade product and necessary inventory to support commercial launch;
- the ability to receive additional non-dilutive funding;
- the revenue, if any, received from commercial sale of our products, should any of our product candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- our ability to establish and maintain licensing, collaboration or other strategic transactions and arrangements on favorable terms, if at all;
- the extent to which we acquire or in-license other product candidates, technologies and their related businesses; and
- the timing, receipt and amount of sales of, or milestone payments related to or royalties on, our current or future product candidates, if any.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings, or other sources, including, licensing, collaboration, marketing, distribution or other strategic transactions or arrangements with third parties and to a lesser extent through projected revenue from rilonacept if approved in recurrent pericarditis or any of our other product candidates. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our shareholders' ownership interest may be materially diluted, and the terms of such securities could include liquidation or other preferences that adversely affect our shareholders' rights as a common shareholder. Debt financing and preferred equity financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specified actions, such as incurring additional debt, making capital expenditures or declaring dividends. In addition, debt financing would result in fixed payment obligations.

If we raise funds through licensing, collaboration, marketing, distribution or other strategic transactions or arrangements with third parties, we may have to relinquish valuable rights to our technologies, product candidates or future revenue streams, or otherwise agree to terms that may not be favorable to us. If we are unable to obtain funding, we could be forced to delay, reduce or eliminate some or all of our research and development programs for product candidates, product portfolio expansion or commercialization efforts, which could adversely affect our business prospects, or we may be unable to continue operations.

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

The following table summarizes our contractual obligations as of December 31, 2020 and the effects that such obligations are expected to have on our liquidity and cash flows in future periods:

	Payments Due by Period				Total
	Less than 1 year	1 to 3 years	4 to 5 years (in thousands)	More than 5 years	
Manufacturing commitments <sup>(1)</sup>	\$ 16,178	\$ —	\$ —	\$ —	\$ 16,178
Operating lease commitments <sup>(2)</sup>	2,419	5,120	—	—	7,539
Riloncept long-term incentive plan <sup>(3)</sup>	2,013	—	—	—	2,013
Total	\$ 20,610	\$ 5,120	\$ —	\$ —	\$ 25,730

<sup>(1)</sup> Amounts in the table reflect commitments for costs associated with our external CMOs, which we have engaged to manufacture clinical trial materials and forecasted purchases under the Regeneron clinical supply agreement. Manufacturing commitments include agreements that are enforceable and legally binding on us and that specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. For obligations with cancellation provisions, the amounts included in the preceding table are limited to the non-cancelable portion of the agreement terms or the minimum cancellation fee.

<sup>(2)</sup> Amounts in the table reflect minimum payments due under operating lease agreements entered into by our wholly owned U.S. subsidiary Kiniksa US for office and laboratory space in Lexington, Massachusetts, which expires in 2023, office space in San Diego, California, which expires in 2022, and office space in London UK, which expires in 2025 with an option to terminate in 2023.

<sup>(3)</sup> Amounts in the table reflect the cash awards granted to employees under the Riloncept Long-Term Incentive Plan, or RLTI, which become payable in such amounts if the performance goals defined in the RLTI are achieved at target.

Our contracts with CMOs, CROs and other third parties for the manufacture of our product candidates and to support clinical trials and preclinical research studies and testing are generally cancelable by us upon prior notice. Payments due upon cancellation consisting only of payments for services provided or expenses incurred, including noncancelable obligations of our service providers, up to the date of cancellation are not included in the preceding table as the amount and timing of such payments are not known.

Under various agreements with third parties, we have agreed to make milestone payments, pay royalties, annual maintenance fees and to meet due diligence requirements based upon specified milestones. We generally have not included any contingent payment obligations, such as milestones, royalties or due diligence, in the table above as the amount, timing and likelihood of such payments are not known. We have not included any of the annual maintenance fee payments in the above table, as although the amount and timing are known, we cannot currently determine the final termination dates of the agreements and, as a result, we cannot determine the total amounts of such payments we will be required to make under the agreements.

Under our license agreement with Regeneron, we are obligated to make future regulatory milestone payments of \$20.0 million which may be met in the first quarter of 2021. Upon approval from the FDA, if any, of riloncept in recurrent pericarditis, we will assume the sales and distribution of riloncept for the approved indications in the United States and, under the license agreement, we have agreed to evenly split profits on our sales of riloncept with Regeneron after deducting certain commercialization expenses subject to specified limits.

Under our license agreement with MedImmune, we are obligated to make future clinical, regulatory and initial sales milestone payments of up to \$57.5 million in aggregate for the first two indications we develop. In addition, we are obligated to make clinical and regulatory milestone payments of up to \$15.0 million in the aggregate for each subsequent indication. In third quarter of 2020, we entered into an amendment to the MedImmune Agreement to establish a new coronavirus field and defer the payment of certain development and regulatory milestones as applied to the new coronavirus field. We are also obligated to make milestone payments to MedImmune of up to \$85.0 million upon the achievement of annual net sales thresholds of up to, but excluding, \$1.0 billion in annual net sales as well as additional milestone payments aggregating up to \$1.1 billion upon the achievement of additional specified annual net sales thresholds starting at \$1.0 billion and higher. Commencing on the first commercial sale of licensed products, we are obligated to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the low double-digit percentages and ending at twenty percent. We must pay such royalties on a product-by-product and

country-by-country basis until the latest to occur of the expiration of licensed patents, the expiration of regulatory exclusivity or the tenth anniversary of the first commercial sale of such product in such country.

Under our asset purchase agreement with Biogen, we are obligated to make future milestone payments of up to \$315.0 million upon the achievement of specified clinical and regulatory milestones as well as upon the achievement of annual net sales thresholds. We have also agreed to pay certain obligations under third-party contracts retained by Biogen that relate to vixarelimab. Additionally, we are obligated to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the high single-digit percentages and ending below the teens.

#### **Critical Accounting Policies and Significant Judgments and Estimates**

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

While our significant accounting policies are described in more detail in Note 2 to our consolidated financial statements included elsewhere in this Annual Report, 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 Expenses***

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advanced payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of these estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- vendors, including research laboratories, in connection with preclinical development activities;
- CROs and investigative sites in connection with preclinical studies and clinical trials;
- third parties in the connection with the achievement of milestones due under license acquisition and other similar agreements; and
- CMOs in connection with drug substance and drug product formulation and manufacturing of materials.

We base our expenses related to preclinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple research institutions and CROs that conduct and manage preclinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. Non-refundable prepayments determined to be used within one year for goods or services that will be used or rendered for future research and development activities are recorded as prepaid expenses.

Non-refundable prepayments or minimum balance requirements associated to clinical trials determined to not be used within one year are classified as other long-term assets. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or the amount of prepaid expenses accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

#### **Share-Based Compensation**

We measure all share-based awards granted to employees and directors based on their fair value on the date of the grant and recognize compensation expense for those awards over the requisite service period. Forfeitures are accounted for as they occur. We issue share-based awards with both service-based vesting conditions and performance-based vesting conditions. Expense for awards with service-based vesting is recorded using the straight-line method, and expense for awards with performance-based vesting conditions is recognized using the accelerated-attribution method.

For share-based awards granted to consultants and non-employees, compensation expense is recognized over the vesting period of the awards, which is generally the period during which services are rendered by such consultants and non-employees until completed.

We classified share-based compensation expense in the consolidated statements of operations and comprehensive loss in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

The fair value of each restricted share award was estimated on the date of grant based on the fair value of the Company's Class A common shares or Class B common shares on that same date.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected share price volatility, the expected term of the award, the risk-free interest rate, and expected dividends (see Note 9). Prior to May 2018, we were a private company and, accordingly, lacked company-specific historical and implied volatility information. Therefore, we estimate our expected share price volatility based on the historical volatility of publicly traded peer companies and expect to continue to do so until such time as we have adequate historical data regarding the volatility of our traded share price. The expected term of our share options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" share options. The expected term of share options granted to non-employees is equal to the contractual term of the share option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future.

The fair value of each restricted share unit award is based on the closing price of our Class A common shares on the date of grant. Restricted share unit awards with an associated performance condition are evaluated on a regular basis for probability of achievement, to determine the timing of recording share-based compensation expense to include in our consolidated statements of operations and comprehensive loss.

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

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

## **Recently Issued Accounting Pronouncements**

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our annual consolidated financial statements included elsewhere in this Annual Report.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

### ***Interest Rate Risk***

We are exposed to market risk related to changes in interest rates. As of December 31, 2020, our cash, cash equivalents and short-term investments consisted of money market funds and U.S. Treasury notes. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Further, the COVID-19 pandemic has adversely impacted the U.S. and global economy and financial markets, and any prolonged impact may have an impact on market interest rates. However, because of the short-term nature of the instruments in our portfolio, an immediate 10% change in market interest rates would not have a material impact on the fair market value of our investment portfolio or on our financial position or results of operations.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

The financial statements required to be filed pursuant to this Item 8 are appended to this report. An index of those financial statements is found in Item 15.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.**

None.

## **ITEM 9A. CONTROLS AND PROCEDURES.**

### ***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our Chief Executive Officer and Interim Chief Financial Officer, evaluated, as of the end of the period covered by this Annual Report, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on that evaluation, our Chief Executive Officer and Interim Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2020.

In designing and evaluating our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

### ***Management's Report on Internal Control over Financial Reporting for the Fiscal Year Ended December 31, 2020.***

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended.

Our management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, our management concluded that, as of December 31, 2020, our internal control over financial reporting was effective.

The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in Item 15 in this Annual Report on Form 10-K.

***Changes in Internal Control over Financial Reporting***

There was no change in our internal control over financial reporting, (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter of the year ended December 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

***Report of Independent Public Accounting Firm***

The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in Item 15 in this Annual Report on Form 10-K.

**ITEM 9B. OTHER INFORMATION.**

None

**PART III**

**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.**

Except to the extent provided below, the information required to be disclosed by this Item will be set forth in our proxy statement for our 2021 Annual Meeting to be filed with the SEC within 120 days of December 31, 2020, and is incorporated into this Annual Report by reference.

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, principal accounting officer and controller, or persons performing similar functions. Our code of business conduct and ethics is available in the "Investors & Media" section of our website at [www.kiniksa.com](http://www.kiniksa.com) under "Corporate Governance". We intend to post on our website all disclosures that are required by law or the Nasdaq rules concerning any amendments to, or waivers from, any provision of the code. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this Annual Report.

**ITEM 11. EXECUTIVE COMPENSATION.**

The information required to be disclosed by this Item will be set forth in our proxy statement for our 2021 Annual Meeting to be filed with the SEC within 120 days of December 31, 2020, and is incorporated into this Annual Report by reference.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS.**

The information required to be disclosed by this Item will be set forth in our proxy statement for our 2021 Annual Meeting to be filed with the SEC within 120 days of December 31, 2020, and is incorporated into this Annual Report by reference.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

The information required to be disclosed by this Item will be set forth in our proxy statement for our 2021 Annual Meeting to be filed with the SEC within 120 days of December 31, 2020, and is incorporated into this Annual Report by reference.

**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.**

The information required to be disclosed by this Item will be set forth in our proxy statement for our 2021 Annual Meeting to be filed with the SEC within 120 days of December 31, 2020, and is incorporated into this Annual Report by reference.

**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(a)(1) Financial Statements.

See the "Index to Consolidated Financial Statements" on page F-1 below for the list of financial statements filed as part of this report.

(a)(2) Financial Statement Schedules.

All schedules have been omitted because they are not required or because the required information is given in the Consolidated Financial Statements or Notes thereto set forth below beginning on page F-1.

(a)(3) Exhibits. See Exhibit Index.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<a href="#">Memorandum of Association of Kiniksa Pharmaceuticals, Ltd.</a>	S-1	333-224488	3.1	4/27/18	
3.2	<a href="#">Amended and Restated Bye-Laws of Kiniksa Pharmaceuticals, Ltd.</a>	8-K	001-38492	3.1	5/29/18	
4.1	<a href="#">Specimen Share Certificate evidencing the Class A common shares</a>	S-1/A	333-224488	4.1	5/14/18	
4.2	<a href="#">Second Amended and Restated Investors' Rights Agreement, dated as of February 9, 2018</a>	S-1	333-224488	4.2	4/27/18	
4.3	<a href="#">Description of Kiniksa Pharmaceuticals, Ltd. Securities</a>	10-K	001-38492	4.3	3/5/20	
10.1	<a href="#">Amended and Restated Employment Agreement, dated as of May 29, 2018, by and between Kiniksa Pharmaceuticals Corp. and Sanj K. Patel</a>	10-Q	001-38492	10.7	8/6/18	
10.2	<a href="#">Amended and Restated Employment Agreement, dated as of May 29, 2018, by and between Kiniksa Pharmaceuticals Corp. and Stephen Mahoney</a>	10-Q	001-38492	10.8	8/6/18	
10.3	<a href="#">Amended and Restated Employment Agreement, dated as of May 29, 2018, by and between Kiniksa Pharmaceuticals Corp. and John F. Paolini</a>	10-Q	001-38492	10.9	8/6/18	
10.4†	<a href="#">Asset Purchase Agreement, dated September 7, 2016, by and between the Registrant and Biogen MA Inc., as amended</a>	S-1	333-224488	10.6	4/27/18	
10.5†	<a href="#">License Agreement, dated September 25, 2017, by and between the Registrant and Regeneron Pharmaceuticals, Inc.</a>	S-1	333-224488	10.7	4/27/18	
10.6†	<a href="#">License Agreement, dated as of December 21, 2017, by and between the Registrant and MedImmune, Limited</a>	S-1	333-224488	10.8	4/27/18	
10.7†	<a href="#">Amendment No. 1 to the License Agreement, effective as of July 9, 2020, by and between Kiniksa Pharmaceuticals, Ltd. and MedImmune Limited</a>	8-K	001-38492	10.1	7/15/20	
10.8	<a href="#">Clinical Supply Agreement, dated as of September 27, 2017, by and between the Registrant and Regeneron Pharmaceuticals, Inc.</a>	S-1	333-224488	10.9	4/27/18	
10.9	<a href="#">Sublease Agreement, dated as of March 13, 2018, by and between Kiniksa Pharmaceuticals Corp. and Shire Human Genetic Therapies, Inc.</a>	S-1	333-224488	10.10	4/27/18	

10.10	<a href="#">First and Second Amendment to Sublease Agreement, dated as of June 26, 2018 and July 17, 2018, respectively, by and between Kiniksa Pharmaceuticals Corp. and Shire Human Genetic Therapies, Inc.</a>	10-Q	001-38492	10.10	8/6/18	
10.11	<a href="#">Third Amendment to Sublease Agreement, dated as of November 7, 2018, by and between Kiniksa Pharmaceuticals Corp. and Shire Human Genetic Therapies, Inc.</a>	8-K	001-38492	10.1	11/13/18	
10.12	<a href="#">Recognition and Attornment Agreement and Amendment of Sublease by and between Kiniksa Pharmaceuticals Corp. and 92 Hayden Avenue Trust dated as of November 6, 2020</a>	8-K	001-38492	10.1	11/10/20	
10.13	<a href="#">Form of Indemnification Agreement for Non-Fund-Designated Directors</a>	S-1	333-224488	10.11	4/27/18	
10.14	<a href="#">Form of Indemnification Agreement for Fund-Designated Directors</a>	S-1	333-224488	10.12	4/27/18	
10.15	<a href="#">Form of Indemnification Agreement for Officers</a>	S-1	333-224488	10.13	4/27/18	
10.16	<a href="#">2015 Equity Incentive Plan, as amended, and form of share option grant notice and option agreement thereunder</a>	S-1	333-224488	10.1	4/27/18	
10.17	<a href="#">2018 Incentive Award Plan, and the form of share option grant notice and option agreement, form of restricted share grant notice and restricted share agreement, and form of restricted share unit grant notice and restricted share unit agreement thereunder</a>	10-Q	001-38492	10.3	5/4/20	
10.18	<a href="#">2018 Incentive Award Plan; Sub-Plan for UK Employees, and the form of share option grant notice for UK participants</a>	S-1	333-229394	10.23	1/28/19	
10.19	<a href="#">Form of Restricted Share Unit Grant Notice and Restricted Share Unit Agreement Thereunder for UK Participants under the 2018 Incentive Award plan; Sub-Plan for UK Employees</a>	S-8	333-237589	99.3	4/7/20	
10.20	<a href="#">2018 Incentive Award Plan forms of share option grant notice and share option agreement for German participants, restricted share grant notice and restricted share agreement for German participants, and restricted share unit grant notice and restricted share unit agreement for German participants</a>	10-K	001-38492	10.27	3/12/19	
10.21	<a href="#">2018 Employee Share Purchase Plan</a>	S-1/A	333-224488	10.14	5/14/18	
10.22	<a href="#">Offering Document under the 2018 Employee Share Purchase Plan (effective July 1, 2019)</a>					*
10.23	<a href="#">Offering Document under the 2018 Employee Share Purchase Plan (effective January 1, 2021)</a>					*
10.24†	<a href="#">Kiniksa Pharmaceuticals, Ltd. Rilonacept Long-Term Incentive Plan</a>	8-K	001-38492	10.1	12/16/19	

10.25	<a href="#">Form of U.S. Performance Restricted Share Unit and Performance Cash Award Grant Notice and Agreement under the Rilonacept Long-Term Incentive Plan</a>	8-K	001-38492	10.2	12/16/19	
10.26	<a href="#">Form of U.S. Restricted Share Unit Grant Notice and Agreement under the Rilonacept Long-Term Incentive Plan</a>	8-K	001-38492	10.3	12/16/19	
10.27	<a href="#">Forms of Performance Restricted Share Unit and Performance Cash Award Grant Notice and Performance Restricted Share Unit and Performance Cash Award Agreement thereunder and Restricted Share Unit Grant Notice and Restricted Share Unit Agreement thereunder for UK participants and German participants under the Rilonacept Long-Term Incentive Plan</a>	S-8	333-237589	99.8	4/7/2020	
10.28	<a href="#">Non-Employee Director Compensation Program</a>	10-Q	001-38492	10.1	11/5/19	
10.29	<a href="#">Restricted Share Agreement, dated as of September 16, 2015, by and between the Registrant and Sanj K. Patel</a>	S-1	333-229394	10.25	1/28/19	
10.30	<a href="#">Restricted Share Agreement, dated as of September 18, 2015, by and between the Registrant and Stephen Mahoney</a>	S-1	333-229394	10.26	1/28/19	
10.31	<a href="#">Letter Agreement, dated November 13, 2019, between Kiniksa Pharmaceuticals, Ltd. and Stephen Mahoney</a>	10-K	001-38492	10.24	3/5/2020	
10.32	<a href="#">Employment agreement, dated August 20, 2018, by and between Kiniksa Pharmaceuticals Corp. and Qasim Rizvi</a>	10-K	001-38492	10.25	3/5/2020	
10.33	<a href="#">Amended and Restated Employment Agreement, dated as of May 29, 2018, by and between Kiniksa Pharmaceuticals Corp. and Thomas Beetham</a>					*
10.34	<a href="#">Restricted Share Agreement, dated as of September 18, 2015, by and between Kiniksa Pharmaceuticals, Ltd. and Thomas Beetham</a>					*
21.1	<a href="#">Subsidiaries of the Registrant</a>					*
23.1	<a href="#">Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm</a>					*
31.1	<a href="#">Rule 13a-14(a) / 15d-14(a) Certification of Chief Executive Officer</a>					*
31.2	<a href="#">Rule 13a-14(a) / 15d-14(a) Certification of Interim Chief Financial Officer</a>					*
32.1	<a href="#">Section 1350 Certification of Chief Executive Officer</a>					**
32.2	<a href="#">Section 1350 Certification of Interim Chief Financial Officer</a>					**
101.INS	Inline XBRL Instance Document					***
101.SCH	Inline XBRL Taxonomy Extension Schema Document					***

101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	***
101.DEF	Inline XBRL Extension Definition Linkbase Document	***
101.LAB	Inline XBRL Taxonomy Label Linkbase Document	***
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	***
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).	

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\* Filed herewith

\*\* Furnished herewith

\*\*\* Submitted electronically herewith

† Confidential treatments of certain provisions has been granted by the SEC pursuant to Rule 406 under the Securities Act of 1933, as amended

**ITEM 16. FORM 10-K SUMMARY**

None.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**KINIKA PHARMACEUTICALS, LTD.**

Date: February 25, 2021

By: /s/ Sanj K. Patel  
Sanj K. Patel  
Chief Executive Officer and Chairman of the Board of Directors

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Sanj K. Patel</u> Sanj K. Patel	Chief Executive Officer and Chairman of the Board of Directors (principal executive officer)	February 25, 2021
<u>/s/ Mark Ragosa</u> Mark Ragosa	Interim Chief Financial Officer (principal financial officer)	February 25, 2021
<u>/s/ Michael R. Megna</u> Michael R. Megna	VP, Finance and Chief Accounting Officer (principal accounting officer)	February 25, 2021
<u>/s/ Felix J. Baker</u> Felix J. Baker	Lead Independent Director	February 25, 2021
<u>/s/ Stephen R. Biggar</u> Stephen R. Biggar	Director	February 25, 2021
<u>/s/ G. Bradley Cole</u> G. Bradley Cole	Director	February 25, 2021
<u>/s/ Richard S. Levy</u> Richard S. Levy	Director	February 25, 2021
<u>/s/ Thomas R. Malley</u> Thomas R. Malley	Director	February 25, 2021
<u>/s/ Tracey L. McCain</u> Tracey L. McCain	Director	February 25, 2021
<u>/s/ Kimberly J. Popovits</u> Kimberly J. Popovits	Director	February 25, 2021
<u>/s/ Barry D. Quart</u> Barry D. Quart	Director	February 25, 2021

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Kiniksa Pharmaceuticals, Ltd.

