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 001-38419

Arcus Biosciences, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)	**47-3898435** (I.R.S. Employer Identification No.)

3928 Point Eden Way
Hayward, CA 94545
(Address of principal executive offices)

Registrant's telephone number, including area code: (510) 694-6200

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

Titles of Each Class	Trading Symbol(s)	Name of Each Exchange on which Registered
Common Stock, Par Value $0.0001 Per Share	RCUS	The New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

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 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 (§232.405 of this chapter) 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, 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 shares of common stock on The New York Stock Exchange on June 30, 2020, was $1,250,372,984. This excludes 8,400,392 shares of the Registrant's Common Stock held by executive officers, directors and stockholders affiliated with directors outstanding at June 30, 2020. Exclusion of such shares should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant or that such person is controlled by or under common control with the registrant.

The number of shares of Registrant's Common Stock outstanding as of February 12, 2021 was 70,876,222.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement relating to the 2021 Annual Meeting of Shareholders are incorporated by reference into Part III of this Report. The Definitive Proxy Statement will be filed within 120 days of the Registrant's fiscal year ended December 31, 2020.

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INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (Annual Report) includes forward-looking statements. All statements regarding future events, results or other future matters contained in this Annual Report are forward-looking statements, including, but not limited to, statements about:

- our expectations regarding our relationship with Gilead;
- our expectations regarding the timing and achievement of our investigational product development activities and ongoing and planned clinical trials;
- our expectations for reporting data from clinical trials in certain timeframes;
- our ability to develop intra-portfolio combinations and highly-differentiated small-molecule investigational products, including our ability to create small-molecule investigational products with ideal pharmacological properties and desired clinical effects;
- our expectations regarding the efficiency and speed with which we can create and advance small-molecule investigational products and develop our investigational products and combination therapies;
- our reliance on third parties to conduct our ongoing and future clinical trials and third-party manufacturers to manufacture and supply our investigational products;
- our expectations regarding the nature of the immuno-oncology pathways we are targeting, the size of the potential patient population and the potential market size;
- our ability to obtain and maintain control of our combination investigational products and maximize the commercial potential of our investigational products;
- our ability to obtain and maintain regulatory approvals of our investigational products, the potential market opportunities for commercializing our investigational products;
- our ability to retain and recruit key personnel, estimates of our expenses, future revenue, capital requirements and our needs for additional financing;
- our ability to develop, acquire and advance investigational products into, and successfully complete, clinical trials;
- our initiation, timing, progress and results of future research and development programs, preclinical studies and clinical trials;
- our ability to obtain and maintain intellectual property rights covering our investigational products;
- our expectations regarding the developments and projections relating to our competitors;
- our expectations as to the effect that the COVID-19 pandemic will have on our company; and
- our expectations regarding our industry.

The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “design,” “intend,” “expect,” “could,” “plan,” “potential,” “predict,” “seek,” “should,” “would” or the negative version of these words and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives and financial needs.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the Risk Factor Summary below and in Item 1A of this Annual Report, “Risk Factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, advancements, discoveries, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Annual Report to conform these statements to actual results or to changes in our expectations.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report on Form 10-K, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

RISK FACTOR SUMMARY

- The impact of the COVID-19 pandemic and related risks could have a material adverse impact on our research and development programs and financial condition.
- We are an early-stage immuno-oncology company with a limited operating history. We have incurred annual net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have never generated any revenue from product sales and may never be profitable.
- We may need to obtain additional funding to finance our operations and complete the development and any commercialization of our investigational products. If we do not receive substantial opt-in, milestone or royalty payments from our existing collaboration agreements, or are unable to raise additional capital when needed, we may be forced to restrict our operations or delay, reduce or eliminate our product development programs.
- We are early in our development efforts. If we are unable to develop, obtain regulatory approval for and commercialize our investigational products, or experience significant delays in doing so, our business will be materially harmed.
- Clinical drug development is a lengthy, expensive and uncertain process. The results of preclinical studies and early clinical trials are not always predictive of future results. Any investigational product that we advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval.
- Enrollment and retention of subjects in clinical trials is expensive and time consuming, can be made more difficult or rendered impossible by competing treatments, clinical trials of competing investigational products, and public health epidemics, each of which could result in significant delays and additional costs in our product development activities, or in the failure of such activities.
- Serious adverse events, undesirable side effects or other unexpected properties of our investigational products may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our investigational products or limitations on the use of our investigational products or, if discovered following marketing approval, revocation of marketing authorizations or subsequent limitations on the use of our investigational products.
- A key element of our strategy is the development of intra-portfolio combinations. If we are not successful in discovering, developing and commercializing investigational products that take advantage of different mechanisms of action to achieve superior outcomes relative to the use of single agents or other combination therapies, our ability to achieve our strategic objectives would be impaired.
- Certain of our investigational products may require companion diagnostics in certain indications. Failure to successfully develop, validate and obtain regulatory clearance or approval for such tests could

harm our product development strategy or prevent us from realizing the full commercial potential of our investigational products.

- We have conducted, and continue to conduct, portions of our clinical trials outside the United States, and the FDA may not accept data from trials conducted in foreign locations.
- We expect to depend on our collaboration with Gilead for the research, development, manufacture and commercialization of our investigational products. If this collaboration is not successful, our business could be adversely affected.
- We rely on third parties to conduct our clinical trials, to manufacture and supply us with sufficient quantities of our investigational products, and to perform some of our research and preclinical studies. If these third parties do not satisfactorily carry out their contractual duties or fail to meet expected deadlines, our development programs may be delayed or subject to increased costs, each of which may have an adverse effect on our business and prospects.
- Even if our investigational products are approved by the FDA, they may never be approved or commercialized outside the United States, which would limit our ability to realize their full market potential.
- We are currently party to several in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our investigational products. If we breach our obligations under these agreements, we may be required to pay damages, lose our rights to these investigational products or both, which would adversely affect our business and prospects.
- Our operating activities may be restricted by certain covenants in our license and other strategic agreements, which could limit our development and commercial opportunities.
- If we are unable to obtain and maintain sufficient intellectual property protection for our investigational products, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be adversely affected.
- We may need to obtain additional licenses of third-party technology that may not be available to us or are available only on commercially unreasonable terms, and which may cause us to operate our business in a more costly or otherwise adverse manner that was not anticipated.
- We may become involved in lawsuits alleging that we have infringed the intellectual property rights of third parties or to protect or enforce our patents or other intellectual property, which litigation could be expensive, time consuming and adversely affect our ability to develop or commercialize our investigational products.
- We face substantial competition, which may result in others discovering, developing or commercializing products more quickly or marketing them more successfully than us. If their investigational products are shown to be safer or more effective than ours, then our commercial opportunity will be reduced or eliminated.
- The development and commercialization of zimberelimab may face strong competition from other anti-PD-1 antibodies that have already received marketing approval by larger companies with substantial resources and more experience developing, manufacturing and commercializing biologic compounds.
- Our internal information technology systems, or those of our third-party CROs or other contractors or consultants, are subject to failure, security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our investigational products' development programs, compromise sensitive information related to our business or prevent us from accessing critical information, potentially exposing us to notification obligations, liability or reputational damage and otherwise adversely affecting our business.
- Failure to comply with health and data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business.

- Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations.

PART I

Item 1. Business

Company Overview

We are a clinical-stage biopharmaceutical company focused on creating best-in-class cancer therapies. Our initial focus has been on well-characterized biological pathways with significant scientific data supporting their importance. We have built a robust and highly efficient drug discovery capability to create highly differentiated small molecules, which we have the ability to develop in combinations with our monoclonal antibodies through rationally designed, indication-specific trial designs. Our vision is to create, develop and commercialize highly differentiated combination cancer therapies.

Our Clinical Development Pipeline

The following chart summarizes our clinical pipeline. In 2020, we entered into an Option, License and Collaboration Agreement (Gilead Collaboration Agreement) with Gilead Sciences, Inc. (Gilead), whereby Gilead obtained an exclusive license to zimberelimab and a time-limited exclusive option to all of our current and future programs during the 10-year collaboration term. For each program to which Gilead exercises their option, the parties will co-develop globally and co-commercialize the program in the U.S., subject to certain exceptions, and Gilead will have the right to commercialize the program outside of the United States, subject to the rights of our existing partners to certain territories. In 2017, we entered into an Option and License Agreement (Taiho Agreement) with Taiho Pharmaceutical Co., Ltd. (Taiho) pursuant to which Taiho has a time-limited option to exclusively license the development and commercialization rights to each of our programs for Japan and certain other territories in Asia (excluding China). To date, Taiho has exercised their option rights to our adenosine receptor antagonist program (including etrumadenant) and our anti-PD-1 program (including zimberelimab).