### **Opinions on the Financial Statements and Internal Control over Financial Reporting**

We have audited the accompanying consolidated balance sheets of Kiniksa Pharmaceuticals, Ltd. and its subsidiaries (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations and comprehensive loss, of convertible preferred shares and shareholders' equity (deficit) and of cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

#### *Change in Accounting Principle*

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

#### **Basis for Opinions**

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Emphasis of Matter***

As discussed in Note 1 to the consolidated financial statements, the Company will require additional financing to fund future operations. Management's evaluation of the events and conditions and management's plans to mitigate this matter is also described in Note 1.

***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

***Critical Audit Matters***

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

***Accrued Research and Development Costs***

As described in Notes 2 and 6 to the consolidated financial statements, the Company has entered into various research and development contracts with companies both inside and outside of the United States. When billing terms under these contracts do not coincide with the timing of when the work is performed, management is required to make estimates of outstanding obligations to those third parties as of the end of the reporting period. Within accrued expenses, total accrued research and development expenses amounted to \$16.9 million as of December 31, 2020, which include accruals for these estimated research and development obligations. Accrual estimates are based on a number of factors, including management's assessment of progress towards completion of the research and development activities, invoicing to date under the contracts, communication from the research institution or other companies of any actual costs incurred during the period that have not yet been invoiced, and the costs included in the contracts. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period.

The principal considerations for our determination that performing procedures relating to accrued research and development costs is a critical audit matter are (i) the significant judgment by management in determining the accrued costs, which in turn led to (ii) significant auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence for these accrued costs and the factors related to management's assessment of progress towards completion of the research and development activities, invoicing to date under the contracts and communication from the research institution or other companies of any actual costs incurred during the period that have not yet been invoiced.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to accrued research and development costs, including controls over the review of contracts, accumulating information on actual costs incurred during the period, and assessment of progress towards completion of the research and development activities. These procedures also included, among others (i) testing management's process for estimating accrued research and development costs, (ii) evaluating the appropriateness of the methodology used by management to determine the estimate, (iii) evaluating the reasonableness of the factors related to management's assessment of progress towards completion of the research and development activities, invoicing to date under the contracts and communication from the research institution or other companies of any actual costs incurred during the period that have not yet been invoiced by testing specific tasks and the associated cost incurred for services the Company has not yet been invoiced for or otherwise notified of the actual cost at period end, and (iv) testing the completeness and accuracy of the data inputs to the estimate, including total costs included within executed contracts and actual billed expenses under these contracts.

/s/ PricewaterhouseCoopers LLP  
Boston, Massachusetts  
February 25, 2021

We have served as the Company's auditor since 2016.

**KINIKSA PHARMACEUTICALS, LTD.**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except share and per share amounts)

	December 31, 2020	December 31, 2019
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 114,038	\$ 46,928
Short-term investments	209,444	186,452
Restricted cash	210	—
Prepaid expenses and other current assets	9,557	8,247
Total current assets	333,249	241,627
Property and equipment, net	4,051	6,398
Operating lease right-of-use assets	6,566	1,927
Non-current restricted cash	—	210
Other long-term assets	5,588	—
Deferred tax assets	10	4,372
Total assets	\$ 349,464	\$ 254,534
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 503	\$ 5,693
Accrued expenses	29,199	20,415
Operating lease liabilities	2,107	1,697
Other current liabilities	37	25
Total current liabilities	31,846	27,830
Non-current liabilities:		
Non-current operating lease liabilities	4,878	955
Other long-term liabilities	805	326
Total liabilities	37,529	29,111
Commitments and contingencies (Note 13)		
Shareholders' equity:		
Class A common shares, par value of \$0.000273235 per share; 31,777,420 shares and 19,245,201 shares issued and outstanding as of December 31, 2020 and 2019, respectively	8	6
Class B common shares, par value of \$0.000273235 per share; 2,355,458 shares and 4,638,855 shares issued and outstanding as of December 31, 2020 and 2019, respectively	1	1
Class A1 common shares, \$0.000273235 par value; 18,024,526 shares and 14,995,954 issued and outstanding as of December 31, 2020 and 2019, respectively	5	4
Class B1 common shares, \$0.000273235 par value; 16,057,618 shares issued and outstanding as of December 31, 2020 and 2019	4	4
Additional paid-in capital	829,424	581,467
Accumulated other comprehensive income (loss)	(34)	33
Accumulated deficit	(517,473)	(356,092)
Total shareholders' equity	311,935	225,423
Total liabilities and shareholders' equity	\$ 349,464	\$ 254,534

The accompanying notes are an integral part of these consolidated financial statements.

**KINIKSA PHARMACEUTICALS, LTD.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**  
**(In thousands, except share and per share amounts)**

	Years Ended		
	2020	2019	2018
Operating expenses:			
Research and development	\$ 112,042	\$ 135,001	\$ 86,597
Selling, general and administrative	45,321	34,962	21,563
Total operating expenses	157,363	169,963	108,160
Loss from operations	(157,363)	(169,963)	(108,160)
Interest income	1,134	6,049	4,719
Loss before (provision) benefit for income taxes	(156,229)	(163,914)	(103,441)
(Provision) benefit for income taxes	(5,152)	2,047	214
Net loss	\$ (161,381)	\$ (161,867)	\$ (103,227)
Net loss per share attributable to common shareholders—basic and diluted	\$ (2.61)	\$ (2.99)	\$ (3.49)
Weighted average common shares outstanding—basic and diluted	61,842,722	54,049,477	29,547,427
Comprehensive loss:			
Net loss	\$ (161,381)	\$ (161,867)	\$ (103,227)
Other comprehensive income (loss):			
Unrealized gain (loss) on short-term investments and currency translation adjustments, net of tax	(67)	37	(4)
Total other comprehensive income (loss)	(67)	37	(4)
Total comprehensive loss	\$ (161,448)	\$ (161,830)	\$ (103,231)

The accompanying notes are an integral part of these consolidated financial statements.

**KINKSA PHARMACEUTICALS, LTD.**  
**CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED SHARES AND SHAREHOLDERS' EQUITY (DEFICIT)**  
(In thousands, except share amounts)

	Convertible Preferred Shares (Series A, B and C)		Common Shares (Class A, B, A1 and B1)		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
<b>Balances at December 31, 2017</b>	22,885,492	\$ 119,770	4,288,329	\$ 1	\$ 1,289	\$ —	\$ (90,998)	\$ (89,708)
Issuance of Series C convertible preferred shares, net of issuance costs of \$9,178	12,784,601	190,822	—	—	—	—	—	377
Conversion of convertible preferred shares to common shares	(35,670,093)	(310,592)	35,670,093	8	310,584	—	—	310,592
Issuance of Class A common shares upon completion of initial public offering, net of underwriting discounts and commissions and offering costs	—	—	9,484,202	4	155,532	—	—	155,536
Issuance of Class A common shares under incentive award plans and employee share purchase plan	—	—	47,023	—	377	—	—	377
Share-based compensation expense	—	—	—	—	5,701	—	—	5,701
Unrealized loss on short-term investments	—	—	—	—	—	(4)	—	(4)
Net loss	—	—	—	—	—	—	(103,227)	(103,227)
<b>Balances at December 31, 2018</b>	—	—	49,489,647	13	473,483	(4)	(194,225)	279,267
Issuance of Class A common shares upon completion of follow-on offering, inclusive of the over-allotment option exercise, net of underwriting discounts and commissions and offering costs	—	—	2,816,110	2	48,474	—	—	48,476
Issuance of Class A1 common shares upon completion of private placement, net of underwriting discounts and commissions and offering costs	—	—	2,000,000	—	34,511	—	—	34,511
Class A common shares issued or to be issued in connection with the acquisition of all issued and outstanding equity securities of Primatope Therapeutics, Inc.	—	—	337,008	—	7,000	—	—	7,000
Class A common shares issued or to be issued in connection with a milestone payment due to Primatope Therapeutics, Inc.	—	—	94,284	—	1,800	—	—	1,800
Issuance of Class A common shares under incentive award plans and employee share purchase plan	—	—	200,579	—	1,119	—	—	1,119
Share-based compensation expense	—	—	—	—	15,080	—	—	15,080
Unrealized gain on short-term investments and currency translation adjustments	—	—	—	—	—	37	—	37
Net loss	—	—	—	—	—	—	(161,867)	(161,867)
<b>Balances at December 31, 2019</b>	—	—	54,937,628	15	581,467	33	(356,092)	225,423
Issuance of Class A common shares upon completion of follow-on offerings, inclusive of the over-allotment option exercise, net of underwriting discounts and commissions and other offering costs	—	—	8,712,381	2	164,586	—	—	164,588
Issuance of Class A1 common shares upon completion of private placements, net of placement agent fees	—	—	3,028,572	1	55,944	—	—	55,945
Issuance of Class A common shares in connection with the release of escrow from the acquisition of all issued and outstanding equity securities of Primatope Therapeutics, Inc.	—	—	76,103	—	—	—	—	—
Issuance of Class A common shares under incentive award plans and employee share purchase plan	—	—	1,460,338	—	6,552	—	—	6,552
Share-based compensation expense	—	—	—	—	20,875	—	—	20,875
Unrealized loss on short-term investments and currency translation adjustments	—	—	—	—	—	(67)	—	(67)
Net loss	—	—	—	—	—	—	(161,381)	(161,381)
<b>Balances at December 31, 2020</b>	—	—	68,215,022	18	\$ 829,424	\$ (34)	\$ (517,473)	\$ 311,935

The accompanying notes are an integral part of these consolidated financial statements.

**KINIKSA PHARMACEUTICALS, LTD.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Years Ended December 31,		
	2020	2019	2018
<b>Cash flows from operating activities:</b>			
Net loss	\$ (161,381)	\$ (161,867)	\$ (103,227)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation expense	2,405	2,068	286
Share-based compensation expense	20,875	15,080	5,701
Class A common shares issued as consideration for Primatope, including milestone payments	—	8,800	—
Loss on disposal of property and equipment	—	21	66
Other	—	—	235
Non-cash lease expense	1,400	1,211	—
Amortization (accretion) of discounts on short-term investments	123	(3,501)	(1,423)
Deferred income taxes	4,361	(3,156)	(978)
Changes in operating assets and liabilities:			
Prepaid expenses and other short-term assets	(1,334)	(1,020)	(4,791)
Other long-term assets	(5,588)	—	—
Accounts payable	(4,969)	(4,705)	8,823
Accrued expenses and other short-term liabilities	8,797	4,638	9,296
Accrued milestones	—	(15,000)	5,000
Operating lease liabilities	(1,699)	(1,264)	—
Other long-term liabilities	478	326	—
Net cash used in operating activities	<u>(136,532)</u>	<u>(158,369)</u>	<u>(81,012)</u>
<b>Cash flows from investing activities:</b>			
Purchases of property and equipment	(283)	(3,203)	(5,290)
Purchases of short-term investments	(430,211)	(488,773)	(402,008)
Proceeds from the maturities of short-term investments	407,050	541,190	168,100
Net cash provided by (used in) investing activities	<u>(23,444)</u>	<u>49,214</u>	<u>(239,198)</u>
<b>Cash flows from financing activities:</b>			
Proceeds from issuance of Series C convertible preferred shares, net of issuance costs	—	—	190,822
Proceeds from issuance of Class A common shares upon completion of initial public offering, net of underwriting discounts and commissions, inclusive of the over-allotment option exercise	—	—	159,194
Proceeds from issuance of Class A common shares from follow-on offerings, net of underwriting discounts and commissions, inclusive of the over-allotment option exercise	165,725	48,595	—
Proceeds from issuance of Class A1 common shares from private placements, net of placement agent fees	55,944	34,511	—
Payments of offering costs	(1,136)	(118)	(3,657)
Proceeds from issuance of Class A common shares under incentive award plans and employee share purchase plan	6,553	1,119	377
Net cash provided by financing activities	<u>227,086</u>	<u>84,107</u>	<u>346,736</u>
<b>Net increase (decrease) in cash, cash equivalents and restricted cash</b>	<b>67,110</b>	<b>(25,048)</b>	<b>26,526</b>
Cash, cash equivalents and restricted cash at beginning of period	47,138	72,186	45,660
Cash, cash equivalents and restricted cash at end of period	<u>\$ 114,248</u>	<u>\$ 47,138</u>	<u>\$ 72,186</u>
<b>Supplemental information:</b>			
Cash paid for income taxes	\$ 482	1,724	\$ 383
<b>Supplemental disclosure of non-cash investing and financing activities:</b>			
Right-of-use asset obtained in exchange for operating lease obligation	\$ 6,039	\$ —	\$ —
Deferred offering costs included in accrued expenses and accounts payable	\$ —	\$ —	\$ 404
Property and equipment included in accrued expenses and accounts payable	\$ —	\$ 222	\$ 1,292

The accompanying notes are an integral part of these consolidated financial statements.

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(Amounts in thousands, except share and per share amounts)**

**1. Nature of the Business and Basis of Presentation**

Kiniksa Pharmaceuticals, Ltd. (the “Company”) is a biopharmaceutical company focused on discovering, acquiring, developing and commercializing therapeutic medicines for patients suffering from debilitating diseases with significant unmet medical need. The Company was incorporated in July 2015 as a Bermuda exempted company. The Company’s pipeline of product candidates are designed to modulate immunological signaling pathways that are implicated across a spectrum of diseases.

The Company is subject to risks and uncertainties common to early-stage companies in the biopharmaceutical industry and global health, societal, economic and market conditions, including from the impact from the coronavirus disease 2019 (“COVID-19”) pandemic. There can be no assurance that the Company’s research and development will be successfully completed, that adequate protection for the Company’s technology will be obtained, that any products developed will obtain necessary government regulatory approval or that any products, if approved, will be commercially viable. For example, while the U.S. Food and Drug Administration (the “FDA”), accepted the supplemental Biologics License Application (“sBLA”) for rilonacept in recurrent pericarditis with priority review and assigned a Prescription Drug User Fee Act (“PDUFA”) goal date of March 21, 2021, the Company has not yet demonstrated its ability to obtain regulatory approvals. The Company does not currently generate revenue from sales of any products, and it may never be able to develop or commercialize a marketable product. Upon approval from the FDA, if any, of rilonacept for recurrent pericarditis, the Company will assume the sales and distribution of rilonacept for the approved indications for the treatment of cryopyrin-associated periodic syndrome (“CAPS”), specifically familial cold autoinflammatory syndrome and muckle-wells syndrome, and for the treatment of deficiency of IL-1 receptor antagonist (“DIRA”) in the United States and would evenly split profits on sales with Regeneron, after deducting certain commercialization expenses subject to specified limits. The Company has never obtained any regulatory approvals, manufactured a commercial-scale drug, or conducted sales and marketing activities. The Company operates in an environment of rapid technological innovation and substantial competition from pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees, consultants and other third parties, including contract research organizations (“CROs”), and contract manufacturing organizations (“CMOs”). Even if the Company’s product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

***Risk and Uncertainties Related to COVID-19***

In addition to risks and uncertainties common to the Company’s industry, the Company is subject to global societal, healthcare, economic and market conditions, including from the impact of the COVID-19 pandemic and measures taken in response to the pandemic or the easing of such measures, which continue to evolve. In December 2019, COVID-19 surfaced in Wuhan, China. The virus spread globally, and was declared a pandemic by the World Health Organization. The impact of this pandemic has been and will likely continue to be extensive on many aspects of society, which has resulted in and will likely continue to result in significant disruptions to healthcare systems, the global economy, as well as businesses and capital markets around the world.

In an effort to halt the spread of the COVID-19 pandemic, federal and state governments in the United States and the governments of other countries around the globe have implemented various measures in response to the pandemic, including significant restrictions on businesses and travel as well as social-distancing measures and the easing of such measures. In response to the COVID-19 pandemic and measures introduced by federal and state governments in the United States, the Company implemented workplace protocols in the jurisdictions where it has facilities. While the majority of the Company’s employees are able to carry out their responsibilities working outside of the Company’s physical locations, for the Company’s essential workers and those choosing to return to the Company’s offices to carry out their responsibilities, the Company implemented additional safety measures, including occupancy limits, restricting business travel, providing and requiring the use of personal protective equipment, self-screening prior to accessing the Company’s facilities, among other things. As these measures implemented by federal and state governments in the

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
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United States in response to the pandemic continue to evolve, the Company continues to monitor the developments, restrictions and requirements in jurisdictions where it has offices, and plans to update the protocols for its offices as applicable.

The COVID-19 pandemic, and measures undertaken in response to the pandemic, or the easing of any of such measures, may cause significant disruptions in the Company's business or operations as well as in the business and operations of the Company's CMOs, CROs and other third parties with whom the Company conducts business or otherwise engages now or in the future, including as a result of staffing shortages or reprioritizations, production slowdowns or stoppages, and disruptions in delivery systems. The COVID-19 pandemic may also adversely impact the Company's preclinical studies and clinical trials, which could impede, delay, limit or prevent the clinical development of the Company's product candidates and ultimately lead to the delay or denial of regulatory approval of its product candidates, which would materially adversely affect the Company's business and operations, including its ability to generate revenue. Moreover, the COVID-19 pandemic is impacting the global economy, and the U.S. economy in particular, with the potential for the economic downturn to be severe and prolonged. A severe or prolonged economic downturn could result in continued disruptions in the financial markets, which could adversely impact the Company's ability to raise additional capital when needed or on acceptable terms, if at all.

While the Company continuously looks to identify business-critical activities and to develop contingencies and mitigation strategies for those activities to potentially minimize the impact of the COVID-19 pandemic on its business and operations, there can be no assurance that it will be able to identify all such activities or that any identified contingencies and mitigation strategies will be effective. Further, the COVID-19 pandemic, and measures undertaken in response to the pandemic continue to rapidly evolve. There is uncertainty relating to the potential effect of the pandemic on the Company's business and operations. The extent of the impact on the Company's business and operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate spread of the disease, duration of the pandemic, business and travel restrictions and social distancing measures, and the effectiveness of these and other actions taken to contain and treat the disease as well as the impact of the easing of any such restrictions, measures and actions.

***Principles of Consolidation***

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Company and its wholly owned subsidiaries, Kiniksa Pharmaceuticals Corp. ("Kiniksa US"), Primatope Therapeutics, Inc. ("Primatope") and Kiniksa Pharmaceuticals (UK), Ltd. ("Kiniksa UK") as well as the subsidiaries of Kiniksa UK, Kiniksa Pharmaceuticals (Germany) GmbH ("Kiniksa Germany"), Kiniksa Pharmaceuticals (France) SARL ("Kiniksa France"), and Kiniksa Pharmaceuticals GmbH ("Kiniksa Switzerland"), after elimination of all significant intercompany accounts and transactions.

In assessing the consolidation requirement for variable interest entities ("VIE"s), the Company focuses on identifying whether it has both the power to direct the activities that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits from the VIE. In the event that the Company is the primary beneficiary of a VIE, the assets, liabilities, and results of operations of the VIE would be included in the Company's consolidated financial statements. At December 31, 2020 and 2019 and during the years then ended, the Company was not the primary beneficiary of a VIE.

***Use of Estimates***

The preparation of the Company's consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
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expenses during the reporting period. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the accrual for research and development expenses and the valuation of share-based awards. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

***Reporting and Functional Currency***

The financial results of the Company's global activities are reported in U.S. dollars ("USD") and its foreign subsidiaries generally utilize their respective local currency to be their functional currency.

Transactions in other currencies are recorded in the functional currency at the rate of exchange prevailing when the transactions occur. Monetary assets and liabilities denominated in other currencies are re-measured into the functional currency at the rate of exchange in effect at the balance sheet date. Exchange rate gains and losses arising from re-measurement of foreign currency-denominated monetary assets and liabilities are included in income or losses in the period in which they occur.

For the Company's foreign subsidiaries where the local currency is the functional currency, assets and liabilities denominated in local currencies are translated into USD at end-of-period exchange rates and the resulting translation adjustments are reported as a component of accumulated other comprehensive gain (loss) within shareholders' equity (deficit).

***Reverse Share Split***

On May 11, 2018, the Company effected a 1-for-2.73235 reverse share split of its authorized, designated, issued and outstanding common shares and preferred shares. Accordingly, all share and per share amounts for all periods presented in the accompanying consolidated financial statements and notes thereto have been adjusted retroactively, where applicable, to reflect this reverse share split.