We currently have four clinical-stage investigational products:

- **Domvanalimab (previously referred to as AB154)** is our anti-TIGIT monoclonal antibody designed to promote sustained immune activation and tumor clearance in combination with other immunotherapy and anti-cancer agents. TIGIT-mediated signaling is known to suppress an array of anti-cancer immune cells. Domvanalimab blocks TIGIT with sub-nanomolar affinity and, in a Phase 1 trial, demonstrated complete receptor coverage on all TIGIT-expressing peripheral leukocytes at the dose-levels tested. In our Phase 1 trial, domvanalimab exhibited a favorable safety profile and demonstrated clinical activity consistent with what has been shown for other anti-TIGIT antibodies in early-stage trials. We are currently evaluating domvanalimab in combination with zimberelimab with or without etrumadenant vs. zimberelimab monotherapy in ARC-7, our randomized Phase 2 trial in first-line metastatic, PD-L1≥50%

non-small cell lung cancer. In February 2021, we initiated ARC-10, our first registrational trial, which will evaluate domvanalimab in combination with zimberelimab and zimberelimab monotherapy vs. chemotherapy in this same setting.

- **Etrumadenant (previously referred to as AB928)**, the first dual A_{2a}/A_{2b} adenosine receptor antagonist to enter the clinic, is designed to maximally inhibit the adenosine-driven impairment of tumor-infiltrating lymphocytes (mainly T cells and NK cells) and myeloid cells (dendritic cells, macrophages), mediated by the A_{2a} and A_{2b} receptors, respectively. A_{2b} is also upregulated in certain tumors, such as in KRAS-mutated cancers. As a result, etrumadenant may uniquely block adenosine's immunosuppressive and cancer cell-intrinsic effects. Developed specifically for the oncology setting, etrumadenant achieves high penetration of tumor tissue, robust potency in the presence of high adenosine concentrations, and minimal shift in potency from non-specific plasma protein binding. Etrumadenant has demonstrated a favorable safety profile with a variety of combination regimens and exhibits pharmacokinetics/pharmacodynamics consistent with once-daily dosing. Etrumadenant is currently being evaluated by us in several randomized or Phase 2 trials across major tumor types, including in our ARC-4, ARC-6, ARC-7, and ARC-9 studies, as well as in two randomized Phase 1b/2 trials being conducted by Genentech (the Morpheus trials).

- **AB680** is an extremely potent and selective small-molecule CD73 inhibitor designed to provide differential benefits relative to monoclonal antibodies, such as greater inhibition of CD73 enzymatic activity (both soluble and cell-bound) and deeper tumor penetration. CD73 is the primary enzymatic producer of immunosuppressive adenosine in the tumor microenvironment; high CD73 expression is associated with significantly poorer prognosis in several tumor types. By effectively eliminating CD73-derived adenosine, AB680 may improve the efficacy of treatment approaches proven to elicit anti-cancer immune responses (e.g., with anti-PD1 and/or platinum-based chemotherapy). AB680 was the first small-molecule CD73 inhibitor to enter the clinic and demonstrated a favorable safety profile with a long half-life in a Phase 1 trial in healthy volunteers. We are currently evaluating AB680 in a Phase 1/1b study for first-line metastatic pancreatic cancer (ARC-8) as well as in a Phase 2 study in combination with etrumadenant for late-line metastatic prostate cancer (ARC-6).

- **Zimberelimab (previously referred to as AB122)** is our anti-PD-1 antibody that we in-licensed to enable the development of our combination regimens. The in-licensed rights include commercialization rights in all countries worldwide other than greater China and Thailand. Guangzhou Gloria Biosciences Co. (Gloria Biosciences), which holds commercialization rights to the same molecule in China, has filed a New Drug Application (NDA) that was accepted for review by China's National Medicinal Products Association in early 2020 for classical relapsed/refractory Hodgkin's lymphoma. To date, zimberelimab, either alone or in combination with other agents, has been evaluated by us in over 200 patients. We are currently evaluating zimberelimab in combination with other agents across several tumor types, including as discussed above under "Domvanalimab" in our ARC-7 trial and recently initiated ARC-10 registrational trial which is designed to support the approval of zimberelimab. In 2019, Taiho exercised its option right to zimberelimab and in 2020, as part of our Gilead Collaboration Agreement, Gilead obtained an exclusive license to zimberelimab. We retain rights to co-develop zimberelimab with Gilead globally and to co-commercialize with Gilead in the U.S.

We conduct our clinical trials in the U.S. and internationally in geographic regions that are impacted by COVID-19 to varying degrees. While we have seen relatively robust enrollment across our ongoing Arcus-sponsored studies, we expect to see volatility as local governments respond to resurgences and the emergence of new strains, each of which may result in the prolonged reinstitution, extension or enhancement of shelter-in-place measures. The American Cancer Society has also reported that the pandemic has led to declines in screening, diagnosis and treatment for cancer patients, which will impact the enrollment of patients in clinical trials targeting early stage cancers and retention of patients overall in our trials. Patient safety remains our paramount concern and we continue to collaborate with our existing and with new investigational sites to implement measures to minimize disruptions to patients and ensure continued access to treatment, in accordance with health authority guidance. We are unable to predict the full impact of this pandemic on our clinical programs.

Our Strategy

Our overarching vision is to create a broad portfolio of best-in-class oncology therapeutics and develop combinations that bring transformative clinical benefits over current treatment options. Our clinical development approach aims to generate meaningful data in the most efficient manner possible in order to rapidly advance our investigational products through clinical trials. Some of the key elements of our strategy include:

- ***Building a differentiated portfolio by focusing on intra-portfolio combinations.*** We are building a diverse portfolio of small-molecule investigational products that target different immune mechanisms, as well as cell-intrinsic pathways important for cancer growth and metastasis. In addition to small molecules, we are also developing antibody investigational products that target what we believe are some of the most important immune checkpoint receptors, including PD-1 and TIGIT, and that we expect to be critical components of our intra-portfolio combinations. By combining these antibody candidates with our internally discovered small-molecule investigational products, we believe we can create highly differentiated combination products.
- ***Designing our clinical trials to advance our compounds as quickly and efficiently as possible***. We have designed our combination trials to enable faster and higher confidence decision making compared to conventional clinical trial approaches. Our platform trial designs, such as our ARC-6 and ARC-9 studies, allow us to evaluate multiple combinations and settings for a single tumor type in one clinical trial, and compare those combinations against standard-of-care control arms. Our goal is to identify the best combinations and settings and to generate randomized proof-of-concept data for our investigational products early in their development.
- ***Pursuing combinations and tumor types based on strong biological rationales.*** In selecting tumor types to pursue, we are focusing on those that are most dependent on the pathways targeted by our agents, such as tumors with high levels of CD73 expression for ATP-adenosine inhibitors. We are also focusing on patient populations and settings in which we believe there is still considerable unmet need. As an example, several tumor types, such as pancreatic cancer and colorectal cancer, have a high percentage of cases that are driven by certain oncogenic mutations (eg, KRAS mutations) which are associated with poor responses to current available therapies and poor overall survival. Emerging data have also demonstrated that many of these oncogenic driver mutations (eg, KRAS, EGFR, BRAF) are associated with high expression levels of CD73 and the adenosine A_{2b} receptor, uniquely positioning us to target multiple associated pathways with our portfolio of investigational ATP-adenosine targeting agents.
- ***Focusing on ubiquitously important targets.*** We largely focus on targets that are ubiquitous, meaning that they are believed to play an important role in a broad range of human cancer types and settings. For example, CD73, the key enzyme responsible for the generation of extracellular adenosine, has been found to be over-expressed in many tumor types, including but not limited to non-small cell lung cancer, colorectal cancer, pancreatic cancer, and gastroesophageal cancer, suggesting that it plays a broad immuno-protective role in tumor survival. We believe that our focus on targets and pathways that are ubiquitously involved in cancer will enable our investigational products to address broad patient populations and significant market opportunities.
- ***Maximizing the value of our portfolio through strategic collaborations.*** We seek to establish collaborative relationships that will provide us with access to capital, opportunities and/or expertise. In 2017, we entered into the Taiho Agreement to secure a development and, if approved, commercialization partner for Japan and certain other Asian countries. In 2020, we established a partnership with Gilead that provided us with an upfront cash payment and equity investment totaling $375 million and provides us with up to $400 million in additional research and development funding during the 10-year collaboration term. Furthermore, for each program that Gilead exercises its option to, we will receive a substantial option payment and Gilead will share 50% of the global costs for that program, while preserving for us the option to co-promote our investigational products in the U.S., should they be approved. We intend to continue to establish strategic collaborations, such as our clinical collaboration with AstraZeneca to evaluate domvanalimab in combination with durvalumab in a registrational phase 3 clinical trial in patients with unresectable Stage 3 NSCLC, so that we can bring our investigational products to the broadest patient population possible.