***Initial Public Offering***

On May 23, 2018, the Company's registration statement on Form S-1 relating to its initial public offering of its Class A common shares (the "IPO") was declared effective by the Securities and Exchange Commission ("SEC"). On May 29, 2018, the Company completed the IPO of 8,477,777 Class A common shares at \$18.00 per share for gross proceeds of \$152,600. In addition, on June 22, 2018, the Company completed the sale of 1,006,425 Class A common shares to the underwriters of the IPO following the exercise of their over-allotment option to purchase additional shares at \$18.00 per share for gross proceeds of \$18,116. The aggregate net proceeds to the Company from the IPO, inclusive of the over-allotment option exercise, was \$155,536 after deducting underwriting discounts and commissions and other offering costs.

Upon the closing of the IPO, all convertible preferred shares then outstanding automatically converted into 5,546,019 Class A common shares, 1,070,502 Class B common shares, 12,995,954 Class A1 common shares and 16,057,618 Class B1 common shares. In connection with the closing of the IPO, the Company amended and restated its bye-laws (the "Amended & Restated Bye-Laws").

***Follow-on Offerings and Private Placements***

On February 4, 2019, the Company completed a follow-on offering of 2,654,984 Class A common shares at a public offering price of \$18.26 and a concurrent private placement of 2,000,000 Class A1 common shares at an offering price of \$18.26 per share for aggregate gross proceeds of \$85,000. In addition, on March 1, 2019, the Company

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
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completed the sale of 161,126 Class A common shares to the underwriters of the follow-on offering following the exercise in part of their over-allotment option to purchase additional shares at a public offering price of \$18.26 per share for gross proceeds of \$2,942. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement, inclusive of the over-allotment option exercise, was \$82,988 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On May 18, 2020, the Company completed a follow-on offering of 2,760,000 Class A common shares, inclusive of the exercise of the underwriters' overallotment option at a public offering price of \$18.25 and a concurrent private placement of 1,600,000 Class A1 common shares at an offering price of \$18.25 per share for aggregate gross proceeds of \$79,570. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement, inclusive of the over-allotment option exercise, was \$74,495 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On July 24, 2020, the Company completed a follow-on offering of 5,952,381 Class A common shares, at a public offering price of \$21.00 and a concurrent private placement of 1,428,572 Class A1 common shares at an offering price of \$21.00 per share for aggregate gross proceeds of \$155,000. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement was \$146,037 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

***Liquidity***

In accordance with Accounting Standards Update ("ASU") 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40), the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the consolidated financial statements are issued. As of December 31, 2020, the Company had an accumulated deficit of \$517,473. During the year ended December 31, 2020, the Company incurred a net loss of \$161,381 and used \$136,532 of cash in operating activities. The Company expects to continue to generate operating losses and cash used in operations for the foreseeable future. As of December 31, 2020, the Company had cash, cash equivalents and short-term investments of \$323,482.

Based on its current operating plan, the Company expects that its cash, cash equivalents and short-term investments will be sufficient to fund its operating expenses and capital expenditure requirements for at least twelve months from the issuance date of these consolidated financial statements. The future viability of the Company beyond that point is dependent on its ability to raise additional capital to finance its operations. The Company will need to finance its operations through public or private securities offerings, debt financings, government funding or grants, or other sources, which may include licensing, collaborations or other strategic transactions or arrangements. Although the Company has been successful in raising capital in the past, there is no assurance that it will be successful in obtaining such additional financing on terms acceptable to the Company, if at all. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate some or all of its research and development programs for product candidates, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects, or the Company may be unable to continue operations.

**2. Summary of Significant Accounting Policies**

***Cash and Cash Equivalents***

The Company classifies deposits in banks, money market funds and cash invested temporarily in various instruments with maturities of three months or less at the time of purchase as cash and cash equivalents. At December 31, 2020 and 2019, cash and cash equivalents consisted principally of U.S. Treasury notes, amounts held in money market accounts and cash on deposit at commercial banks.

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
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**Short-Term Investments**

The Company generally invests its excess cash in money market funds and short-term investments in U.S. Treasury notes. Such investments which are included in short-term investments on the Company's consolidated balance sheets are considered available-for-sale debt securities and are reported at fair value with unrealized gains and losses included as a component of shareholders' equity (deficit). Realized gains and losses, if any, on short-term investments are included in interest income.

The Company evaluates its short-term investments with unrealized losses for other-than-temporary impairment. When assessing short-term investments for other-than-temporary declines in value, the Company considers such factors as, among other things, how significant the decline in value is as a percentage of the original cost, the Company's ability and intent to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value and market conditions in general. If any adjustment to fair value reflects a decline in the value of the investment that the Company considers to be "other than temporary," the Company reduces the investment to fair value through a charge to the consolidated statement of operations and comprehensive loss. No such adjustments were necessary during the periods presented.

**Concentrations of Credit Risk**

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash, cash equivalents and short-term investments. At December 31, 2020 and 2019, substantially all of the Company's cash, cash equivalents and short-term investments were held at two financial institutions. The Company generally maintains balances in various operating accounts at financial institutions that management believes to be of high credit quality, in amounts that may exceed federally insured limits. The Company has not experienced any losses related to its cash, cash equivalents and short-term investments and does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

**Restricted Cash**

In conjunction with the Company's lease agreement entered into in March 2018, the Company maintains a letter of credit for the benefit of the landlord. A letter of credit to secure the lease is not required under the 2020 Agreement (see Note 5). As of December 31, 2020 and 2019, the underlying cash balance of \$210 securing this letter of credit, was classified as current and non-current, respectively, in its consolidated balance sheet.

**Property and Equipment**

Property and equipment are recorded at cost and depreciated over the estimated useful lives of the related assets using the straight-line method. Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the cost of these assets and related accumulated depreciation or amortization are eliminated from the consolidated balance sheet and any resulting gains or losses are included in the consolidated statement of operations and comprehensive loss in the period of disposal. The expected useful lives of the respective assets are as follows:

	<u>Estimated Useful Life</u>
Computer hardware and software	3 - 5 years
Laboratory equipment	5 years
Furniture, fixtures and vehicles	5 - 7 years
Leasehold improvements	Shorter of estimated useful life or lease term

**KINIKSA PHARMACEUTICALS, LTD.**  
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***Impairment of Long-Lived Assets***

Long-lived assets consist of property and equipment. Long-lived assets to be held and used are tested for recoverability whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset group for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset group to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset group are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset group over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

***Inventory***

Prior to the regulatory approval of the Company's product candidates, the Company incurs expenses for the manufacture of drug product that could potentially be available to support the commercial launch of those products. Until the date at which regulatory approval has been received or is otherwise considered probable, the Company records all such costs as research and development expenses. There were no capitalized inventory costs recorded as of December 31, 2020 and 2019.

***Deferred Offering Costs***

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded as a reduction to the carrying value of convertible preferred shares or in shareholders' equity (deficit) as a reduction of additional paid-in capital generated as a result of the offering. Should an in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the consolidated statements of operations and comprehensive loss. There were no deferred offering costs recorded as of December 31, 2020 and 2019.

***Fair Value Measurements***

Certain assets and liabilities of the Company are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.

**KINIKSA PHARMACEUTICALS, LTD.**  
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- Level 3—Unobservable inputs that are supported by little or no market activity that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's restricted cash, which is held in a money market fund, is carried at fair value, determined based on Level 1 inputs in the fair value hierarchy described above (see Note 3). The Company's cash equivalents and short-term investments, consisting of money market accounts and U.S. Treasury notes, are carried at fair value, determined based on Level 1 and 2 inputs in the fair value hierarchy described above (see Note 3). The carrying values of the Company's prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities.

**Leases**

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), which set forth the principles for recognition, measurement, presentation and disclosure of lease arrangements to enhance the transparency and comparability of financial reporting related to the arrangements. ASU 2016-02, including subsequently issued amendments, is collectively referred to as Accounting Standards Codification, *Leases (Topic 842)* ("ASC 842"). The Company adopted the new standard on January 1, 2019 using the modified retrospective transition approach as applied to leases existing as of the adoption date. The standard will be applied to all leases entered into after the initial adoption date.

At the inception of an arrangement, the Company determines whether the arrangement is or contains a "lease" as defined by ASC 842. A lease is an arrangement, or part of an arrangement, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration. The Company determines if the arrangement conveys the right to control the use of an identified asset for a period of time. It assesses throughout the period of use whether the Company has both of the following (1) the right to obtain substantially all of the economic benefits from use of the identified asset and (2) the right to direct the use of the identified asset. This determination is reassessed if the terms of the arrangement are changed. Leases are classified as operating or finance leases based on the terms of the lease agreement and certain characteristics of the identified asset. Right-of-use ("ROU") assets and lease liabilities are recognized at lease commencement date based on the present value of the minimum future lease payments.

Most leases with a term greater than one year are recognized on the balance sheet as ROU assets with corresponding lease liabilities and, if applicable, long-term lease liabilities. The Company has elected not to recognize leases with a term of one year or less on its balance sheet. Operating leases, ROU assets and their corresponding lease liabilities are recorded based on the present value of lease payments over the expected remaining lease term. However, certain adjustments to the ROU assets may be required for items such as incentives received. The interest rate implicit in lease arrangements is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment.

In accordance with the guidance in ASU 2016-02, components of a lease should be split into three categories: lease components (e.g., land, building, etc.), non-lease components (e.g., common area maintenance, consumables, etc.), and non-components (e.g., property taxes, insurance, etc.); then the fixed and in-substance fixed contract consideration (including any related to non-components) must be allocated based on fair values to the lease components and non-lease components.

Although separation of lease and non-lease components is required, certain practical expedients are available. Companies may elect the practical expedient to not separate lease and non-lease components. In which case, the Company would account for each lease component and the related non-lease component together as a single component.

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
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The Company has elected to account for the lease and non-lease components of each of its operating leases as a single lease component and allocate all of the arrangement consideration to the lease component only. The lease component results in an operating right-of-use asset being recorded on the balance sheet and amortized on a straight-line basis as lease expense.

Upon the adoption of ASC 842, the Company recorded operating lease right-of-use assets of \$3,682 and operating lease liabilities of \$3,917 for its leases which were in effect and had commenced prior to January 1, 2019 and had original lease terms of more than 12 months.

***Segment Information***

The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is on developing and delivering therapeutic medicines for patients suffering from debilitating diseases with significant unmet medical need.

***Research and Development Costs***

Research and development costs are expensed as incurred. Research and development expenses consist of costs incurred to discover, research and develop drug candidates, including personnel expenses, share-based compensation expense, allocated facility-related and depreciation expenses, third-party license fees and external costs of outside vendors engaged to conduct preclinical and clinical development activities and clinical trials as well as to manufacture clinical trial materials. Non-refundable prepayments determined to be used within one year for goods or services that will be used or rendered for future research and development activities are recorded as prepaid expenses. Non-refundable prepayments or minimum balance requirements associated to clinical trials determined to not be used within one year are classified as other long term assets. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered, or the services rendered. Milestone and other payments made to third parties with respect to in-process research and development, in accordance with the Company's license, acquisition and other similar agreements are expensed when determined to be probable and estimable.

***Research Contract Costs and Accruals***

The Company has entered into various research and development-related contracts with companies both inside and outside of the United States. The related costs are recorded as research and development expenses as incurred. The Company records accruals for estimated ongoing research and development costs. When billing terms under these contracts do not coincide with the timing of when the work is performed, the Company is required to make estimates of outstanding obligations to those third parties as of the end of the reporting period. Any accrual estimates are based on a number of factors, including the Company's knowledge of the progress towards completion of the research and development activities, invoicing to date under the contracts, communication from the research institution or other companies of any actual costs incurred during the period that have not yet been invoiced, and the costs included in the contracts. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ materially from the Company's estimates. The Company's historical accrual estimates have not been materially different from the actual costs.

***Patent Costs***

The Company charges patent-related costs in connection with filing and prosecuting patent applications to operations as incurred as their realization is uncertain. These costs are classified as selling, general and administrative expenses.

**KINIKSA PHARMACEUTICALS, LTD.**  
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***Share-Based Compensation***

The Company measures all share-based awards granted to employees and directors based on their fair value on the date of grant. The Company issues share-based awards with both service-based vesting conditions and performance-based vesting conditions. The Company recognizes compensation expense for awards with service conditions on a straight-line basis over the requisite service period. For awards with performance conditions, the Company recognizes compensation expense when the achievement of the performance milestone is probable and estimable through the vest date.

For share-based awards granted to consultants and non-employees, compensation expense is recognized over the vesting period of the awards, which is generally the period during which services are rendered by such consultants and non-employees until completed.

The Company classifies share-based compensation expense in its consolidated statements of operations and comprehensive loss in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected share price volatility, the expected term of the award, the risk-free interest rate, and expected dividends (see Note 9). Prior to May 2018, the Company was a private company and, accordingly, lacks company-specific historical and implied volatility information for its shares. Therefore, it estimates its expected share price volatility based on the historical volatility of publicly traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded share price. The expected term of the Company's options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends on common shares and does not expect to pay any cash dividends in the foreseeable future.

The fair value of each restricted share unit award is based on the closing price of the Company's Class A common shares on the date of grant. Restricted share unit awards with an associated performance condition are evaluated on a regular basis for probability of achievement to determine the timing of recording share-based compensation expense in the Company's consolidated statements of operations and comprehensive loss.

***Comprehensive Loss***

Comprehensive loss includes net loss as well as other changes in shareholders' equity (deficit) that result from transactions and economic events other than those with shareholders. For the years ended December 31, 2020, 2019 and 2018 the Company's other comprehensive loss was comprised of unrealized gain (loss) on short-term investments and currency translation adjustments, net of tax.

***Income Taxes***

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements or in the Company's tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the (provision) benefit for income taxes. The Company assesses the likelihood that its deferred tax assets will

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be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

As an exempted company incorporated under the laws of Bermuda, the Company is principally subject to taxation in Bermuda. Under the current laws of Bermuda, tax on a company's income is assessed at a zero percent tax rate. As a result, the Company has not recorded any income tax benefits from losses incurred in Bermuda during each reporting period, and no net operating loss carryforwards will be available to the Company for those losses. The Company's wholly owned U.S. subsidiaries, Kiniksa US and Primatope, are subject to federal and state income taxes in the United States. The Company's wholly owned subsidiary Kiniksa UK, and its wholly owned subsidiaries, Kiniksa Germany, Kiniksa France, and Kiniksa Switzerland, are subject to taxation in their respective countries. Certain of the Company's subsidiaries, primarily Kiniksa US, operate under cost-plus arrangements.

The Company's U.S. provision for income taxes relates to current tax expense associated with the taxable income in the United States of its wholly owned subsidiary, Kiniksa US, as well as the recognition of a valuation allowance. The current income tax expense is a result of the taxable income earned by Kiniksa US under its cost-plus arrangement offset in part by tax benefits from the U.S. federal and state research and development credits. The Company has recorded an immaterial foreign provision for income taxes related to income in non-U.S. subsidiaries.

The Company accounts for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the consolidated financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties. In 2020, the Company recognized an uncertain tax position related to research and development credits (see Note 11).

***Net Loss per Share***

The Company follows the two-class method when computing net loss per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net loss per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common shareholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net loss per share attributable to common shareholders is computed by dividing the net loss attributable to common shareholders by the weighted average number of common shares outstanding for the period. Diluted net loss attributable to common shareholders is computed by adjusting net loss attributable to common shareholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net loss per share attributable to common shareholders is computed by dividing the diluted net loss attributable to common shareholders by the weighted average number of common shares outstanding for the period, including potential dilutive common shares. For purpose of this calculation, outstanding share options, unvested restricted common shares and unvested restricted share units are considered potential dilutive common shares.

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***Recently Adopted Accounting Pronouncements***

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments: Credit Losses (Topic 326)*, as clarified in ASU 2019-04 and ASU 2019-05. The objective of the standard is to provide information about expected credit losses on financial instruments at each reporting date and to change how other-than-temporary impairments on investment securities are recorded. The standard became effective for the Company beginning on January 1, 2020. The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40)* (“ASU 2018-15”), which amends ASC 350-40 to address a customer's accounting for implementation costs incurred in a cloud computing arrangement (“CCA”) that is a service contract. ASU 2018-15 aligns the accounting for costs incurred to implement a CCA that is a service contract with the guidance on capitalizing costs associated with developing or obtaining internal-use software. Specifically, the ASU amends ASC 350 to include in its scope implementation costs of a CCA that is a service contract and clarifies that a customer should apply ASC 350-40 to determine which implementation costs should be capitalized in a CCA that is considered a service contract. The standard became effective for the Company beginning on January 1, 2020. The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

***Recently Issued Accounting Pronouncements***

In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes (Topic 740)* (“ASU 2019-12”). The objective of the standard is to improve areas of GAAP by removing certain exceptions permitted by ASC Topic 740 Income Taxes and clarifying existing guidance to facilitate consistent application. The standard became effective for the Company beginning on January 1, 2021. The Company is currently evaluating the new standard to determine the potential impact of ASU 2019-12 on its consolidated financial statements and related disclosures. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

**3. Fair Value of Financial Assets and Liabilities**

The following tables present information about the Company's financial instruments measured at fair value on a recurring basis and indicate the level of the fair value hierarchy used to determine such fair values:

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	Fair Value Measurements as of December 31, 2020 Using:			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Restricted cash — money market funds	\$ 210	\$ —	\$ —	\$ 210
Cash equivalents — money market funds	22,942	—	—	22,942
Cash equivalents — U.S. Treasury notes	—	72,695	—	72,695
Short-term investments — U.S. Treasury notes	—	209,444	—	209,444
	<u>\$ 23,152</u>	<u>\$ 282,139</u>	<u>\$ —</u>	<u>\$ 305,291</u>

	Fair Value Measurements as of December 31, 2019 Using:			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Restricted cash — money market funds	\$ 210	\$ —	\$ —	\$ 210
Cash equivalents — money market funds	25,207	—	—	25,207
Cash equivalents — U.S. Treasury notes	—	10,192	—	10,192
Short-term investments — U.S. Treasury notes	—	186,452	—	186,452
	<u>\$ 25,417</u>	<u>\$ 196,644</u>	<u>\$ —</u>	<u>\$ 222,061</u>

During the years ended December 31, 2020 and 2019 there were no transfers between Level 1, Level 2 and Level 3. The money market funds were valued using quoted prices in active markets, which represent a Level 1 measurement in the fair value hierarchy. The Company's cash equivalents and short-term investments as of December 31, 2020 and 2019 included U.S. Treasury notes, which are not traded on a daily basis and, therefore, represent a Level 2 measurement in the fair value hierarchy at each period end.

Cash equivalents and short-term investments as of December 31, 2020 and 2019 consisted of U.S. Treasury notes which investments were each due within six months of such date.

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>December 31, 2020</b>				
Cash equivalents — U.S. Treasury notes	\$ 72,694	\$ 1	\$ —	\$ 72,695
Short-term investments — U.S. Treasury notes	209,459	4	(19)	209,444
	<u>\$ 282,153</u>	<u>\$ 5</u>	<u>\$ (19)</u>	<u>\$ 282,139</u>
<b>December 31, 2019</b>				
Cash equivalents — U.S. Treasury notes	\$ 10,191	\$ 1	\$ —	\$ 10,192
Short-term investments — U.S. Treasury notes	186,415	44	(7)	186,452
	<u>\$ 196,606</u>	<u>\$ 45</u>	<u>\$ (7)</u>	<u>\$ 196,644</u>

As of December 31, 2020, the Company held 17 securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position was \$107,753 at December 31, 2020. As of December 31, 2019, the Company held seven securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position was \$43,107 at December 31, 2019. As of both December 31, 2020 and 2019, these securities were held by the Company in an unrealized loss position for

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less than 12 months. The Company determined that there was no material change in the credit risk of these securities. As a result, the Company determined it did not hold any investments with an other-than-temporary impairment as of December 31, 2020 and 2019.

**4. Property and Equipment, Net**

Property and equipment, net consisted of the following:

	December 31, 2020	December 31, 2019
Furniture, fixtures and vehicles	\$ 62	\$ 47
Computer hardware and software	349	344
Leasehold improvements	3,667	3,627
Lab equipment	4,602	4,685
Construction in progress	101	20
Total property and equipment	8,781	8,723
Less: Accumulated depreciation	(4,730)	(2,325)
Total property and equipment, net	\$ 4,051	\$ 6,398

As of December 31, 2020, construction in progress is primarily comprised of leasehold improvements which the Company anticipates will be placed into service in 2021.

Depreciation expense for the years ended December 31, 2020, 2019 and 2018 was \$2,405, \$2,068 and \$286, respectively.

**5. Leases**

Kiniksa US leases office and laboratory space under operating leases. Leases with an initial term of 12 months or less are not recorded on the balance sheet; the Company recognizes lease expense for these leases on a straight-line basis over the lease term. For lease agreements entered into or reassessed after the Company's adoption of ASC 842, the Company will combine lease and non-lease components. Kiniksa US's leases have remaining lease terms of less than 2 years.

On March 13, 2018, Kiniksa US entered into an operating lease in Lexington, Massachusetts for office and laboratory space that comprises the headquarters for Kiniksa US and on June 26, 2018, Kiniksa US entered into an amendment to the lease expanding the rentable space to a total of 27,244 square feet. On November 7, 2018, Kiniksa US entered into an amendment (the "Third Amendment") to the lease expanding the rentable space to a total of 55,924 square feet which were occupied in phases through December 2019. On November 6, 2020, Kiniksa US entered into an amendment (the "Fourth Amendment") to extend the term of the sublease by one month to August 31, 2021 and entered into a Recognition and Attornment Agreement and Amendment of Sublease (the "2020 Agreement") directly with the prime landlord to continue to lease the space upon the expiration of the Fourth Amendment through August 31, 2023. Monthly lease payments include base rent, as well as, ancillary charges such as the share of operating expenses and real estate taxes. Base rent under the Third Amendment and Fourth Amendments were \$139 per month and increased to \$153 per month in November 2020 with subsequent increases to \$233 per month in September 2021 and \$240 per month in September 2022 through the end of the lease. Further, a letter of credit to secure the lease is not required under the 2020 Agreement.

On December 21, 2018, Kiniksa US entered into an operating lease in San Diego, California for office space comprising a total of 4,400 square feet. The lease commenced on January 1, 2019 and expires on January 31, 2021. On July 17, 2020, Kiniksa US entered into an amendment to extend the lease through January 31, 2022. Monthly lease

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payments for base rent are \$13 and increase to \$14 in February 2021 in accordance with the extension. Additional fees for ancillary charges such as the share of operating expenses, parking and real estate taxes are not included in the base rent.

On December 1, 2020, Kiniksa UK entered into an operating lease in London, UK for office space comprising a total of 164 square meters. The lease commenced on December 1, 2020 and expires on November 30, 2025 with an option to terminate on November 30, 2023. Quarterly lease payments for base rent are £20 as of December 2020 and will increase periodically until the termination of the lease. Additional fees for ancillary charges such as the share of operating expenses, parking and real estate taxes are not included in the base rent. The lease also includes a requirement to restore the property to original condition and is estimated to be approximately £22.

	Years Ended	
	December 31,	
	2020	2019
Operating lease cost	\$ 1,578	\$ 1,443
Variable lease cost	167	152
Total lease cost	<u>\$ 1,745</u>	<u>\$ 1,595</u>

	December 31,	
	2020	
Weighted-average remaining lease term (years)		2.64
Weighted-average discount rate		5.60%

Maturities of operating leases liabilities were as follows:

<b>As of December 31,</b>	
2021	\$ 2,419
2022	3,055
2023	2,065
2024 and thereafter	—
Total future minimum lease payments	<u>\$ 7,539</u>
Less imputed interest	<u>(554)</u>
Present value of lease liabilities	<u>\$ 6,985</u>

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**6. Accrued Expenses**

Accrued expenses consisted of the following:

	December 31, 2020	December 31, 2019
Accrued research and development expenses	\$ 16,945	\$ 11,813
Accrued employee compensation and benefits	7,704	7,089
Accrued legal and professional fees	3,988	1,087
Other	562	426
	<u>\$ 29,199</u>	<u>\$ 20,415</u>

**7. Convertible Preferred Shares**

As of December 31, 2017, the Company's bye-laws, as amended and restated, designated 22,885,492 authorized shares to be issued as convertible preferred shares with a par value of \$0.000273235 per share, of which 17,128,120 shares were further designated as Series A convertible preferred shares (the "Series A preferred shares") and 5,757,372 shares were further designated as Series B convertible preferred shares (the "Series B preferred shares"). In February 2018, the Company's bye-laws were further amended and restated to, among other things, effect an increase in the number of authorized convertible preferred shares with a par value of \$0.000273235 per share to 35,670,093 shares, of which 12,784,601 shares were further designated as Series C convertible preferred shares (the "Series C preferred shares"). The holders of convertible preferred shares had liquidation rights in the event of a deemed liquidation that, in certain situations, was not solely within the control of the Company. Therefore, the Series A, Series B and Series C convertible preferred shares (collectively, the "Preferred Shares") were classified outside of shareholders' equity (deficit).

In February 2018, the Company issued and sold 12,784,601 Series C preferred shares at a price of \$15.6438 per share (the "Series C Original Issue Price") for proceeds of \$190,822, net of issuance costs of \$9,178.

In May 2018, upon the completion of the Company's IPO (which qualified as a "Qualified IPO" under the Company's bye-laws, as amended and restated), all of the outstanding Preferred Shares were converted into 5,546,019 Class A common shares, 1,070,502 Class B common shares, 12,995,954 Class A1 common shares and 16,057,618 Class B1 common shares in accordance with the Company's bye-laws, as amended and restated. In connection with the completion of its IPO in May 2018, the Company amended and restated its bye-laws to, among other things, authorize the issuance of undesignated preferred shares. As of December 31, 2020 and 2019, no preferred shares were designated or issued.

Prior to the conversion to common shares, the holders of the Preferred Shares had the following rights and preferences:

**Voting**

The holders of Preferred Shares were entitled to vote, together with the holders of common shares, on all matters submitted to shareholders for a vote. The holders of Series A preferred shares were entitled to the number of votes per Series A preferred share equal to the number of whole Class B common shares into which the Series A preferred shares were convertible at the time of such vote (which is ten votes for each Class B common share). The holders of Series B preferred shares were entitled to the number of votes per Series B preferred share equal to the number of whole Class A common shares into which the Series B preferred shares were convertible at the time of such vote (which was one vote for each Class A common share). The holders of Series C preferred shares were entitled to the number of votes per Series C preferred share equal to the number of whole Class A common shares into which the Series

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C preferred shares were convertible at the time of such vote (which was one vote for each Class A common share). Except as provided by law or by the other provisions of the Company's bye-laws, holders of Preferred Shares voted together with the holders of common shares as a single class.

The holders of Preferred Shares, voting together as a single class, were entitled to elect two directors of the Company. The holders of Preferred Shares, voting together with the holders of common shares as a single class, were entitled to elect the remaining directors of the Company, except for the one director that the holders of Class A common shares and Class B common shares, voting together as a single class were entitled to elect.

***Conversion***

Each Series A preferred share was convertible, at the option of the holder, at any time and from time to time, and without the payment of additional consideration by the holder thereof, in such manner as permitted by Bermuda law, into such number of fully paid and non-assessable Class B common shares determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. Each Series B preferred share was convertible, at the option of the holder, at any time and from time to time, and without the payment of additional consideration by the holder thereof, in such manner as permitted by Bermuda law, into such number of fully paid and non-assessable Class A common shares determined by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion. Each Series C preferred share was convertible, at the option of the holder, at any time and from time to time, and without the payment of additional consideration by the holder thereof, in such manner as permitted by Bermuda law, into such number of fully paid and non-assessable Class A common shares determined by dividing the Series C Original Issue Price by the Series C Conversion Price (as defined below) in effect at the time of conversion.

At the time of the IPO, the Series A Original Issue Price and Series A Conversion Price were equal to \$4.6707. The Series B Original Issue Price and Series B Conversion Price were equal to \$6.9475, and the Series C Original Issue Price and Series C Conversion Price were equal to \$15.6438. Therefore, each Series A preferred share was convertible into one Class B common share, each Series B preferred share was convertible into one Class A common share and each Series C preferred share was convertible into one Class A common share.

Further, upon either (i) the closing of the sale of Class A common shares or Class B common shares to the public at a price of at least \$15.6438 per share (subject to appropriate adjustment in the event of any share dividend, share split, combination or other similar recapitalization with respect to the applicable class of common shares) in an initial public offering resulting in at least \$100,000 of gross proceeds to the Company (a "Qualified IPO") or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding Preferred Shares, voting together as a single class on an as if converted to Class A common shares basis, all outstanding Series A preferred shares would automatically be converted, in such manner as permitted pursuant to Bermuda law, into Class B common shares at the then effective conversion rate, and all outstanding Series B and Series C preferred shares would automatically be converted, in such manner as permitted pursuant to Bermuda law, into Class A common shares at the then effective conversion rate. Notwithstanding the foregoing, in the event of a mandatory conversion of preferred shares as a result of a Qualified IPO, (a) holders of Series A preferred shares could elect to receive Class B1 common shares in lieu of Class B common shares and (b) holders of Series B and Series C preferred shares could elect to receive Class A1 common shares in lieu of Class A common shares.

***Dividends***

The holders of the Preferred Shares were entitled to receive noncumulative dividends when and if declared by the Company's board of directors. The Company was not permitted to declare, pay or set aside any dividends on any other class or series of shares of the Company, other than dividends on common shares payable in common shares, unless the holders of the Preferred Share first received, or simultaneously received, a dividend on each outstanding

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Preferred Share equal to (i) in the case of a dividend on any class of common shares or any class or series convertible into common shares, that dividend per Preferred Share as would have equaled the product of (a) 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 shares and (b) the number of common shares issuable upon conversion of a share of the applicable series of Preferred Shares, or (ii) in the case of a dividend on any class or series that was not convertible into common shares, at a rate per Preferred Share determined by (a) dividing the amount of the dividend payable on each share of such class or series of shares by the original issue price of such class or series (subject to appropriate adjustment in the event of any bonus share, share dividend, share split, combination of or other similar recapitalization with respect to such class or series) and (b) multiplying such fraction by an amount equal to the applicable Series A, Series B or Series C Original Issue Price. No cash dividends were declared or paid on the Preferred Shares.

***Liquidation Preference***

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or deemed liquidation event (as defined below), the holders of Preferred Shares then outstanding were entitled to be paid out of the assets of the Company available for distribution to its shareholders, on a *pari passu* basis, before any payment was made to the holders of common shares by reason of their ownership thereof, an amount per share equal to the greater of (i) one times the applicable Original Issue Price, plus any dividends declared but unpaid thereon, and (ii) such amount per share as would have been payable had all Preferred Shares been converted into common shares immediately prior to such liquidation, dissolution, winding up or deemed liquidation event. Thereafter, the remaining assets of the Company available for distribution to its shareholders would have been distributed among the holders of common shares, pro rata based on the number of shares held by each such holder.

If upon any such liquidation, dissolution or winding up of the Company or deemed liquidation event, the assets of the Company available for distribution to its shareholders were insufficient to pay the holders of Preferred Shares the full amount to which they were entitled, the holders of Preferred Shares would have shared ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise have been payable in respect of the shares held by such holders of Preferred Shares upon such distribution if all amounts payable on or with respect to such shares were paid in full.

Unless a majority of the holders of the then outstanding Preferred Shares elected otherwise, a deemed liquidation event would include a merger or consolidation (other than one in which shareholders of the Company own a majority by voting power of the outstanding shares of the surviving or acquiring company or corporation) or a sale, lease, transfer, exclusive license or other disposition of all or substantially all of the assets of the Company.

***Redemption***

The Company's bye-laws, as amended and restated, did not provide redemption rights to the holders of Preferred Shares.

**8. Common Shares**

As of December 31, 2017, the Company's bye-laws, as amended and restated, authorized the Company to issue 43,918,239 total shares with a par value of \$0.000273235, of which 5,507,938 and 3,568,353 shares were designated as Class A and Class B common shares, respectively. In February 2018, the Company's bye-laws were further amended and restated to, among other things, effect an increase in the number of authorized common shares to 44,746,463 shares, of which 5,507,938 shares were designated as Class A common shares and 3,568,353 shares were designated as Class B common shares. The remaining 11,956,456 shares that were not designated as common shares or Preferred Shares as of

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December 31, 2017 could have been designated to any class at any time in the future by the Company's board of directors. No Class A1 common shares or Class B1 common shares were designated as of December 31, 2017.

On May 23, 2018, the Company's registration statement on Form S-1 relating to the IPO was declared effective by the SEC. On May 29, 2018, the Company completed the IPO of 8,477,777 Class A common shares at a public offering price of \$18.00 per share for gross proceeds of \$152,600. In addition, on June 22, 2018, the Company completed the sale of 1,006,425 Class A common shares to the underwriters of the IPO following the exercise in part of their over-allotment option to purchase additional shares at a public offering price of \$18.00 per share for gross proceeds of \$18,116. The aggregate net proceeds to the Company from the IPO, inclusive of the over-allotment option exercise, was \$155,536 after deducting underwriting discounts and commissions and other offering costs.

In May 2018, upon completion of the IPO (which qualified as a "Qualified IPO" under the Company's bye-laws, as amended and restated), all outstanding Preferred Shares were converted into 5,546,019 Class A common shares, 1,070,502 Class B common shares, 12,995,954 Class A1 common shares and 16,057,618 Class B1 common shares in accordance with the Company's bye-laws, as amended and restated. In connection with the completion of the IPO in May 2018, the Company increased the authorized capital of the Company to \$54,647 consisting of 200,000,000 shares of \$0.000273235 par value per share and, among other things, amended the description of different classes of shares under the Amended & Restated Bye-Laws.

On February 4, 2019, the Company completed a follow-on offering of 2,654,984 Class A common shares at a public offering price of \$18.26 and a concurrent private placement of 2,000,000 Class A1 common shares at an offering price of \$18.26 per share for aggregate gross proceeds of \$85,000. In addition, on March 1, 2019, the Company completed the sale of 161,126 Class A common shares to the underwriters of the follow-on offering following the exercise in part of their over-allotment option to purchase additional shares at a public offering price of \$18.26 per share for gross proceeds of \$2,942. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement, inclusive of the over-allotment option exercise, was \$82,988 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On May 18, 2020, the Company completed a follow-on offering of 2,760,000 Class A common shares, inclusive of the exercise of the underwriters' over-allotment option at a public offering price of \$18.25 and a concurrent private placement of 1,600,000 Class A1 common shares at an offering price of \$18.25 per share for aggregate gross proceeds of \$79,570. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement, inclusive of the over-allotment option exercise, was \$74,495 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

On July 24, 2020, the Company completed a follow-on offering of 5,952,381 Class A common shares, at a public offering price of \$21.00 and a concurrent private placement of 1,428,572 Class A1 common shares at an offering price of \$21.00 per share for aggregate gross proceeds of \$155,000. The aggregate net proceeds to the Company from the follow-on offering and concurrent private placement was \$146,037 after deducting underwriting discounts and commissions, placement agent fees and other offering costs.

The rights of the holders of the Company's Class A common shares, Class B common shares, Class A1 common shares and Class B1 common shares are identical, except with respect to voting, transferability and conversion, as described below. As of December 31, 2020, no preferred shares were designated or issued.

**Voting**

Each Class A common share entitles the holder to one vote on all matters submitted to the shareholders for a vote. Each Class B common share entitles the holder to ten votes on all matters submitted to the shareholders for a vote.

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The holders of Class A and Class B common shares, voting together as a single class, are entitled to elect the directors of the Company. Holders of Class A1 common shares and Class B1 common shares have no voting rights.

***Dividends***

The common shareholders are entitled to receive dividends, as may be declared by the Company's board of directors. Through December 31, 2020, no cash dividends have been declared or paid.

***Conversion***

Each Class B common share shall automatically convert into one Class A common share upon certain transfers of such shares by the holder thereof (subject to certain exceptions). Each Class B common share is convertible, at the holder's election into one Class A common share or one Class B1 common share. Each Class A1 common share is convertible into one Class A common share at the holder's election (subject to certain exceptions). Each Class B1 common share shall automatically convert into one Class A common share upon certain transfers of such shares by the holder thereof (subject to certain exceptions). Each Class B1 common share is convertible into one Class A common share or one Class B common share at the holder's election (subject to certain exceptions). There are no conversion rights associated with the Class A common shares.

**9. Share-Based Compensation**

***2018 Incentive Award Plan***

In May 2018, the Company's board of directors and shareholders approved the 2018 Incentive Award Plan (the "2018 Plan"), which became effective on May 23, 2018. The 2018 Plan provides for the grant of incentive share options, nonqualified share options, share appreciation rights, restricted shares, dividend equivalents, restricted share units and other share- or cash- based awards. Upon the effectiveness of the 2018 Plan, the Company ceased granting awards under its 2015 Equity Incentive Plan (as amended, the "2015 Plan" together with the 2018 Plan, the "Plans").

A total of 4,466,500 Class A common shares were initially reserved for issuance under the 2018 Plan. The number of Class A common shares that may be issued under the 2018 Plan will automatically increase on each January 1, beginning in 2019 and continuing for each fiscal year until, and including, the fiscal year ending December 31, 2028, equal to the lesser of (1) 4% of the Class A common shares outstanding (on an as-converted basis) on the final day of the immediately preceding calendar year and (2) a smaller number of Class A common shares determined by the Company's board of directors. In December 2019, the board of directors approved the automatic increase as of January 1, 2020 of 2,197,505 shares, equal to 4% of the as-converted Class A common shares outstanding on December 31, 2019. No more than 27,915,000 Class A common shares may be issued under the 2018 Plan upon the exercise of incentive share options. The Class A common shares underlying any awards issued under the 2018 Plan or the 2015 Plan that on or after the effective date of the 2018 Plan expire, lapses unexercised or are terminated, exchanged for cash, surrendered, repurchased, canceled without having been fully exercised, or forfeited under the 2018 Plan or the 2015 Plan will be added back to the Class A common shares available for issuance under the 2018 Plan. As of December 31, 2020, 1,618,474 shares remained available for future grant.

***2015 Equity Incentive Plan***

Until May 23, 2018 (the effective date of the 2018 Plan), the 2015 Plan provided for the Company to grant incentive share options, nonqualified share options, share grants and other share-based awards to employees and non-employees to purchase the Company's Class A common shares. On the effective date of the 2018 Plan, the Company ceased granting awards under the 2015 Plan. At that time, the 4,691,213 Class A common shares subject to outstanding awards under the 2015 Plan remained reserved for issuance under the plan pursuant to such awards and the

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92,170 Class A common shares that had been available for future grant under the 2015 Plan were no longer authorized and reserved for issuance or available for future grant under the 2015 Plan.

As of December 30, 2020, there were 2,794,056 Class A common shares subject to outstanding awards under the 2015 Plan and reserved for issuance thereunder pursuant to such awards. The 2015 Plan continues to govern the terms and conditions of the outstanding awards granted under it. Class A common shares subject to awards granted under the 2015 Plan that expire, lapse unexercised or are terminated, exchanged for cash, surrendered, repurchased, canceled without having been fully exercised, or forfeited become available for issuance under the 2018 Plan.

The exercise price for share options granted under the 2015 Plan was determined by the Company's board of directors. All incentive share options granted to any person possessing 10% or less of the total combined voting power of all classes of shares could not have an exercise price of less than 100% of the fair market value of the Class A common shares on the grant date. All incentive share options granted to any person possessing more than 10% of the total combined voting power of all classes of shares could not have an exercise price of less than 110% of the fair market value of the Class A common shares on the grant date. The option term for incentive share options could not be greater than 10 years. Incentive share options granted to persons possessing more than 10% of the total combined voting power of all classes of shares could not have an option term of greater than five years. The vesting period for equity-based awards was determined by the board of directors, which was generally four to six years. For awards granted to employees and non-employees with four year vesting terms, 25% of the option vests on the first anniversary of the grant date and the remaining shares vest equally each month for three years thereafter. For awards granted to employees with six year vesting terms, 16% of the option vests on the first anniversary of the grant date and the remaining shares vest based on a predetermined vesting schedule for five years thereafter.

***2018 Employee Share Purchase Plan***

In May 2018, the Company's board of directors and shareholders approved the 2018 Employee Share Purchase Plan (the "2018 ESPP"), which became effective on May 23, 2018. A total of 670,000 Class A common shares were initially reserved for issuance under the 2018 ESPP. The number of Class A common shares that may be issued under the 2018 ESPP will automatically increase on each January 1, beginning in 2019 and continuing for each fiscal year until, and including, the fiscal year ending December 31, 2028, equal to the lesser of (1) 1% of the Class A common shares outstanding (on an as-converted basis) on the final day of the immediately preceding calendar year and (2) a smaller number of Class A common shares determined by the Company's board of directors, provided that no more than 6,420,000 Class A common shares may be issued under the 2018 ESPP. In December 2020, the board of directors approved an increase as of January 31, 2021 of 130,000 shares. As of December 31, 2020, 518,794 Class A common shares were available for future issuance under the 2018 ESPP.

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**Share Options**

The following table summarizes option activity for the year ended December 31, 2020:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2019	8,491,734	\$ 11.17	7.88	\$ 27,217
Granted	3,794,735	\$ 16.50		
Exercised	(1,324,429)	\$ 4.57		
Forfeited	(1,003,182)	\$ 14.88		
Outstanding as of December 31, 2020	<u>9,958,858</u>	<u>\$ 13.53</u>	8.15	\$ 52,394
Share options exercisable as of December 31, 2020	3,799,854	\$ 10.83	7.00	\$ 31,526
Share options unvested as of December 31, 2020	6,159,004	\$ 15.19	2.79	\$ 64,715

The aggregate intrinsic value of share options is calculated as the difference between the exercise price of the share options and the fair value of the Company's common shares for those share options that had exercise prices lower than the fair value of the Company's common shares.