Our Product Portfolio

Domvanalimab, our Anti-TIGIT Antibody

Because of our early belief that anti-TIGIT antibodies have the potential to become the next backbone immunotherapy, we in-licensed domvanalimab in 2016 and are rapidly advancing this molecule through clinical development. We believe that domvanalimab will be the second or third anti-TIGIT antibody to enter into registrational trials.

TIGIT is now widely believed to play an important role in suppressing the immune response to cancer. The primary ligand for TIGIT (T-cell immunoreceptor with Ig and ITIM domains) is CD155, a protein that plays both inhibitory and stimulatory roles in regulating the activity of effector immune cells such as T and NK cells. TIGIT is an inhibitory receptor highly expressed on T cells displaying an exhausted phenotype, tumor-infiltrating T_{reg}, and NK cells. The ligands for TIGIT are broadly expressed on multiple cell types in the tumor micro-environment, including cancer cells, immune cells such as dendritic cells, and stromal cells such as endothelial cells. CD155 binding to TIGIT results in inhibition of immune cells.

In addition to TIGIT, CD155 binds, with lower affinity, to DNAM-1 (also known as CD226), a stimulatory receptor also expressed on T cells and NK cells. As a result, when anti-TIGIT antibodies bind to TIGIT, thereby blocking the TIGIT:CD155 interaction, they not only block an inhibitory signal on T cells and NK cells but also free up CD155 to bind to and activate DNAM-1, leading to increased activation of T cells and NK cells.

In our Phase 1 dose-escalation study for domvanalimab, we demonstrated the ability to have complete target coverage at very low doses. We have established intravenous dose schedules (every 2 or 3 weeks) and continue to evaluate additional doses and dose schedules in this Phase 1 study.

Our ongoing ARC-7 study is a randomized Phase 2 study evaluating the combination of domvanalimab and zimberelimab, with or without etrumadenant, versus zimberelimab monotherapy in first-line PD-L1≥50% NSCLC. We initiated this study in 2020 based on our strong belief that anti-TIGIT antibodies can build upon the efficacy of monotherapy anti-PD-(L)1 treatment in this patient population. We expect to conduct an interim analysis for this study in the second quarter of 2021.

We have initiated our first registrational trial for domvanalimab, ARC-10, which will evaluate domvanalimab in combination with zimberelimab versus zimberelimab monotherapy versus chemotherapy in the same patient population as ARC-7. This trial has been designed to support potential regulatory filings for both domvanalimab and zimberelimab combination therapy and zimberelimab monotherapy. In addition, we have entered into a clinical collaboration with AstraZeneca to evaluate domvanalimab in combination with durvalumab in PACIFIC-8, a registrational trial in Stage 3 NSCLC, a setting where durvalumab is already approved. We are also evaluating additional registrational trial opportunities for domvanalimab in combination with other therapies in various tumor types.

There has been significantly increased activity from competitors evaluating anti-TIGIT combination therapies across multiple tumor types, including recently announced randomized, potentially pivotal, trials in lung cancer and other indications. Notably, at ASCO 2020, Roche presented data from its Phase 2 CITYSCAPE study which demonstrated that tiragolumab, its anti-TIGIT antibody, in combination with atezolizumab demonstrated a 66% overall response rate (ORR) in a subset of patients with high levels of PD-L1 compared to 24% for atezolizumab alone. Because of our early start in the development of domvanalimab and our aggressive clinical development plans, we believe that we are well positioned to establish ourselves as one of the leaders in the anti-TIGIT antibody field.

Etrumadenant, our Dual A_{2a}/A_{2b} Adenosine Receptor Antagonist

Etrumadenant is a small molecule targeting the ATP-adenosine pathway. Under conditions of cellular damage or cell death, such as in response to certain chemotherapies, large amounts of adenosine triphosphate (ATP) are released into the extracellular environment, where it is converted into adenosine monophosphate by the enzyme CD39 and then into adenosine by the enzyme CD73. However, the generation of large amounts of extracellular adenosine results in an immunosuppressive response that counteracts some of the potentially beneficial effects of chemotherapy.

Etrumadenant, which is an orally bioavailable, highly potent and reversible antagonist of the adenosine A_{2a} and A_{2b} receptors, is unlike most other clinical-stage adenosine receptor antagonists, which only target one of the two receptors. We believe that activation of the A_{2a} receptors on T cells and NK cells mediates a significant portion of

the immunosuppressive effects of adenosine but that binding of adenosine to A_{2b} receptors on myeloid cells also contributes significantly to intra-tumoral immune suppression; consequently, etrumadenant could prove to have more robust anti-tumor effects and activity in a broader range of tumor types than other A_{2a} or A_{2b} antagonists in clinical development.

We have evaluated etrumadenant in four Phase 1/1b studies (ARC-2, ARC-3, ARC-4 and ARC-5) across multiple tumor types and with different combination therapies, including with zimberelimab and standard-of-care chemotherapies. In all these studies, etrumadenant demonstrated a tolerable safety profile and 150 mg was established as the recommended daily dose of etrumadenant across all combinations evaluated. These studies further included expansion cohorts to evaluate etrumadenant in the following tumor types: advanced colorectal cancer, triple negative breast cancer, EGFR-mutated lung cancer and metastatic castrate-resistant prostate cancer. Based on the results from the expansion cohorts, we have designed the following randomized trials to compare etrumadenant combinations against active comparators:

- ARC-6, our platform trial in metastatic CRPC (mCRPC):
  - Etrumadenant + zimberelimab + enzalutamide vs. enzalutamide in 1L mCRPC
  - Etrumadenant + zimberelimab + docetaxel vs. docetaxel in 2L+ mCRPC
  - Etrumadenant ± zimberelimab ± AB680 in 3L+ mCRPC

  Since adenosine can be produced from various sources besides CD73 in different tumor types, such as prostatic acid phosphatase in prostate cancer, it is possible that inhibiting the adenosine pathway through multiple mechanisms may be needed in certain cancers like prostate cancer.
- ARC-9, our platform trial in metastatic colorectal cancer (mCRC):
  - Etrumadenant + zimberelimab + FOLFOX ± bevacizumab vs. FOLFOX ± bevacizumab (2nd line) or regorafenib (3rd line)
  - Etrumadenant + zimberelimab ± AB680 in 3L+ mCRC
- ARC-4, which is evaluating etrumadenant + zimberelimab + chemotherapy vs. zimberelimab + chemotherapy in EGFR*mut* NSCLC patients that have failed 1 or 2 tyrosine kinase inhibitor-therapies.
- ARC-7, which includes an arm evaluating etrumadenant in combination with domvanalimab and zimberelimab. In this trial, patients that progress after zimberelimab monotherapy can cross over into the etrumadenant-containing arm to assess whether etrumadenant in combination with domvanalimab and zimberelimab may provide benefit to patients who have failed anti-PD-1 antibody therapy.

In addition, we entered into a clinical collaboration with Genentech whereby they are evaluating etrumadenant in two of their ongoing Phase 1b/2 MORPHEUS platform studies:

- Etrumadenant plus atezolizumab and regorafenib vs. atezolizumab and regorafenib vs. regorafenib monotherapy in third-line metastatic colorectal cancer; and
- Etrumadenant plus atezolizumab and gemcitabine/nab-paclitaxel vs. gemcitabine/nab-paclitaxel in first-line metastatic pancreatic cancer.

All these studies support our overall strategy of generating meaningful, randomized data on our investigational products in the fastest and most efficient manner possible.

AB680, our CD73 Inhibitor

AB680 targets the ATP-adenosine pathway, specifically the CD73 enzyme, which plays a critical role in the last step of the process of extracellular ATP conversion into adenosine. CD73 inhibition should therefore be a highly effective approach to inhibiting adenosine-mediated immune suppression, as it could significantly suppress adenosine generation.