During the year ended December 31, 2020, share option holders exercised 1,324,429 share options for Class A common shares with an intrinsic value of \$18,271 for total cash proceeds to the Company of \$6,058. During the year ended December 31, 2019, share option holders exercised 150,253 share options for Class A common shares with an intrinsic value of \$1,776 for total cash proceeds to the Company of \$590. During the year ended December 31, 2018, share option holders exercised 25,683 share options for Class A common shares with an intrinsic value of \$411 for total cash proceeds to the Company of \$87.

The weighted-average grant-date fair value per share of share options granted during the years ended December 31, 2020, 2019 and 2018 was \$11.38, \$9.36 and \$11.96, respectively.

The total fair value of share options vested during the years ended December 31, 2020, 2019 and 2018 was \$17,931, \$13,997 and \$2,255, respectively.

**Option Valuation**

The assumptions that the Company used to determine the grant-date fair value of share options granted to employees and directors under the 2015 Plan and the 2018 Plan during the years ended December 31, 2019 and 2018 were as follows, presented on a weighted-average basis:

	Years Ended December 31,		
	2020	2019	2018
Risk-free interest rate	0.55 %	2.07 %	2.82 %
Expected term (in years)	6.21	6.22	6.40
Expected volatility	80.81 %	79.14 %	75.04 %
Expected dividend yield	— %	— %	— %

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During the year ended December 31, 2020, the Company did not grant share options to non-employees. During the year ended December 31, 2019 and 2018, the assumptions that the Company used to determine the fair value of share options granted to non-employees were as follows, presented on a weighted-average basis:

	Years Ended December 31,	
	2019	2018
Risk-free interest rate	1.38 %	2.91 %
Expected term (in years)	2.77	7.35
Expected volatility	68.17 %	74.18 %
Expected dividend yield	— %	— %

***Riloncept Long-Term Incentive Plan***

A restricted share unit (“RSU”) represents the right to receive shares of the Company’s Class A common shares upon vesting of the RSU. The fair value of each RSU is based on the closing price of the Company’s Class A common shares on the date of grant. In December 2019, the compensation committee of the Company’s board of directors approved the Company’s Riloncept Long-Term Incentive Plan (“RLTIP”) under the Company’s 2018 Plan to incentivize eligible employees of the Company or any of its subsidiaries to achieve U.S. Food and Drug Administration (“FDA”) approval for the commercial sale and marketing of riloncept for the treatment of recurrent pericarditis in the United States (“RLTIP Milestone”). The RLTIP provides for the potential to receive a cash award and two grants of RSU awards covering Class A common shares under the 2018 Plan. The target award value for each of the cash award and the two RSU awards will be equal to one-third of a participant’s annual target bonus in the year of grant, as determined in accordance with the RLTIP.

Depending on the date-range within which the RLTIP Milestone is achieved (such date the “Achievement Date”) occurs, the RLTIP provides for (i) an earnout percentage that can be achieved as to 100%, 50%, 25% or 0% and (ii) an upside earnout percentage that can be achieved as to 50%, 25% or 0%. No awards will be earned or vest, and the second RSU award will not be granted, in the event the Achievement Date does not occur by a specified date.

The cash award is eligible to be earned and vested upon the Achievement Date with respect to an amount determined in accordance with the RLTIP based on the earnout percentage. The number of Class A common shares issuable under the first RSU award (“First RSU Award”) as a result of the RLTIP Milestone will be determined in accordance with the RLTIP based on the earnout percentage, and such RSUs will vest on the first anniversary of the Achievement Date, subject to continued employment on such date. The second RSU award will be granted on the Achievement Date with respect to a number of shares determined in accordance with the RLTIP, based on both the earnout percentage and the upside earnout percentage, and will vest on the second anniversary of the Achievement Date, subject to continued employment through such date.

***Restricted Share Units***

In December 2019, the Company granted RSUs with service conditions (“Time-Based RSUs”) that vest in one installment on December 31, 2020, subject to the recipient’s continued employment through that date. During the years ended December 31, 2020 and 2019, the Company also granted the First RSU Award to eligible employees as part of the RLTIP, which becomes eligible to vest upon the Achievement Date and will vest upon the first anniversary of such date, subject to the recipient’s continued employment through that date. In the event the RLTIP Milestone is not achieved, the First RSU Award will not vest.

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On December 31, 2020, all outstanding Time-Based RSUs vested and 56,369 class A common shares were issued and remaining shares of 24,332 were withheld for tax purposes. For the year ended December 31, 2020, the Company recognized \$980 in compensation expense related to the Time-Based RSUs. For the year ended December 31, 2019, the Company did not recognize any compensation expense related to the Time-Based RSU. The grant-date fair value of the First RSU Award remaining as of December 31, 2020 was \$2,754 and will be recognized when the RLTI Milestone is deemed probable of achievement through the date the First RSU Award will vest. During the years ended December 31, 2020 and 2019, the Company did not recognize any compensation expense related to the First RSU Award, as achievement of the RLTI Milestone was determined to be not probable.

The following table summarizes RSU activity, including the Time-Based RSUs and First RSU Awards under the RLTI, for the year ended December 31, 2020:

	Number of Shares		Weighted Average Grant Date Fair Value
Unvested RSUs as of December 31, 2019	328,296	\$	12.93
Granted	17,995	\$	19.15
Vested	(80,701)	\$	12.95
Forfeited	(60,278)	\$	13.09
Unvested RSUs as of December 31, 2020	205,312	\$	13.41

**Share-Based Compensation**

Share-based compensation expense was classified in the consolidated statements of operations and comprehensive loss as follows:

	Years Ended December 31,		
	2020	2019	2018
Research and development expenses	\$ 8,866	\$ 5,746	\$ 2,285
Selling, general and administrative expenses	12,009	9,334	3,416
	\$ 20,875	\$ 15,080	\$ 5,701

During the year ended December 31, 2020, the Company recorded compensation expense for share options and RSUs granted to employees and directors of \$20,860. During the year ended December 31, 2020, the Company recorded compensation expense for share options granted to non-employees of \$15.

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As of December 31, 2020, total unrecognized compensation expense related to the invested share option awards was \$64,715 which is expected to be recognized over a weighted average remaining period of 2.79 years. As of December 31, 2020, the Company has recognized all of the compensation expense related to the Time-Based RSUs and none remain unvested. As of December 31, 2020, total unrecognized compensation cost related to the First RSU Award was \$2,754 which will be recognized when the RLTP Milestone is deemed probable of achievement through the date the First RSU Award vests.

**10. License and Acquisition Agreements**

***Biogen Asset Purchase Agreement***

In September 2016, the Company entered into an asset purchase agreement (the "Biogen Agreement") with Biogen MA Inc. ("Biogen") to acquire all of Biogen's right, title and interest in and to certain assets used in or relating to vixarelimab and other antibodies covered by certain patent rights, including patents and other intellectual property rights, clinical data, know-how, and clinical drug supply. In addition, Biogen granted to the Company a non-exclusive, sublicensable, worldwide license to certain background patent rights related to the vixarelimab program. The Company is obligated to use commercially reasonable efforts to develop and commercialize such acquired products.

In exchange for these rights, the Company made an upfront payment to Biogen of \$11,500 and a technology transfer payment of \$500. The Company accounted for the acquisition of technology as an asset acquisition because it did not meet the definition of a business. The Company recorded the upfront payment and technology transfer payment as research and development expense in the consolidated statement of operations and comprehensive loss because the acquired technology represented in-process research and development and had no alternative future use.

Under the Biogen Agreement, the Company is obligated to make milestone payments to Biogen of up to \$179,000 upon the achievement of specified clinical and regulatory milestones in multiple indications in various territories, including milestone payments of \$4,000 and \$10,000 paid during the year ended December 31, 2017 and the year ended December 31, 2019, respectively, each payment was associated with the achievement of a specified clinical milestone event. No milestones were achieved or paid during the year ended December 31, 2020. Additionally, the Company could be obligated to make up to an aggregate of up to \$150,000 of payments upon the achievement of specified annual net sales milestones and to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the high single-digit percentages and ending below the teens.

The Company also agreed to pay certain obligations under third-party contracts retained by Biogen that relate to the vixarelimab program. Under these retained contracts, the Company paid a one-time upfront sublicense fee of \$150 and is obligated to pay insignificant annual maintenance fees as well as clinical and regulatory milestone payments of up to an aggregate of \$1,575.

The Biogen Agreement will terminate upon the expiration of all payment obligations with respect to the last product in all countries in the territory. The Company has the right to terminate the agreement with 90 days' prior written notice. Both parties may terminate by mutual written consent or in the event of material breach of the agreement by the other party that remains uncured for 90 days (or 30 days for payment-related breaches).

During the year ended December 31, 2020, the Company recorded research and development expense of \$106 primarily related to a milestone occurring in the first quarter of 2020 and the annual maintenance fee both in connection with the retained contracts. During the year ended December 31, 2019, the Company recorded research and development expense of \$10,347 primarily related to milestone payments associated with the achievement of a specified clinical milestone event as well as other payments in connection with the retained contracts due under the Biogen Agreement. The Company did not incur any research and development expense, other than insignificant payments in connection with the retained contracts, under the Biogen Agreement during the year ended December 31, 2018.

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***Primatepe Stock Purchase Option Agreement***

In September 2017, the Company entered into a stock purchase option agreement (the “Primatepe Agreement”) with Primatepe Therapeutics, Inc. (“Primatepe”), pursuant to which the Company was granted a license to certain intellectual property rights owned or controlled by Primatepe to research, develop, and manufacture the preclinical antibody, KPL-404.

The agreement provided the Company with an exclusive call option to purchase all of the outstanding securities of Primatepe. Upon execution of the agreement, the Company made \$500 in upfront payments for the initial option period through April 2018 (the “Initial Option Period”). The Primatepe Agreement allowed for up to three extensions of the Initial Option Period through January 2019 (including the initial option period, the “Option Period”) for total extension payments of up to \$800. Through December 31, 2018, the Company made payments totaling \$800 to extend the Option Period to January 15, 2019. During the Option Period, the Company could conduct research and preclinical work to assess the viability of the asset.

The Company determined that the call option represented a variable interest in Primatepe and that Primatepe is a VIE. However, as the Company had no ability to control the board of directors or direct the ongoing activities of Primatepe during the Option Period, the Company did not have power over the activities that most significantly impact Primatepe’s economic performance and was not the primary beneficiary of Primatepe. As a result, the Company did not consolidate the assets, liabilities, and results of operations of Primatepe prior to 2019.

In January 2019, the Company exercised the call option and in March 2019, the Company acquired all of the outstanding securities of Primatepe (the “Primatepe Acquisition”). The aggregate amount of upfront and contingent payments the Company paid to the former Primatepe shareholders to acquire the Company was comprised of (1) \$15,000 paid at closing in March 2019, comprised of upfront consideration of \$10,000 and milestone payments of \$5,000, which had been achieved as of the closing date, and (2) \$3,000 paid in June 2019 for the final milestone payment, which was achieved following the closing during the six months ended June 30, 2019, each paid in a combination of cash and Class A common shares (inclusive of escrow and holdback share amounts) in accordance with the Primatepe Agreement. At the closing of the Primatepe Acquisition, Primatepe became a wholly owned subsidiary of the Company and the acquisition was accounted for as an asset acquisition as it did not meet the definition of a business. The Company released the escrow and issued the shares that were held back at closing in June 2020 and issued the shares that were held back at the final milestone payment in September 2020. The Company recorded the upfront payment and milestone payments as research and development expense in the consolidated statement of operations and comprehensive loss because the acquired technology represented in-process research and development and had no alternative future use.

During the years ended December 31, 2020, the Company did not incur any research and development expense directly in connection with milestone or other payments related to the Primatepe Acquisition or the Primatepe Agreement. During the year ended December 31, 2019, the Company recorded research and development expense of \$18,000 related to the Primatepe Acquisition. During the year ended December 31, 2018, the Company recorded research and development expense of \$800, related to the extension of the option period under the Primatepe Agreement.

***Beth Israel Deaconess Medical Center License Agreement***

As a result of the Primatepe Acquisition, the Company acquired the rights to an exclusive license to certain intellectual property rights controlled by Beth Israel Deaconess Medical Center, Inc. (“BIDMC”) to make, use, develop and commercialize KPL-404 (the “BIDMC Agreement”). Under the BIDMC Agreement, the Company is solely responsible for all development, regulatory and commercial activities and costs. The Company is also responsible for costs related to filing, prosecuting and maintaining the licensed patent rights. Under the BIDMC Agreement, the Company is obligated to pay an insignificant annual maintenance fee as well as clinical and regulatory milestone

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payments of up to an aggregate of \$1,200 to BIDMC. The Company is also obligated to pay a low single-digit royalty on annual net sales of products licensed under the agreement.

During the years ended December 31, 2020 and 2019, the Company recorded research and development expense of \$10 and \$10, respectively in connection with the BIDMC Agreement.

***Regeneron License Agreement***

In September 2017, the Company entered into a license agreement (the "Regeneron Agreement") with Regeneron Pharmaceuticals, Inc. ("Regeneron"), pursuant to which the Company has been granted an exclusive, sublicensable license under certain intellectual property rights controlled by Regeneron to develop and commercialize rilonacept in certain fields and territories. The Company is obligated to use commercially reasonable efforts to develop and commercialize such licensed products.

In exchange for these rights, the Company made an upfront payment of \$5,000. The Company accounted for the acquisition of technology as an asset acquisition because it did not meet the definition of a business. The Company recorded the upfront payment as research and development expense in the consolidated statement of operations and comprehensive loss because the acquired technology represented in-process research and development and had no alternative future use.

Under the Regeneron Agreement, the Company is also obligated to make payments to Regeneron of up to an aggregate of \$27,500 upon the achievement of specified regulatory milestones, which includes a \$7,500 milestone achieved and paid in the fourth quarter of 2020 and a \$20,000 milestone which may be met in the first quarter of 2021. Upon approval from the FDA, if any, of the sBLA for rilonacept in recurrent pericarditis, the Company will assume the sales and distribution of rilonacept for the approved indications of CAPS and DIRA in the United States and the Company would evenly split profits on sales of commercial products with Regeneron, after deducting certain commercialization expenses subject to specified limits.

During the year ended December 31, 2020, the Company recorded research and development expense of \$7,500 in connection with the achievement of a specified regulatory milestone event. The Company did not incur any research and development expense directly related to milestones due under the Regeneron Agreement during the year ended December 31, 2019 and 2018.

Under the Regeneron Agreement, the Company is solely responsible for all development and commercialization activities and costs in its territories. The Company is also responsible for costs related to the filing, prosecution and maintenance of certain licensed patent rights.

The parties also entered into a clinical supply agreement under which Regeneron agreed to manufacture the developed product during the clinical phase. During the year ended December 31, 2020, the Company did not incur any research and development expense related to the purchase of drug materials under this agreement. During the years ended December 31, 2019 and 2018, the Company recorded research and development expense of \$6,854 and \$1,835, respectively, related to the purchase of drug materials under this agreement. As of December 31, 2020, the Company had non-cancelable purchase commitments under the clinical supply agreement (see Note 13).

The Regeneron Agreement will expire when the Company is no longer developing or commercializing any licensed product under the Regeneron Agreement. Either party may terminate the agreement upon the other party's insolvency or bankruptcy or for material breach of the agreement by the other party that remains uncured for 90 days (or 30 days for payment-related breaches). Regeneron has the right to terminate the agreement if the Company suspends its development or commercialization activities for a consecutive 12 month period or does not grant a sublicense to a third-party to perform such activities, or if the Company challenges any of the licensed patent rights. The Company may

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terminate the agreement at any time that is 18 months after the effective date of the agreement with 180 days' written notice or with one year's written notice if the Company terminates the agreement following U.S. marketing approval of a rilonacept product developed by the Company. The Company may also terminate the agreement with three months' written notice if the products are determined to have certain safety concerns.

***MedImmune License Agreement***

In December 2017, the Company entered into a license agreement (as amended from time to time, the "MedImmune Agreement") with MedImmune, Limited ("MedImmune"), pursuant to which MedImmune granted the Company an exclusive, sublicensable, worldwide license to certain intellectual property rights to make, use, develop and commercialize mavrilimumab. Under the MedImmune Agreement, the Company also acquired reference rights to relevant manufacturing and regulatory documents and MedImmune's existing supply of mavrilimumab drug substance and product. The Company is obligated to use commercially reasonable efforts to develop and commercialize the licensed products.

In exchange for these rights, the Company made an upfront payment of \$8,000. The Company accounted for the acquisition of technology as an asset acquisition because it did not meet the definition of a business. The Company recorded the upfront payment as research and development expense in the consolidated statement of operations and comprehensive loss because the acquired technology represented in-process research and development and had no alternative future use.

In addition, the Company is obligated to make clinical, regulatory and initial sales milestone payments of up to \$72,500 in aggregate for the first two indications, including, a \$5,000 pass-through payment due upon the achievement of a specified clinical milestone event which was achieved in the fourth quarter of 2018. Also included is a milestone payment of \$10,000 due upon the earlier to occur of a specified regulatory milestone and December 31, 2018, unless the MedImmune Agreement is earlier terminated by either party. During the year ended December 31, 2019, the Company made both the \$5,000 and \$10,000 previously accrued milestone payments in accordance with the MedImmune Agreement. In addition, the Company is obligated to make clinical and regulatory milestone payments of up to \$15,000 in the aggregate for each subsequent indication. In July 2020, the Company entered into an amendment to the MedImmune Agreement to establish a new coronavirus field and defer the payment of certain development and regulatory milestones as applied to the new coronavirus field. The Company is obligated to make milestone payments to MedImmune of up to \$85,000 upon the achievement of annual net sales thresholds up to, but excluding, \$1,000,000 in annual net sales as well as additional milestone payments aggregating up to \$1,100,000 upon the achievement of additional specified annual net sales thresholds starting at \$1,000,000 and higher. The Company has also agreed to pay tiered royalties on escalating tiers of annual net sales of licensed products starting in the low double-digit percentages and ending at twenty percent. Royalty rates are subject to reductions upon certain events.

The Company is solely responsible for all development, manufacturing, and commercial activities and costs of the licensed products, including clinical studies or other tests necessary to support the use of a licensed product. The Company is also responsible for costs related to the filing, prosecution and maintenance of the licensed patent rights.

The MedImmune Agreement will expire upon the expiration of the royalty term in the last country for the last indication, as defined in the agreement. Either party may terminate the agreement upon the other party's insolvency or bankruptcy or for material breach of the agreement by the other party that remains uncured for 90 days. MedImmune has the right to terminate the agreement if the Company challenges any of the licensed patent rights. The Company may terminate the agreement at any time upon 90 days' prior written notice.

During the years ended December 31, 2020 and 2019, the Company did not record research and development expense in connection with milestone payments due under the MedImmune Agreement. During the year ended December 31, 2018, the Company recorded research and development expense and an accrued milestone of \$5,000

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related to a pass-through payment due upon the achievement of a specified clinical milestone event due under the MedImmune Agreement.

***Kite Clinical Collaboration***

In December 2019, the Company entered into a clinical collaboration (the "Kite Agreement") with Kite Pharma, Inc., a Gilead Company ("Kite"), to initiate a Phase 2 clinical trial evaluating the combination of Yescarta (axicabtagene ciloleuce) and mavrilimumab in relapsed or refractory large B-Cell lymphoma. The objective of the Phase 2 trial is to determine the effect of mavrilimumab on the safety of Yescarta. Treatment related induction of granulocyte-macrophage colony stimulating factor ("GM-CSF") has been identified through clinical, translational and preclinical studies as a potential key signal associated with side effects of chimeric antigen receptor T ("CAR T"), cell therapy. Preclinical evidence suggest the potential for interruption of GM-CSF signaling to disrupt CAR T cell mediated inflammation without disrupting anti-tumor activity. In August 2020, Kite as the sponsor of the study which had not begun to enroll, informed the Company that the clinical collaboration was being discontinued under a portfolio strategy review and terminated the agreement in accordance with its terms and conditions. During the years ended December 31, 2020 and 2019, the Company did not record any research and development expense in connection with the Kite Agreement.

**11. Income Taxes**

As a company incorporated in Bermuda, the Company is principally subject to taxation in Bermuda. Under the current laws of Bermuda, tax on a company's income is assessed at a zero percent tax rate. As a result, the Company has not recorded any income tax benefits from its losses incurred in Bermuda during each reporting period, and no net operating loss carryforwards will be available to the Company for those losses.

In July 2020, the IRS issued final regulations regarding Foreign Derived Intangible Income ("FDII"), which was enacted as part of the U.S. Tax Cuts and Jobs Act in December 2017. The final FDII requirements outlined in the 2020 guidance did not materially impact the Company's income taxes.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was enacted to provide economic relief to those impacted by the COVID-19 pandemic. The CARES Act made various tax law changes, including, among other things: (i) modifications to the federal net operating loss rules, including permitting federal net operating losses incurred in 2018, 2019, and 2020 to be carried back to the five preceding taxable years in order to generate a refund of previously paid income taxes and eliminating the 80% of taxable income limitations in years 2018-2020; (ii) enhanced recoverability of alternative minimum tax credit carryforwards; and (iii) delayed payment of employer payroll taxes. On December 27, 2020 updates to the CARES Act were enacted which provided the temporary allowance of a full deduction for business meals paid or incurred between December 31, 2020 and January 1, 2023. The Company will continue to monitor for any updates but currently the only material impact to the Company's tax provision is the ability to defer employer payroll taxes for which the Company will not get a deduction until the amounts are paid.

In August 2015, the Company entered into agreements with its wholly owned subsidiary, Kiniksa US, under which Kiniksa US provides management and research and development services to the Company for which the Company pays costs plus a service fee.

In connection with its launch readiness activities, the Company transferred all of its rights, title and interest in, among other things, certain contracts (including the Regeneron Agreement), intellectual property rights, product filings and approvals and other information, plans and materials owned or controlled by the Company insofar as they related exclusively or primarily to rilonccept to Kiniksa UK in January 2021 pursuant to an asset transfer agreement between the Company and Kiniksa UK for the consideration described therein.

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Loss before benefit (provision) for income taxes consisted of the following:

	Years Ended December 31,		
	2020	2019	2018
Bermuda	\$ (161,983)	\$ (168,053)	\$ (105,562)
Foreign (U.S., U.K., Germany, France, Switzerland)	5,754	4,139	2,121
	<u>\$ (156,229)</u>	<u>\$ (163,914)</u>	<u>\$ (103,441)</u>

The components of the Company's income tax (provision) benefit were as follows:

	Years Ended December 31,		
	2020	2019	2018
<b>Current income tax provision:</b>			
Bermuda	\$ —	\$ —	\$ —
U.S. federal	(392)	(567)	(547)
U.S. state	(366)	(530)	(217)
Foreign (U.K., Germany, France, Switzerland)	(33)	(12)	—
Total current income tax provision	<u>(791)</u>	<u>(1,109)</u>	<u>(764)</u>
<b>Deferred income tax (provision) benefit:</b>			
Bermuda	—	—	—
U.S. federal	(3,056)	2,397	542
U.S. state	(1,315)	759	436
Foreign (U.K., Germany, France, Switzerland)	10	—	—
Total deferred income tax (provision) benefit	<u>(4,361)</u>	<u>3,156</u>	<u>978</u>
Total (provision) benefit for income taxes	<u>\$ (5,152)</u>	<u>\$ 2,047</u>	<u>\$ 214</u>

A reconciliation of the Bermuda statutory income tax rate of 0% to the Company's effective income tax rate is as follows:

	Years Ended December 31,		
	2020	2019	2018
Bermuda statutory income tax rate	— %	— %	— %
Foreign (U.S.) tax rate differential	(0.8)	(0.5)	(1.0)
Research and development tax credits	2.4	2.2	1.5
Share-based compensation	1.3	(0.5)	0.1
Permanent differences	(0.1)	(0.1)	—
Change in valuation allowance	(5.7)	(0.1)	—
U.S. state taxes, net of federal	0.1	(0.3)	(0.4)
FDII	0.6	0.9	—
Uncertain tax positions	(0.2)	(0.3)	—
Other	(0.9)	—	—
Effective income tax rate	<u>(3.3)%</u>	<u>1.3 %</u>	<u>0.2 %</u>

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
(Amounts in thousands, except share and per share amounts)

Net deferred tax assets consisted of the following:

	December 31,	
	2020	2019
Deferred tax assets:		
Research and development tax credit carryforwards	\$ 1,674	\$ 238
Share-based compensation	6,271	3,746
Operating lease liability	1,764	712
Accrued bonus	1,208	855
Accrued expenses and other liabilities	634	223
Net operating losses	198	190
Total deferred tax assets	<u>11,749</u>	<u>5,964</u>
Valuation allowance	(9,307)	(330)
Deferred tax liabilities:		
Depreciation and amortization	(786)	(745)
Right of use asset	(1,646)	(517)
Net deferred tax assets	<u>\$ 10</u>	<u>\$ 4,372</u>

As of December 31, 2020 and 2019, the Company had federal research and development tax credit carryforwards of approximately \$1,383 and \$228 respectively, available to reduce future tax liabilities, which begin to expire in 2040. As of December 31, 2020 and 2019, the Company had state research and development tax credit carryforwards of approximately \$844 and \$265 respectively, available to reduce future tax liabilities, which begin to expire in 2035.

As required by ASC 740, the Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets. As a result of significant cumulative tax benefits associated with share-based compensation taxable events recognized in 2020, the Company has significant negative evidence in the form of cumulative losses and thus management has determined that it is more likely than not that the Company will not utilize the deferred tax assets in the United States. As such, the Company recorded a valuation allowance against its U.S. deferred tax assets at December 31, 2020 of \$9,307. In prior years, the Company recorded a valuation allowance against certain state research and development tax credits only. In order to utilize state research and development tax credits, the Company will need taxable income in the jurisdiction of where the credit was generated. The Company currently has no taxable income in certain state jurisdictions and thus management had determined that it is more likely than not that the Company will not recognize the benefits of state research and development tax credits generated in those jurisdictions. A valuation allowance of \$330 had been established at December 31, 2019.

Utilization of the state research and development tax credits may be subject to substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership changes that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the shares of a corporation by more than 50% over a three-year period.

Changes in the valuation allowance for deferred tax were as follows:

	Years Ended December 31,		
	2020	2019	2018
Valuation allowance at beginning of year	\$ (330)	\$ (49)	\$ (27)
Increases recorded through the balance sheet	—	(200)	—
Increases recorded to income tax provision	(8,977)	(81)	(22)
Valuation allowance at end of year	<u>\$ (9,307)</u>	<u>\$ (330)</u>	<u>\$ (49)</u>

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**(Amounts in thousands, except share and per share amounts)**

The valuation allowance increased by \$8,977 in 2020 primarily as a result of the recognition of a valuation allowance against all U.S. deferred tax assets.

The Company recognizes the tax benefit from an uncertain tax position only if it is more-likely-than-not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. The amount of unrecognized tax benefits is \$837 and \$528 as of December 31, 2020 and 2019, respectively. The net increase relates to new tax positions on research and development credits generated in 2020, offset by positions which are no longer outstanding due to the statute of limitations closing.

A roll forward of the Company's uncertainties in its income tax provision liability is presented below:

	Years Ended		
	December 31,		
	2020	2019	2018
Gross balance at the beginning of year	\$ 528	\$ —	\$ —
Gross increases based on current period tax positions	411	528	—
Gross decreases based on tax positions of the prior periods	(102)	—	—
Unrecognized tax benefits at the end of the year	<u>\$ 837</u>	<u>\$ 528</u>	<u>\$ —</u>

The Company's policy is to record interest and penalties related to income taxes as part of its income tax provision. The Company had recorded immaterial interest on the tax positions during the year ended December 31, 2020, 2019 and 2018.

The Company files income tax returns in the United States as well as in certain state and in certain country jurisdictions. Kiniksa US's federal and state income tax returns are subject to tax examinations for the tax years ended December 31, 2017 and subsequent years. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service and state tax authorities to the extent utilized in a future period. There are currently no income tax examinations pending.

## 12. Net Loss per Share

The rights, including the liquidation and dividend rights, of the holders of Class A, Class B, Class A1 and Class B1 common shares are identical, except with respect to voting, transferability and conversion (see Note 8). As the liquidation and dividend rights are identical, losses are allocated on a proportionate basis and the resulting net loss per share attributed to common shareholders will, therefore, be the same for both Class A and Class B common shares on an individual or combined basis.

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**(Amounts in thousands, except share and per share amounts)**

Basic and diluted net loss per share attributable to common shareholders was calculated as follows:

	Years Ended December 31,		
	2020	2019	2018
<b>Numerator:</b>			
Net loss attributable to common shareholders	\$ (161,381)	\$ (161,867)	\$ (103,227)
<b>Denominator:</b>			
Weighted average common shares outstanding—basic and diluted	61,842,722	54,049,477	29,547,427
<b>Net loss per share attributable to common shareholders— basic and diluted</b>	<b>\$ (2.61)</b>	<b>\$ (2.99)</b>	<b>\$ (3.49)</b>

The Company's unvested restricted shares and restricted share units have been excluded from the computation of basic net loss per share attributable to common shareholders.

The Company's potentially dilutive securities, which include share options, unvested restricted shares and unvested RSUs, have been excluded from the computation of diluted net loss per share attributable to common shareholders as the effect would be to reduce the net loss per share attributable to common shareholders. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common shareholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common shareholders for the periods indicated because including them would have had an anti-dilutive effect:

	As of December 31,		
	2020	2019	2018
Share options to purchase common shares	9,958,858	8,491,734	5,960,939
Unvested restricted common shares	—	—	877,219
Unvested RSUs	205,312	328,296	—
	<u>10,164,170</u>	<u>8,820,030</u>	<u>6,838,158</u>

**13. Commitments and Contingencies**

*License Agreements*

The Company has entered into license agreements with various parties under which it is obligated to make contingent and non-contingent payments (see Note 10).

*Manufacturing Commitments*

The Company entered into agreements with several contract manufacturing organizations to provide preclinical and clinical trial materials. As of December 31, 2020, the Company had committed to minimum payments under these agreements totaling \$16,178 which are due during the year ending December 31, 2021.

*Riloncept Long-Term Incentive Plan*

During the year ended December 31, 2020, the Company granted a cash award and the First RSU Award to employees under the RLTI. The cash award vests upon the achievement of the RLTI Milestone, subject to the recipient's continued employment. The First RSU Award becomes eligible to vest upon the achievement of the RLTI

**KINIKSA PHARMACEUTICALS, LTD.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**(Amounts in thousands, except share and per share amounts)**

Milestone, and will vest upon the first anniversary of such date, subject to the recipient's continued employment through that date. As of December 31, 2020, the Company estimates, but has not accrued the cash payments of \$2,013 under the RLTP. In the event the RLTP Milestone is not achieved, the cash award will not be paid and the First RSU Award will not vest.

***Indemnification Agreements***

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors, officers and other key personnel that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or other key personnel. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company does not believe that the outcome of any claims under indemnification arrangements will have a material effect on its financial position, results of operations or cash flows, and it has not accrued any liabilities related to such obligations in its consolidated financial statements as of December 31, 2020, 2019 or 2018.

***Legal Proceedings***

The Company is not a party to any litigation and does not have contingency reserves established for any litigation liabilities.

**14. Benefit Plans**

The Company has established a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The Company provides matching contributions of 100% of the first 3% of each participant's salary contributed, plus 50% for each of the next 2% contributed. Employees are immediately and fully vested in their own contributions and the Company's match. During the years ended December 31, 2020, 2019 and 2018, the Company contributed \$993, \$851 and \$315, respectively, to the plan.

**KINIKSA PHARMACEUTICALS, LTD.  
2018 EMPLOYEE SHARE PURCHASE PLAN**

**OFFERING DOCUMENT**

This document (this "**Offering Document**") is adopted by the Compensation Committee of the Board of Directors of Kiniksa Pharmaceuticals, Ltd. (the "**Company**"), in its capacity as Administrator of the Kiniksa Pharmaceuticals, Ltd. 2018 Employee Share Purchase Plan (the "**Plan**") and is made a part of the Plan. A copy of this Offering Document shall be attached to the Plan. Defined terms used in this Offering Document without definition have the meanings specified in the Plan.

This Offering Document shall be effective for the Offering Period under the Plan commencing July 1, 2019, shall supersede any prior Offering Documents under the Plan as of its effectiveness and shall apply to subsequent Offering Periods under the Plan until this Offering Document is terminated, amended or modified by the Administrator or a new Offering Document is adopted by the Administrator.

- Eligibility Requirements:** Eligible Employees of the Company and the Designated Subsidiaries indicated below shall be eligible to participate, provided they meet the other eligibility requirements set forth in the Plan.
- Designated Subsidiaries:** All Subsidiaries of the Company organized under the laws of any state of the United States of America, except any such Subsidiary that the Administrator has specifically designated as ineligible to participate in the Plan, and each other Subsidiary that the Administrator has specifically designated as eligible to participate in the Plan.
- Offering Periods to Commence:** On each January 1 and July 1.
- Length of Offering Periods:** Six months.
- Purchase Dates:** The Purchase Date with respect to an Offering Period shall occur on the final Trading Day of the Offering Period.
- Purchase Price:** On each Purchase Date, the purchase price for a Share will be 85% of the Fair Market Value of a Share on the Enrollment Date or on the Purchase Date, whichever is lower; provided, however, that the Purchase Price may be adjusted by the Administrator pursuant to the Plan; provided, further, that the Purchase Price shall not be less than the par value of a Share.
- Contributions:** A Participant may elect to have up to 10% of the Participant's Compensation deducted on each payday on an after-tax basis for use in purchasing Common Shares

pursuant to the Plan and subject to the limitations on purchasing Common Shares thereunder.

**Enrollment:**

Eligible Employees must enroll in an Offering Period by delivering to the Company or its designee at least seven days prior to the first day of the Offering Period a completed subscription agreement in the form provided by the Company (a "**Subscription Agreement**").

**Changes in Contribution Rates:**

Participants may decrease their rate of contributions once during an Offering Period by delivering a completed Subscription Agreement to the Company or its designee at least seven days prior to the final day of the Offering Period and the decrease will become effective on the first payroll date that occurs at least seven days after the Company's (or its designee's) receipt of the new Subscription Agreement. Participants may not increase their rate of contributions during an Offering Period. Participants may increase or decrease their rate of contributions for future Offering Periods by delivering to the Company or its designee at least seven days prior to the first day of the Offering Period a completed Subscription Agreement.

**Withdrawals:**

A Participant may withdraw from an Offering Period not less than seven days prior to the final day of the Offering Period.

If a Participant withdraws from an Offering Period, the Participant may elect to participate again in any subsequent Offering Period so long as the Participant is still eligible to participate in the Plan.

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**KINIKSA PHARMACEUTICALS, LTD.  
2018 EMPLOYEE SHARE PURCHASE PLAN**

**OFFERING DOCUMENT**

This document (this "**Offering Document**") is adopted by the Compensation Committee of the Board of Directors of Kiniksa Pharmaceuticals, Ltd. (the "**Company**"), in its capacity as Administrator of the Kiniksa Pharmaceuticals, Ltd. 2018 Employee Share Purchase Plan (the "**Plan**") and is made a part of the Plan. A copy of this Offering Document shall be attached to the Plan. Defined terms used in this Offering Document without definition have the meanings specified in the Plan.

This Offering Document shall be effective for the Offering Period under the Plan commencing January 1, 2021, shall supersede any prior Offering Documents under the Plan as of its effectiveness and shall apply to subsequent Offering Periods under the Plan until this Offering Document is terminated, amended or modified by the Administrator or a new Offering Document is adopted by the Administrator.

**Eligibility Requirements:** Eligible Employees of the Company and the Designated Subsidiaries indicated below shall be eligible to participate, provided they meet the other eligibility requirements set forth in the Plan.

**Designated Subsidiaries:** All Subsidiaries of the Company organized under the laws of any state of the United States of America (except any such Subsidiary that the Administrator has specifically designated as ineligible to participate in the Plan) and each other Subsidiary that the Administrator has specifically designated as eligible to participate in the Plan.

**Offering Periods to Commence:** On each January 16 and July 16 (ending on each of July 15 and January 15, respectively); provided, however, that the initial Offering Period under this Offering Document (the "Initial Offering Period") shall commence on January 1, 2021 (such date, the "Initial Offering Commencement Date") and end July 15, 2021 (the "Initial Offering End Date").

**Length of Offering Periods:** Six months; provided, however, that the Initial Offering Period will commence on the Initial Offering Commencement Date and end on the Initial Offering End Date.

**Purchase Dates:** The Purchase Date with respect to an Offering Period shall occur on the final Trading Day of the Offering Period.

- Purchase Price:** On each Purchase Date, the purchase price for a Share will be 85% of the Fair Market Value of a Share on the Enrollment Date or on the Purchase Date, whichever is lower; provided, however, that the Purchase Price may be adjusted by the Administrator pursuant to the Plan; provided, further, that the Purchase Price shall not be less than the par value of a Share.
- Contributions:** A Participant may elect to have up to 10% of the Participant's Compensation deducted on each payday on an after-tax basis for use in purchasing Common Shares pursuant to the Plan and subject to the limitations on purchasing Common Shares thereunder.
- Enrollment:** Eligible Employees must enroll in an Offering Period by delivering to the Company or its designee at least seven days prior to the first day of the Offering Period a completed subscription agreement in the form provided by the Company (a "**Subscription Agreement**").
- Changes in Contribution Rates:** Participants may decrease their rate of contributions once during an Offering Period by delivering a completed Subscription Agreement to the Company or its designee at least seven days prior to the final day of the Offering Period and the decrease will become effective on the first payroll date that occurs at least seven days after the Company's (or its designee's) receipt of the new Subscription Agreement. Participants may not increase their rate of contributions during an Offering Period. Participants may increase or decrease their rate of contributions for future Offering Periods by delivering to the Company or its designee at least seven days prior to the first day of the Offering Period a completed Subscription Agreement.
- Withdrawals:** A Participant may withdraw from an Offering Period not less than seven days prior to the final day of the Offering Period.
- If a Participant withdraws from an Offering Period, the Participant may elect to participate again in any subsequent Offering Period so long as the Participant is still eligible to participate in the Plan.

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## AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Amended and Restated Employment Agreement (this "Agreement") is made and entered into as of May 29, 2018, 2018 (the "Effective Date"), by and between Kiniksa Pharmaceuticals Corp., a Delaware corporation (the "Company"), and Thomas W. Beetham (the "Employee").

WHEREAS, the operations of the Company and its Affiliates (as defined below) are a complex matter requiring direction and leadership in a variety of arenas;

WHEREAS, the Employee is currently serving as the Company's Executive Vice President, Chief Legal Officer and Corporate Development and possesses certain experience and expertise that qualify Employee to provide the direction and leadership required by the Company and its Affiliates;

WHEREAS, the Company and the Employee are party to an Employment Agreement dated as of November 1, 2016 (the "Original Agreement"); and

WHEREAS, the Company and the Employee wish to amend and restate the Original Agreement in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, terms, provisions and conditions set forth in this Agreement, the Company and Employee hereby agree:

1. Definitions. Words or phrases that are initially capitalized or are within quotation marks shall have the meanings provided in this Section and as provided elsewhere herein. For purposes of this Agreement, the following definitions apply:

(a) "Affiliates" shall mean all persons and entities directly or indirectly controlling, controlled by or under common control with the Company, where control may be by management authority, contract or equity interest.

(b) "Cause" shall mean:

(i) The Employee's gross negligence or willful misconduct in performance of Employee's duties to the Company, where such gross negligence or willful misconduct has resulted in or reasonably could result in material damage to the Company or any of its Affiliates or successors; or

(ii) The Employee's commission of any act of fraud, embezzlement or professional dishonesty with respect to the business of the Company or any of its Affiliates; or

(iii) The Employee's commission of a felony or crime involving moral turpitude; or

(iv) The Employee's material breach of any provision of this Agreement or any other written agreement between Employee and the Company; or

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(v) The Employee's failure to comply with lawful directives of the Company, which has caused or which reasonably could cause damage to the Company or any of its Affiliates or successors.

(c) "Change in Control" shall mean:

(i) a sale of all or substantially all of the Parent's assets; or

(ii) any merger, consolidation or other business combination transaction of the Parent with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital shares of the Parent outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Parent (or the surviving entity) outstanding immediately after such transaction; or

(iii) the direct or indirect acquisition (including by way of a tender or exchange offer) by any person, or persons acting as a group, of beneficial ownership or a right to acquire beneficial ownership of shares representing a majority of the voting power of the then outstanding shares of capital shares of the Parent. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur:

(A) on account of the acquisition of shares of voting capital stock by any institutional investor or any affiliate thereof or any other person, or persons acting as a group, that acquires the Parent's shares of voting capital shares in a transaction or series of related transactions that are primarily a private financing transaction for the Parent, or

(B) solely because the level of ownership held by any institutional investor or any affiliate thereof or any other person, or persons acting as a group (the "Subject Person"), exceeds the designated percentage threshold of the outstanding voting capital shares as a result of a repurchase or other acquisition of voting capital shares by the Parent reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition voting capital shares by the Parent, and after such share acquisition, the Subject Person becomes the owner of any additional voting capital shares that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting capital shares owned by such Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur.

(d) "Code" shall mean the Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder.

(e) "Employee Benefit Plan" shall have the meaning ascribed to such term in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended.

(f) "Founder Invention and Non-Disclosure Agreement" shall mean the Founder Invention and Non-Disclosure Agreement between the Employee and Company dated as of September 18, 2015.