We believe AB680 was the first small-molecule CD73 inhibitor to enter clinical development. While there are several anti-CD73 antibodies in development, we believe that a small-molecule approach to CD73 inhibition could offer several advantages, including:

- *More complete inhibition of CD73 enzymatic activity.* We have shown in our assays that our small-molecule CD73 inhibitor, AB680, inhibits CD73 more potently (single-digit picomolar) and effectively than several of the anti-CD73 antibodies in clinical development, including oleclumab (MEDI9447, prepared by Arcus based on Patent Appl. US 2016/0129108). Our small-molecule CD73 inhibitors bind in the active site of the CD73 enzyme and they do so with an affinity about ten million times greater than the affinity of its substrate, AMP, for CD73. In contrast, many anti-CD73 antibodies were not designed to inhibit the enzymatic activity of CD73 but to instead induce internalization of CD73 from the cell surface and therefore will be less effective at inhibiting cell-bound and soluble forms of CD73. There are significant levels of soluble CD73 that have been shed from the cell surface. Our small-molecule inhibitors display comparable potency and effectiveness against soluble as well as membrane-bound forms of CD73.
- *Deeper tumor penetration.* Based on preclinical work, we expect that our small-molecule CD73 inhibitors should be able to achieve better penetration of tumor tissue relative to the CD73 antibodies which are much larger molecules. It is well accepted that monoclonal antibodies, because of their molecular size and properties, cannot diffuse further than a few microns from the blood vessel that delivers them to the tumor.
- *Potential for both intravenous and oral delivery.* We are developing both oral and intravenous formulations of AB680, which could provide flexibility on dosing regimens and be attractive commercially. The intravenous formulation of AB680 is dosed once every two weeks, which would be convenient for patients also undergoing infusions with an anti-PD-1 antibody or a chemotherapy regimen. An orally formulated AB680 would be convenient for patients not undergoing regular infusions.

In our initial study of AB680 in healthy volunteers, AB680 was well tolerated in single and multi-day administration and demonstrated a half-life consistent with dosing every two weeks. At the highest doses tested, AB680 also achieved significant inhibition of CD73 activity following a single dose.

We are currently evaluating AB680 in ARC-8, our Phase 1/1b clinical study in first-line metastatic pancreatic cancer in combination with gemcitabine and nab-paclitaxel (NP/Gem), standard-of-care chemotherapies used for advanced pancreatic cancer, and zimberelimab. We selected pancreatic cancer as the initial indication to pursue for AB680 given its high level of CD73 expression and the anticipated immunogenicity of the chemotherapy.

We presented initial results from the 25mg, 50mg, 75mg and 100mg (all dosed every two weeks) cohorts from the dose-escalation portion of ARC-8 at the ASCO 2021 Virtual Gastrointestinal Cancers Symposium (ASCO GI) in January 2021. These results demonstrated encouraging safety and clinical data:

- No significant additive toxicity from AB680 plus NP/Gem was observed beyond that expected from NP/Gem alone.
- Only one dose limiting toxicity in 19 evaluable patients was observed (Grade 2 autoimmune hepatitis), which resolved with steroid treatment and the patient was able to resume treatment.
- In 17 efficacy-evaluable patients, a 41% (7/17) objective response rate (ORR) was observed. Of the partial responses, three were confirmed as of the presentation's data cut-off date; of the four unconfirmed responders, three responded at the first tumor assessment.
- For patients that had been on drug for more than 16 weeks, an 85% (11/13) disease control rate (DCR) was achieved with the AB680 combination.

The last drug to be approved in the first-line metastatic pancreatic cancer setting was Abraxane® (nab-paclitaxel) in combination with gemcitabine, which demonstrated a 23% ORR and 48% DCR in its Phase 3 registrational study.

Based on these results, we opened the dose-expansion portion of this trial using an AB680 dose of 100mg every two weeks and expect to open a control arm in this study shortly. Given the lack of significant additive toxicity from AB680, we are also exploring a 125mg dose of AB680 in the dose-escalation portion. Additionally, we have opened

arms to evaluate AB680 in combination with etrumadenant with and without zimberelimab in our ARC-6 and ARC-9 studies and plan to explore AB680 in other tumor types and settings that we believe are associated with high levels of adenosine.

Zimberelimab, our Anti-PD-1 Antibody

In 2017, we in-licensed zimberelimab from WuXi Biologics. Zimberelimab is a fully human IgG4 antibody that was discovered by WuXi Biologics using the transgenic rat platform from Open Monoclonal Technology. The biochemical, biological and preclinical properties of zimberelimab have been shown by WuXi Biologics and us to be comparable to those of the marketed anti-PD-1 antibodies nivolumab and pembrolizumab.

We are currently using zimberelimab as the cornerstone of our combination strategy and it is being evaluated in combination with our other molecules in all of our ongoing clinical studies. Our registrational ARC-10 study includes a zimberelimab monotherapy arm and is designed to support the potential approval of zimberelimab as monotherapy.