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(g) “Founder Non-Competition and Non-Solicitation Agreement” shall mean the Founder Non-Competition and Non-Solicitation Agreement between the Employee and Company dated as of September 18, 2015.

(h) “Good Reason” shall mean any of the following, occurring without the Employee’s written consent:

(i) a demotion of the Employee to a position with responsibilities substantially less than the Employee’s prior position; provided that, a change in title, reporting relationships and/or responsibilities of the Employee could, but do not necessarily in and of themselves, individually or in the aggregate, constitute a demotion for purposes of this Section 1(h)(i); and in all instances, the determination of whether a demotion has occurred shall be made by the Company in good faith; or

(ii) a requirement that the Employee relocate Employee’s primary reporting location to a location more than fifty (50) miles from the location of the Company’s current offices in Lexington, Massachusetts as of the Effective Date; or

(iii) a reduction of more than five percent (5%) of Employee’s Base Salary, other than in connection with a reduction of similar magnitude to the base salaries of employees who are similarly situated to Employee; or

(iv) any failure by the Company to comply with any of the provisions of Section 4(a), 4(b), 4(c) or 4(d) hereof, other than insubstantial or inadvertent failures not in bad faith that are remedied by the Company promptly after receipt of notice thereof given by the Employee; or

(v) a breach by the Company of this Agreement.

(i) “Parent” shall mean the Company’s parent entity, Kiniksa Pharmaceuticals, Ltd., a Bermuda exempted company.

(j) “Parent Board” shall mean the board of directors of the Parent.

(k) “Person” shall mean an individual, a corporation, a limited liability company, an association, a partnership, an estate, a trust and any other entity or organization, other than the Company or any of its Affiliates.

2. Acceptance and Term. Subject to the terms and conditions set forth in this Agreement, the Company hereby offers, and the Employee hereby accepts, continuing employment on an at-will basis. Subject to earlier termination as hereinafter provided, the Employee’s employment shall continue until terminated pursuant to Section 5 hereof (the “Term”).

3. Position, Duties and Responsibilities.

(a) During the Term, the Employee shall initially serve the Company as its Executive Vice President, Chief Legal Officer and Corporate Development, and shall initially report to the Chief Executive Officer of the Company. During the Term, the Employee shall be employed by

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the Company on a full-time basis and shall perform the duties and responsibilities of Employee's position.

(b) During the Term, the Employee shall devote Employee's full business time and Employee's best efforts, business judgment, skill and knowledge exclusively to the advancement of the business and interests of the Company and its Affiliates and to the discharge of Employee's duties and responsibilities hereunder. During the Term, the Employee shall not engage in any other business activity or serve in any industry, trade, professional, governmental or academic position unless Employee first has obtained consent from the Chief Executive Officer of the Company.

(c) Immediately upon termination of Employee's employment with the Company for any reason, Employee will be deemed to resign any and all positions held by Employee, whether as an officer or director of the Company, the Parent or any Affiliate of the Company, or as a member of any committees thereof.

4. Compensation and Benefits. As compensation for all services performed by the Employee during the Term and subject to the Employee's performance of Employee's duties and obligations to the Company and its Affiliates, pursuant to this Agreement or otherwise, the Company shall provide the Employee with the following compensation and benefits:

(a) Base Salary. The Company shall pay the Employee an annual base salary of \$375,000, payable in accordance with the Company's standard payroll practices and procedures and subject to change from time-to-time in the Company's sole discretion (such base salary, as from time-to-time changed, the "Base Salary").

(b) Discretionary Bonus Compensation. During the Term, the Employee shall be eligible to receive an annual cash bonus ("Discretionary Annual Bonus") with an initial target level of 35% of Employee's Base Salary (the "Target Bonus"). The applicable performance goals shall be determined by the Company as soon as practicable at the beginning of each calendar year. The actual Discretionary Annual Bonus for each calendar year, if any, shall be determined in the sole and absolute discretion of the Company and shall be paid to Employee no later than March 15<sup>th</sup> of the calendar year immediately following the calendar year in which it was earned. For the avoidance of doubt, the Company reserves the right to not pay any Discretionary Annual Bonuses even if all performance goals are achieved or exceeded.

(c) Vacation. During the Term, the Employee shall be entitled to earn vacation at the rate of four (4) weeks per year, to be taken at such times and intervals as shall be determined by the Employee, subject to the reasonable business needs of the Company. Vacation shall otherwise be governed by the policies of the Company, as in effect from time-to-time.

(d) Other Benefits. During the Term, the Employee shall be entitled to participate, to the extent eligible, in any and all Employee Benefit Plans from time-to-time in effect for employees of the Company generally, except to the extent any such Employee Benefit Plan is in a category of benefit otherwise provided to the Employee under this Agreement (e.g., a severance pay plan). Such participation shall be subject to the terms of the applicable plan documents and generally applicable Company policies. The Company may alter, modify, add to or discontinue its Employee Benefit Plans at any time as it, in its sole judgment, determines to be appropriate, without recourse by the Employee.

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(e) Business Expenses. The Company shall pay or reimburse the Employee for all reasonable business expenses incurred or paid by the Employee in the performance of Employee's duties and responsibilities hereunder, subject to reasonable substantiation and documentation and the Company's standard expense reimbursement policies and procedures.

5. Termination of Employment and Severance Benefits. The Employee's employment with the Company shall terminate under the following circumstances:

(a) Death. In the event of the Employee's death, the Employee's employment hereunder shall immediately and automatically terminate.

(b) Disability.

(i) The Company may terminate the Employee's employment hereunder, upon notice to the Employee, in the event that the Employee becomes disabled during Employee's employment hereunder through any illness, injury, accident or condition of either a physical or psychological nature and, as a result, is unable to perform substantially all of Employee's duties and responsibilities hereunder, notwithstanding the provision of any reasonable accommodation, for ninety (90) consecutive days.

(ii) The Parent Board may designate another employee to act in the Employee's place during any period of the Employee's disability. Notwithstanding any such designation, the Employee shall continue to receive the Base Salary in accordance with Section 4(a) and benefits in accordance with Section 4(d), to the extent permitted by the then-current terms of the applicable benefit plans, until the Employee becomes eligible for disability income benefits under any disability income plan or until the termination of Employee's employment, whichever shall first occur.

(iii) While receiving disability income payments under any disability income plan, the Employee shall not be entitled to receive any Base Salary under Section 4(a) hereof, but shall continue to participate in Company benefit plans in accordance with Section 4(d) and the terms of such plans, until the termination of Employee's employment.

(c) By the Company for Cause. The Company may terminate the Employee's employment hereunder for Cause at any time upon written notice to the Employee setting forth in reasonable detail the nature of such Cause.

(d) By the Company Other than for Cause. The Company may terminate the Employee's employment hereunder other than for Cause at any time upon written notice to the Employee.

(e) By the Employee for Good Reason. The Employee may terminate Employee's employment hereunder for Good Reason (i) by providing notice to the Company specifying in reasonable detail the condition giving rise to the Good Reason no later than thirty (30) days following the occurrence of that condition; (ii) by providing the Company a period of thirty (30) days to remedy the condition and so specifying in the notice; and (iii) by terminating Employee's employment for Good Reason within thirty (30) days following the expiration of the period to remedy if the Company fails to remedy the situation.

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(f) By the Employee Other than for Good Reason. The Employee may terminate Employee's employment hereunder at any time upon forty-five (45) days' notice to the Company. In the event of termination of the Employee pursuant to this Section 5(f), the Company may elect to waive the period of notice, or any portion thereof.

6. Severance Payments and Other Matters Related to Separation from Service.

(a) Final Compensation. Following the termination of the Employee's employment for any reason, the Company shall pay to the Employee: (i) any Base Salary earned but not paid during the final payroll period of the Employee's employment through the date of termination, (ii) pay for any vacation time earned but not used through the date of termination, (iii) any unpaid Discretionary Annual Bonus due to Employee for the calendar year prior to the year in which the termination occurs, and (iv) any business expenses incurred by the Employee but un-reimbursed on the date of termination, provided that such expenses and required substantiation and documentation are submitted within thirty (30) days of termination and that such expenses are reimbursable under Company policy (all of the foregoing, "Final Compensation"). Any Base Salary and any earned, unused vacation time shall be paid to the Employee at the time required by law, but not later than the Company's next regular pay date following the date of termination. Any reimbursable business expenses shall be paid within sixty (60) days following the date that the Employee submits such expenses to the Company. Other than as expressly provided in Section 6(b), the Company shall have no further obligation to the Employee hereunder.

(b) Severance. In the event the Employee's employment terminates pursuant to Section 5(a), 5(b), 5(d) or 5(e) of this Agreement, in addition to Final Compensation, (i) the vesting of all unvested equity awards of Parent or its Affiliates that vest solely based on the passage of time then held by Employee (including, without limitation, restricted stock, restricted stock units, stock options or other equity-based awards, whether granted to or held by Employee either before or after the date of this Agreement) shall accelerate by twelve (12) months (for the avoidance of doubt, with any equity awards that vest in whole or in part based on the attainment of performance-vesting conditions being governed by the terms of the applicable award agreement); and (ii) the Company shall pay the Employee (A) a lump sum equal to the Base Salary (such payment, the "Severance Payment"), (B) the Post-Termination Bonus (as defined below) and (C) an additional one-time bonus of \$16,500 (such payment, the "One-Time Bonus"). Subject to Sections 6(d) and 7(a) of this Agreement (x) the Severance Payment and the One-Time Bonus shall be paid by the sixtieth (60th) day following the date of termination and (y) the Post-Termination Bonus shall be paid at or around the time that annual bonuses are paid to other similarly situated employees of the Company, but in no event later than March 15 of the year following the year in which the Separation from Service occurs; provided that if the termination occurs during the twelve (12) month period following a Change in Control, (i) the Post-Termination Bonus shall be paid by the sixtieth (60th) day following the date of termination and (ii) notwithstanding the provisions of the Parent's 2018 Incentive Award Plan, the Parent's 2015 Equity Incentive Plan or any other equity plan, the Employee shall be immediately 100% fully vested in all unvested equity awards of Parent or its Affiliates that vest solely based on the passage of time (including, without limitation, restricted stock, restricted stock units, stock options or other equity-based awards, whether granted to or held by Employee either before or after the date of this Agreement, and for the avoidance of doubt, with any equity awards that vest in whole or in part based on the attainment of performance-vesting conditions being governed by the terms of the applicable award agreement).

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(c) Post-Termination Bonus. For the purposes of this Agreement, the “Post-Termination Bonus” shall be a pro-rata share of the Target Bonus for the calendar year in which the termination occurs; provided that if the termination occurs in the twelve (12) month period following a Change in Control, the Post-Termination Bonus shall be equal to the Target Bonus for the calendar year in which such termination occurs.

(d) Release of Claims. The Employee’s right to receive the payments and benefits set forth in Section 6(b) is conditioned on the Employee’s signing and returning to the Company (and not revoking) a general release of claims in the form provided by the Company at the time the Employee’s employment is terminated (the “Employee Release”). The Employee must sign and return the Employee Release, if at all, by the deadline specified therein, which deadline shall in no event be later than the sixtieth (60th) calendar day following the termination date. The Employee Release shall take effect on the expiration of any revocation period specified therein.

(e) Effect of Termination. Payment by the Company of Final Compensation and the payments and benefits set forth in Section 6(b) shall constitute the sole obligations of the Company in connection with the termination of the Employee’s employment hereunder. Except for any right of the Employee to continue medical and dental plan participation in accordance with applicable law, benefits shall terminate pursuant to the terms of the applicable benefit plans based on the date of termination of the Employee’s employment without regard to any of the payments set forth in Section 6(b).

(f) Survival. Provisions of this Agreement shall survive any termination if so provided herein or if necessary or desirable to accomplish the purposes of other surviving provisions, including without limitation the obligations of the Employee under Section 8 hereof. The obligation of the Company to make, and the right of the Employee to retain, any payments or benefits set forth in Section 6(b) is expressly conditioned upon the Employee’s continued full performance of obligations under Section 8, the Founder Invention and Non-Disclosure Agreement, and the Founder Non-Solicitation and Non-Competition Agreement.

7. Timing of Payments and Section 409A.

(a) Notwithstanding anything to the contrary in this Agreement, if at the time of the Employee’s termination of employment, the Employee is a Specified Employee (as defined below), such amounts that may be subject to the Specified Employee rules set forth at (a)(2)(B)(i) of Section 409A of the Code (“Section 409A”) and payable under Section 6 on account of such Separation from Service (as defined below) that would (but for this provision) be payable within six (6) months following the date of termination, shall instead be paid on the next business day following the expiration of such six (6) month period.

(b) For purposes of this Agreement, “Separation from Service” shall be determined in a manner consistent with subsection (a)(2)(A)(i) of Section 409A, and the term “Specified Employee” shall mean an individual determined by the Company to be a specified employee as defined in subsection (a)(2)(B)(i) of Section 409A.

(c) Each payment made under this Agreement shall be treated as a separate payment and the right to a series of installment payments under this Agreement is to be treated as a right to a series of separate payments.

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(d) The Employee's right to reimbursement for business expenses hereunder shall be subject to the following additional rules: (i) the amount of expenses eligible for reimbursement during any calendar year shall not affect the expenses eligible for reimbursement in any other taxable year, (ii) reimbursement shall be made not later than December 31 of the calendar year following the calendar year in which the expense was incurred, and (iii) the right to reimbursement is not subject to liquidation or exchange for any other benefit.

(e) In no event shall the Company have any liability relating to any payment or benefit under this Agreement failing to comply with, or be exempt from, the requirements of Section 409A.

8. Confidentiality; Cooperation

(a) Confidentiality and Other Covenants. As a condition of Employee's employment with the Company, the Employee has executed the Founder Invention and Non-Disclosure Agreement and the Founder Invention and Non-Disclosure Agreement, both of which the Company and Employee acknowledge and agree shall be considered separate contracts. In addition, Employee represents and warrants that Employee shall be able to and will continue to perform the duties of Employee's position without utilizing any material confidential and/or proprietary information that Employee may have obtained in connection with employment with any prior employer, and that Employee shall not (i) disclose any such information to the Company, or (ii) induce any Company employee to use any such information, in either case in violation of any confidentiality obligation, whether by agreement, by operation of law or otherwise.

(b) Litigation and Regulatory Cooperation. During and after Employee's employment, Employee shall reasonably cooperate with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while the Company employed Employee; provided that, the Employee will not have an obligation under this paragraph with respect to any claim that the Employee has filed directly against the Company or related persons or entities. The Employee's reasonable cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after Employee's employment, Employee also shall reasonably cooperate with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while Employee was employed by the Company, provided Employee will not have any obligation under this paragraph with respect to any claim that Employee has filed directly against the Company or related persons or entities. The Company shall reimburse Employee for any reasonable out-of-pocket expenses incurred in connection with Employee's performance of obligations pursuant to this Section 8(b).

9. Section 280G; Limitations on Payment

(a) If any payment or benefit Employee shall or may receive from the Company or otherwise (a "280G Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then any such 280G Payment provided pursuant to this Agreement (a "Payment") shall be equal to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after

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reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Employee's receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "Reduction Method") that results in the greatest economic benefit for Employee. If more than one method of reduction shall result in the same economic benefit, the items so reduced shall be reduced pro rata (the "Pro Rata Reduction Method").

(b) Notwithstanding any provision of Section 9(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Employee as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless Employee and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the change of control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the change of control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 9. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to Employee and the Company within fifteen (15) calendar days after the date on which Employee's right to a 280G Payment becomes reasonably likely to occur (if requested at that time by Employee or the Company) or such other time as requested by Employee or the Company.

(d) If Employee receives a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 9(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, Employee agrees to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 9(a)) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 9(a), Employee shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

(e) Notwithstanding anything contained herein to the contrary, the requirements of this Section 9 shall apply only to the extent the Company has completed an "initial public offering" which results in the Company's stock being publicly traded on an applicable public exchange.

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10. Indemnification. The Company shall indemnify the Employee to the extent provided in its then current Certificate of Incorporation or By-Laws. The Employee agrees to promptly notify the Company of any actual or threatened claim arising out of or as a result of Employee's employment with the Company. The parties acknowledge that the Employee is also indemnified by the Parent to the extent set forth in the Indemnification Agreement between the Parent and Employee dated December 16, 2015.

11. Withholding. All payments made by the Company under this Agreement shall be reduced by any tax or other amounts required to be withheld by the Company under applicable law.

12. Assignment.

(a) Neither the Company nor the Employee may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other; provided, however, that the Company may assign its rights and obligations under this Agreement without the consent of the Employee in the event that (i) the Employee is transferred to a position with any of the Affiliates or (ii) the Company shall hereafter effect a reorganization, consolidate with, or merge into, any Person or transfer all or substantially all of its properties or assets to any Person. This Agreement shall inure to the benefit of and be binding upon the Company and the Employee, their respective successors, executors, administrators, heirs and permitted assigns.

(b) The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to assume expressly and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. As used in this Agreement, "Company," shall mean the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid.

13. Severability. If any covenants or such other provisions of this Agreement are found to be invalid or unenforceable by a final determination of a court of competent jurisdiction, (a) the remaining terms and provisions hereof shall be unimpaired, and (b) the invalid or unenforceable term or provision hereof shall be deemed replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision hereof.

14. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of either party to require the performance of any term or obligation of this Agreement, or the waiver by either party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

15. Notices. Any and all notices, requests, demands and other communications provided for by this Agreement shall be in writing and shall be effective when delivered in person, consigned to a reputable national courier service or deposited in the United States mail, postage prepaid, registered or certified, and addressed to the Employee at Employee's last known address on the books of the Company or, in the case of the Company, at its principal place of business, attention of the Compensation Committee of the Parent Board with a copy to the attention of the Chief Legal Officer, or to such other address as either party may specify by notice to the other actually received. Any notice so addressed shall be deemed to be given or received (a) if delivered by hand, on the date of such delivery, (b) if mailed by courier or by overnight mail, on the first business day following the date of

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such mailing, and (c) if mailed by registered or certified mail, on the third business day after the date of such mailing.

16. Entire Agreement. This Agreement, together with the Founder Invention and Non-Disclosure Agreement and the Founder Non-Solicitation and Non-Competition Agreement, constitute the entire understanding and agreement of the Company and the Employee regarding the terms and conditions of Employee's employment with the Company. This Agreement supersedes all prior negotiations, discussions, correspondence, communications, understandings, and agreements between the Company and the Employee (including any offer letter given to Employee) relating to the subject matter of this Agreement, including (without limitation) the Original Agreement. Notwithstanding the foregoing, the Company and the Employee acknowledge that the Employee holds restricted stock of the Parent subject to a Restricted Stock Agreement and that options and other equity awards have been and, subject to the discretion and approval of the Parent Board, may be granted to Employee under and pursuant to the Parent's 2015 Equity Incentive Plan and any amendments thereto, as well as additional grants under the Parent's 2018 Incentive Award Plan or any additional equity plans of the Parent or its Affiliates, and the award agreements related to such plans (collectively, the "Awards"); and to the extent that the terms of this Agreement (including without limitation, Section 6(b)) accelerate the vesting of any such Awards, then the terms of this Agreement are intended to be in addition to the vesting provisions of such Awards and are not intended to diminish any vesting rights contained in such Awards.

17. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Employee and by an expressly authorized representative of the Company.

18. Headings. The headings and captions in this Agreement are for convenience only and in no way define or describe the scope or content of any provision of this Agreement.

19. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

20. Governing Law. This is a Massachusetts contract and shall be construed and enforced under and be governed in all respects by the laws of the Commonwealth of Massachusetts, without regard to the conflict of laws principles thereof. The Company and Employee agree that any dispute concerning this Agreement shall be heard exclusively by a court of competent jurisdiction within the Commonwealth of Massachusetts. By signing below, Employee acknowledges that Employee is subject to the personal jurisdiction of the Massachusetts courts in any county where the Company has operations or facilities. The Employee and Company further agree that any such dispute shall be tried by a judge alone, and they hereby waive and forever renounce the right to a trial before a civil jury in any such dispute.

[Remainder of Page Intentionally Left Blank]

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IN WITNESS WHEREOF, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized representative, and by the Employee, as of the date first above written.

**EMPLOYEE**

**KINIKSA PHARMACEUTICALS CORP.**

/s/ Thomas Beetham  
Name: Thomas W. Beetham

By: /Sanj K. Patel  
Name: Sanj K. Patel  
Title: Chief Executive Officer

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## KINIKSA PHARMACEUTICALS, LTD.

## Restricted Stock Agreement

AGREEMENT made this 18 day of September, 2015, between Kiniksa Pharmaceuticals, Ltd., a Bermuda exempted company (the "Company"), and Thomas Beetham (the "Founder").

For valuable consideration, receipt of which is acknowledged, the parties hereto agree as follows:

1. Purchase of Shares.

The Company shall allot and issue to the Founder, and the Founder shall subscribe for and shall purchase from the Company, subject to the terms and conditions set forth in this Agreement, 200,000 common shares (the "Shares") US\$0.0001 par value, of the Company ("Common Stock"), at a purchase price of US\$0.0001 per share. The aggregate purchase price for the Shares shall be paid by the Founder by check payable to the order of the Company or such other method as may be acceptable to the Company. Upon receipt by the Company of payment for the Shares, the Company shall issue to the Founder one or more certificates in the name of the Founder for that number of Shares purchased by the Founder. The Founder agrees that the Shares shall be subject to the purchase options set forth in Sections 2 and 5 of this Agreement and the restrictions on transfer set forth in Section 4 of this Agreement.

2. Purchase Option.

(a) In the event that the Founder ceases to be employed by the Company for any reason or no reason, with or without cause, within 48 months from the Vesting Commencement Date (as defined below), the Company shall have the right and option (the "Purchase Option") to purchase from the Founder, for a sum of US\$0.0001 per share (the "Option Price"), some or all of the Unvested Shares (as defined below).

"Unvested Shares" means the total number of Shares multiplied by the Applicable Percentage at the time the Purchase Option becomes exercisable by the Company. The "Applicable Percentage" shall be (i) 100% during the period ending on the first anniversary of the Vesting Commencement Date (as defined below), (ii) 75% on the first anniversary of the Vesting Commencement Date, (iii) 75% less 2.0833% for each month of employment completed by the Founder with the Company from and after the first anniversary of the Vesting Commencement Date, and (iv) zero on or after the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean August 1, 2015.

(b) For purposes of this Agreement, employment with the Company shall include employment with a parent or subsidiary of the Company and service to the Company as an advisor, consultant or member of the Board of Directors of the Company.

(c) If, after a Sale (as defined below) of the Company, the Founder's employment with the Company is terminated (i) by the Company without cause (as defined

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below) or (ii) by the Founder for Good Reason (as defined below), then the vesting schedule of the Shares shall be accelerated so that all then Unvested Shares shall immediately become free from the Purchase Option on the date of such termination.

(d) For purposes of Section 2(c), the Founder's employment shall be considered terminated without cause when such termination does not exist upon (i) a good faith finding by the Board of Directors of the Company that the Founder's gross negligence or repeated and willful misconduct in performance of his duties to the Company, where such gross negligence or repeated and willful misconduct has resulted in material damage to the Company or any of its Affiliates or successors; (ii) the Founder's commission of any act of fraud, embezzlement or material professional dishonesty with respect to the business of the Company or any of its Affiliates; (iii) the Founder's commission of a felony or crime involving moral turpitude; or (iv) the Founder's material breach of any provision of this Agreement or any other written agreement between the Founder and the Company which breach is not cured within twenty days after written notice thereof.

(e) For purposes of Section 2(c), "Good Reason" shall exist upon any of the following occurring without the prior consent of the Founder (i) a requirement that the Founder relocate his primary reporting location to a location more than fifty (50) miles from the location of the Company subsidiary's offices in Wellesley, Massachusetts; (ii) a material diminution by the Company of the Founder's annual compensation; (iii) a breach by the Company (or its subsidiaries) of any written agreement between the Company (or its subsidiaries) and Founder; or (iv) if at any point more than twelve (12) months after the date of this Agreement, a demotion of the Founder to a position with responsibilities substantially less than the Founder's prior position.

3. Exercise of Purchase Option and Closing.

(a) The Company may exercise the Purchase Option by delivering or mailing to the Founder (or his estate), within 90 days after the termination of the employment of the Founder with the Company, a written notice of exercise of the Purchase Option. Such notice shall specify the number of Shares to be purchased. If and to the extent the Purchase Option is not so exercised by the giving of such a notice within such 90-day period, the Purchase Option shall automatically expire and terminate effective upon the expiration of such 90-day period.

(b) Within 10 days after delivery to the Founder of the Company's notice of the exercise of the Purchase Option pursuant to subsection (a) above, the Founder (or his estate) shall, pursuant to the provisions of the Joint Escrow Instructions referred to in Section 7 below, tender to the Company at its principal offices the certificate or certificates representing the Shares which the Company has elected to purchase in accordance with the terms of this Agreement, duly endorsed in blank or with duly endorsed instrument of transfer attached thereto, all in form suitable for the transfer of such Shares to the Company. Promptly following its receipt of such certificate or certificates, the Company shall pay to the Founder the aggregate Option Price for such Shares (provided that any delay in making such payment shall not invalidate the Company's exercise of the Purchase Option with respect to such Shares).

(c) After the time at which any Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Founder on account of such Shares or permit the Founder to exercise any of the privileges or rights of a holder with respect to such Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Shares.

(d) The Option Price may be payable, at the option of the Company, in cancellation of all or a portion of any outstanding indebtedness of the Founder to the Company or in cash (by check) or both.

(e) The Company shall not purchase any fraction of a Share upon exercise of the Purchase Option, and any fraction of a Share resulting from a computation made pursuant to Section 2 of this Agreement shall be rounded to the nearest whole Share (with any one-half Share being rounded upward).

(f) The Company may assign its Purchase Option to one or more persons or entities.

4. Restrictions on Transfer.

(a) The Founder shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any Shares, or any interest therein, that are subject to the Purchase Option, except that the Founder may transfer such Shares (i) to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "Approved Relatives") or to a trust established solely for the benefit of the Founder and/or Approved Relatives, provided that such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in this Section 4, the Purchase Option and the right of first refusal set forth in Section 5) and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement or (ii) as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation), provided that, in accordance with Section 9(b) below, the securities or other property received by the Founder in connection with such transaction shall remain subject to this Agreement.

(b) The Founder shall not transfer any Shares, or any interest therein, that are no longer subject to the Purchase Option, except in accordance with Section 5 below.

5. Right of First Refusal.

(a) If the Founder proposes to transfer any Shares that are no longer subject to the Purchase Option (either because they are no longer Unvested Shares or because the Purchase Option expired unexercised), then the Founder shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed

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transferee and state the number of such Shares the Founder proposes to transfer (the "OfferedShares"), the price per share and all other material terms and conditions of the transfer.

(b) For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Founder within such 30-day period. Within 10 days after his receipt of such notice, the Founder shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Founder or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Founder a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) If the Company does not elect to acquire any of the Offered Shares, the Founder may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 5 shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(d) After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Founder on account of such Offered Shares or permit the Founder to exercise any of the privileges or rights of a holder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) The following transactions shall be exempt from the provisions of this

Section 5:

(1) a transfer of Shares to or for the benefit of any Approved

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Relatives, or to a trust established solely for the benefit of the Founder and/or ApprovedRelatives;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

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(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 5 to one or more persons or entities.

(g) The provisions of this Section 5 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, amalgamation, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction) (such occurrence, a "Sale").

(h) The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

6. Agreement in Connection with Initial Public Offering.

The Founder agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, whether any transaction described in clause (a) or (b) is to be settled by delivery of shares of Common Stock or other securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days from the date of

the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA rules), and

(ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

7. Escrow.

The Founder shall, upon the execution of this Agreement, execute Joint Escrow Instructions in the form attached to this Agreement as Exhibit A. The Joint Escrow Instructions shall be delivered to the Treasurer of the Company, as escrow agent thereunder. The Founder shall deliver to such escrow agent a stock assignment duly endorsed in blank, in the form attached to this Agreement as Exhibit B, and hereby instructs the Company to deliver to such escrow agent, on behalf of the Founder, the certificate(s) evidencing the Shares issued hereunder. Such materials shall be held by such escrow agent pursuant to the terms of such Joint Escrow Instructions.

8. Restrictive Legends.

All certificates representing Shares shall have affixed thereto legends in substantially the following form, in addition to any other legends that may be required under federal or state securities laws:

"The shares represented by this certificate are subject to restrictions on transfer and an option to purchase set forth in a certain Restricted Stock Agreement between the company and the registered owner of these shares (or his predecessor in interest), and such Agreement is available for inspection without charge at the office of the Treasurer of the company."

"The shares represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be sold, transferred or otherwise disposed of in the absence of an effective registration statement under such Act or an opinion of counsel satisfactory to the company to the effect that such registration is not required."

9. Adjustments for Stock Splits, Stock Dividends, etc.

(a) If from time to time there is any stock split, stock dividend, stock distribution or other reclassification of the Common Stock of the Company, any and all new, substituted or additional securities to which the Founder is entitled by reason of his ownership of the Shares shall be immediately subject to the purchase options, the restrictions on transfer and the other provisions of this Agreement in the same manner and to the same extent as the Shares, and the Option Price shall be appropriately adjusted.

(b) Upon the occurrence of any merger, amalgamation or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction, the repurchase and other rights of the Company hereunder shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Shares were converted into or exchanged for pursuant to such transaction in the same manner and to the same extent as they applied to the Shares under this Agreement. If, in connection with such a transaction, a portion of the cash, securities and/or other property received upon the conversion or exchange of the Shares is to be placed into escrow to secure indemnification or similar obligations, the mix between the vested and unvested portion of such cash, securities and/or other property that is placed into escrow shall be the same as the mix between the vested and unvested portion of such cash, securities and/or other property that is not subject to escrow.

10. Investment Representations.

The Founder represents, warrants and covenants as follows:

(a) The Founder is purchasing the Shares for his own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act, or any rule or regulation under the Securities Act.

(b) The Founder has had such opportunity as he has deemed adequate to obtain from representatives of the Company such information as is necessary to permit him to evaluate the merits and risks of his investment in the Company.

(c) The Founder has sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

(d) The Founder can afford a complete loss of the value of the Shares and is able to bear the economic risk of holding such Shares for an indefinite period.

(e) THE FOUNDER UNDERSTANDS THAT (I) THE SHARES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT AND ARE "RESTRICTED SECURITIES" WITHIN THE MEANING OF RULE 144 UNDER THE SECURITIES ACT; (II) THE SHARES CANNOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF UNLESS THEY ARE SUBSEQUENTLY REGISTERED UNDER THE SECURITIES ACT OR AN EXEMPTION FROM REGISTRATION IS THEN AVAILABLE; (III) IN ANY EVENT, THE EXEMPTION FROM REGISTRATION UNDER RULE 144 WILL NOT BE AVAILABLE FOR AT LEAST ONE YEAR AND EVEN THEN WILL NOT BE AVAILABLE UNLESS A PUBLIC MARKET THEN EXISTS FOR THE COMMON STOCK, ADEQUATE INFORMATION CONCERNING THE COMPANY IS THEN AVAILABLE TO THE PUBLIC, AND OTHER TERMS AND CONDITIONS OF RULE 144 ARE COMPLIED WITH; AND (IV) THERE IS NOW NO REGISTRATION STATEMENT ON FILE WITH

THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO ANY STOCK OF THE COMPANY AND THE COMPANY HAS NO OBLIGATION OR CURRENT INTENTION TO REGISTER THE SHARES UNDER THE SECURITIES ACT.

11. Withholding Truces; Section 83(b) Election.

(a) The Founder acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Founder any federal, state or local truces of any kind required by law to be withheld with respect to the purchase of the Shares by the Founder or the lapse of the Purchase Option.

(b) The Founder has reviewed with the Founder's own true advisors the federal, state, local and foreign true consequences of this investment and the transactions contemplated by this Agreement. The Founder is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Founder understands that the Founder (and not the Company) shall be responsible for the Founder's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement. The Founder understands that it may be beneficial in many circumstances to elect to be truced at the time the Shares are purchased rather than when and as the Company's Purchase Option expires by filing an election under Section 83(b) of the Internal Revenue Code of 1986 with the I.R.S. within 30 days from the date of purchase.

THE FOUNDER ACKNOWLEDGES THAT IT IS SOLELY THE FOUNDER'S RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF THE FOUNDER REQUESTS THE COMPANY OR ITS REPRESENTATIVES TO MAKE THIS FILING ON THE FOUNDER'S BEHALF.

12. Miscellaneous.

(a) No Rights to Employment. The Founder acknowledges and agrees that the vesting of the Shares pursuant to Section 2 hereof is earned only by continuing service as an employee at the will of the Company (not through the act of being hired or purchasing shares hereunder). The Founder further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee or consultant for the vesting period, for any period, or at all.

(b) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(c) Waiver. Any provision for the benefit of the Company contained in this Agreement may be waived, either generally or in any particular instance, by the Board of Directors of the Company.

(d) Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and the Founder and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in Sections 4 and 5 of this Agreement.

(e) Notice. All notices required or permitted hereunder shall be in writing and deemed effectively given upon personal delivery or five days after deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party hereto at the address shown beneath his or its respective signature to this Agreement, or at such other address or addresses as either party shall designate to the other in accordance with this Section 12(e).

(f) Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa.

(g) Entire Agreement. This Agreement constitutes the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Agreement.

(h) Amendment. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Founder.

(i) Governing Law/Submission to Jurisdiction. This Agreement shall be construed, interpreted and enforced in accordance with the laws of Bermuda without regard to any applicable conflicts of laws. The parties hereto submit to the non-exclusive jurisdiction of the courts of Massachusetts, USA to resolve any disputes arising between them pertaining to the matters set out herein.

(j) Founder's Acknowledgments. The Founder acknowledges that he: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of the Founder's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) understands that the law firm of Latham & Watkins LLP, is acting as counsel to the Company in connection with the transactions contemplated by the Agreement, and is not acting as counsel for the Founder.

- Remainder of this page intentionally left blank -

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

KINIKSA PHARMACEUTICALS, LTD.

By /s/ Stephen Mahony.  
Name: Stephen Mahony  
Title: Sr. Vice President  
Address: Clarendon House  
2 Church Street  
Hamilton HM 11 Bermuda

/s/ Thomas Beetham  
Thomas Beetham  
Address: 9 Starr Avenue East

Andover, MA 01810 USA

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Joint Escrow Instructions September 18, 2015

Kiniksa Pharmaceuticals, Ltd. Clarendon House  
2 Church Street  
Hamilton HM 11 Bermuda

Attn: Treasurer Dear Sir/Madam:

As Escrow Agent for Kiniksa Pharmaceuticals, Ltd., a Bermuda exempted company, and its successors in interest under the Restricted Stock Agreement (the "Agreement") of even date herewith, to which a copy of these Joint Escrow Instructions is attached (the "Company"), and the undersigned person ("Holder"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Agreement in accordance with the following instructions:

1. Appointment. Holder irrevocably authorizes the Company to deposit with you any certificates evidencing Shares (as defined in the Agreement) to be held by you hereunder and any additions and substitutions to said Shares. For purposes of these Joint Escrow Instructions, "Shares" shall be deemed to include any additional or substitute property. Holder does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such Shares all documents necessary or appropriate to make such Shares negotiable and to complete any transaction herein contemplated. Subject to the provisions of this Section 1 and the terms of the Agreement, Holder shall exercise all rights and privileges of a member of the Company while the Shares are held by you.

2. Closing of Purchase.

(a) Upon any purchase by the Company of the Shares pursuant to the Agreement, the Company shall give to Holder and you a written notice specifying the number of Shares to be purchased, the purchase price for the Shares, as determined pursuant to the Agreement, and the time for a closing hereunder (the "Closing") at the principal office of the Company. Holder and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

(b) At the Closing, you are directed (i) to date the stock assignment form or forms necessary for the transfer of the Shares, (ii) to fill in on such form or forms the number of Shares being transferred, and (iii) to deliver the same, together with the certificate or certificates

evidencing the Shares to be transferred, to the Company against the simultaneous delivery to you of the purchase price for the Shares being purchased pursuant to the Agreement.

3. Withdrawal. The Holder shall have the right to withdraw from this escrow any Shares as to which the Purchase Option (as defined in the Agreement) has terminated or expired.

4. Duties of Escrow Agent.

(a) Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

(b) You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact of Holder while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

(c) You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or entity, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. If you are uncertain of any actions to be taken or instructions to be followed, you may refuse to act in the absence of an order, judgment or decrees of a court. In case you obey or comply with any such order, judgment or decree of any court, you shall not be liable to any of the parties hereto or to any other person or entity, by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

(d) You shall not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

(e) You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder and may rely upon the advice of such counsel.

(f) Your rights and responsibilities as Escrow Agent hereunder shall terminate if (i) you cease to be Treasurer of the Company or (ii) you resign by written notice to each party. In the event of a termination under clause (i), your successor as Treasurer shall become Escrow Agent hereunder; in the event of a termination under clause (ii), the Company shall appoint a successor Escrow Agent hereunder.

(g) If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

(h) It is understood and agreed that if you believe a dispute has arisen with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

(i) These Joint Escrow Instructions set forth your sole duties with respect to any and all matters pertinent hereto and no implied duties or obligations shall be read into these Joint Escrow Instructions against you.

G) The Company shall indemnify you and hold you harmless against any and all damages, losses, liabilities, costs, and expenses, including attorneys' fees and disbursements, (including without limitation the fees of counsel retained pursuant to Section 4(e) above, for anything done or omitted to be done by you as Escrow Agent in connection with this Agreement or the performance of your duties hereunder, except such as shall result from your gross negligence or willful misconduct.

5. Notice. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses, or at such other addresses as a party may designate by ten days' advance written notice to each of the other parties hereto.

COMPANY: Notices to the Company shall be sent to the address set forth in the salutation hereto,  
Attn: President

Copy to: Kiniksa Pharmaceuticals Corp. 15 Walnut Street, Suite 200 Wellesley  
Hills, MA 02481-1909 USA

Notices to Holder shall be sent to the address set forth below Holder's signature below.

HOLDER:

ESCROW AGENT: Notices to the Escrow Agent shall be sent  
to the address set forth in the salutation hereto.

6. Miscellaneous.

(a) By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions, and you do not become a party to the Agreement.

(b) This instrument shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

Very truly yours,

Kiniksa Pharmaceuticals, Ltd.

By:       /s/ Stephen Mahoney        
Name: Stephen Mahoney  
Title: Senior Vice President

HOLDER:

      /s/ Thomas Beetham        
(Signature)

Name: Thomas Beetham Address: 9 Starr Avenue East Andover, MA 01810 USA

Date Signed: September 18, 2015

ESCROW AGENT:

  
\_\_\_\_\_  
Treasurer

**FOR VALUE RECEIVED,** I hereby sell, assign and transfer unto \_\_\_\_\_

\_\_\_\_\_ shares of Common Stock, \$0.0001 par value per share, of Kiniksa Pharmaceuticals, Ltd.(the "Company") standing in my name on the books of the Company represented by Certificate(s) Number

\_\_\_\_\_ herewith, and do hereby irrevocably constitute and appoint \_\_\_\_\_ attorney to transfer the said shares on the books of the Company with full power of substitution in the premises.

Dated: \_\_\_\_\_

/s/ Stephen Mahoney \_\_\_\_\_  
[Holder Print Signature]

Stephen Mahoney \_\_\_\_\_  
[Holder Print Name]

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## SUBSIDIARIES OF KINIKSA PHARMACEUTICALS, LTD.

The following subsidiaries are owned directly or indirectly by Kiniksa Pharmaceuticals, Ltd.

Legal Name of Subsidiary	Jurisdiction of Organization
Kiniksa Pharmaceuticals Corp.	Delaware
Kiniksa Pharmaceuticals (France) SARL	France
Kiniksa Pharmaceuticals (Germany) GmbH	Germany
Kiniksa Pharmaceuticals GmbH	Switzerland
Kiniksa Pharmaceuticals (UK), Ltd.	United Kingdom
Primatope Therapeutics, Inc.	Delaware

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## CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-3 (Nos. 333-231910, 333-248656 and 333-238585) and Forms S-8 (Nos. 333-225196 and 333-237589) of Kiniksa Pharmaceuticals, Ltd. of our report dated February 25, 2021 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP  
Boston, Massachusetts  
February 25, 2021

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**CERTIFICATION**

I, Sanj K. Patel, certify that:

1. I have reviewed this annual report on Form 10-K of Kiniksa Pharmaceuticals, Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2021

/s/ Sanj K. Patel  
Sanj K. Patel  
Chief Executive Officer and Chairman of the Board of Directors  
(Principal Executive Officer)

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CERTIFICATION

I, Mark Ragosa, certify that:

1. I have reviewed this annual report on Form 10-K of Kiniksa Pharmaceuticals, Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2021

/s/ Mark Ragosa  
Mark Ragosa  
Interim Chief Financial Officer  
(Principal Financial Officer)

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**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sanj K. Patel, Chief Executive Officer and Chairman of the Board of Directors of Kiniksa Pharmaceuticals, Ltd. (the "Company"), hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Annual Report on Form 10-K of the Company for the period ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 25, 2021

/s/ Sanj K. Patel  
\_\_\_\_\_  
Sanj K. Patel  
Chief Executive Officer and Chairman of the Board of Directors  
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark Ragosa, Interim Chief Financial Officer of Kiniksa Pharmaceuticals, Ltd. (the "Company"), hereby certify pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Annual Report on Form 10-K of the Company for the period ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 25, 2021

/s/ Mark Ragosa  
Mark Ragosa  
Interim Chief Financial Officer  
(Principal Financial Officer)