In 2019, Taiho exercised its option to obtain development and commercialization rights to zimberelimab for Japan and certain other territories in Asia (excluding China). In 2020, Gilead received rights to zimberelimab as part of our partnership agreement with them. Together, we and Gilead will co-develop zimberelimab globally and co-commercialize zimberelimab in the U.S. Gilead has the right to commercialize zimberelimab outside the United States, subject to Taiho's existing commercialization rights and Gloria Biosciences's commercialization rights in China.

Our Early-Stage Drug Discovery Programs

We have active early stage discovery efforts focused on the creation of additional development candidates aimed at regulating various aspects of the anti-tumor immune response as well as other cancer-intrinsic pathways which we believe play an important role in many human cancers. These include AB308, our FcR-enabled anti-TIGIT antibody, which received IND clearance in January 2021 and is expected to enter a clinical trial shortly, as well as several small molecules aimed at modulating key biological pathways in various types of cancer that are responsible for the abnormal growth and resistance to current therapies. The targets for these programs include HIF-2a, PAK4, and Axl. We anticipate selecting small molecule development candidates and initiating CMC/preclinical development for at least two of these new programs, followed by initiation of clinical development for at least one of them in 2021.

In addition, in December 2020, we announced a collaboration to discover anti-CD39 antibodies with WuXi Biologics. CD39 represents another key node along the ATP-adenosine pathway and rounds out our portfolio of ATP-adenosine targeting molecules.

Commercialization Plans

Subject to timely exercise of their respective option rights, the Taiho Agreement provides us with a potential commercialization partner for Japan and certain other Asian countries, and the Gilead Collaboration Agreement provides us with a potential commercialization partner for the rest of the world. Under our Gilead Collaboration Agreement, we retain co-promotion rights for the U.S. Therefore, we intend to build the necessary infrastructure and sales, marketing and commercial product distribution capabilities to co-promote our products, if approved, for the United States. Clinical data, the size of the addressable patient population, and the size of the commercial infrastructure and manufacturing needs may all influence or alter our commercialization plans.

License and Collaboration Agreements

Gilead Agreements

On May 27, 2020, we entered into the Gilead Collaboration Agreement, a Common Stock Purchase Agreement, and an Investor Rights Agreement, (collectively, the Gilead Agreements), each with Gilead. The transactions under these agreements closed on July 13, 2020 following expiration of the antitrust waiting period. Pursuant to the Gilead Collaboration Agreement, Gilead obtained an exclusive option to acquire an exclusive license to all of our current and future clinical programs during the 10-year collaboration term, contingent upon Gilead's payment of up to $400.0 million over the collaboration term, and, for those programs that enter clinical development prior

to the end of the collaboration term, for up to an additional three years thereafter. Gilead may exercise its option, on a program-by-program basis, upon payment of an option fee that ranges from $200 million to $275 million per program for our clinical programs in existence at the date of the agreement, and $150 million per program for all of our other programs that enter clinical development thereafter. If Gilead exercises its option with respect to our TIGIT program, we are also eligible to receive up to $500 million in potential U.S. regulatory approval milestones with respect to domvanalimab. Pursuant to the Gilead Collaboration Agreement, upon closing, Gilead made a $175 million upfront cash payment and obtained an exclusive license to our zimberelimab program.

Upon Gilead's exercise of its option to a program, the companies will co-develop, equally share global development costs and equally share all profits and losses for the United States, subject to certain opt-out rights for us, expense caps on our spending and true-up adjustments. For each optioned program, provided we have not exercised our opt-out rights, we have an option to co-promote in the United States. Gilead will obtain rights to exclusively commercialize any optioned programs outside of the U.S., subject to the rights of our existing partners to any territories, and Gilead will pay to us tiered royalties as a percentage of revenues ranging from the high teens to the low twenties.

The Gilead Collaboration Agreement is subject to termination by either party for the other party's uncured material breach or insolvency, and by Gilead with sufficient prior written notice. Other customary termination rights are further provided in the Gilead Collaboration Agreement.

In addition to the Gilead Collaboration Agreement, we and Gilead entered into a Common Stock Purchase Agreement and an Investor Rights Agreement, which we refer to as the Equity Agreements, pursuant to which Gilead made an upfront equity investment of $200 million by purchasing from us 5,963,029 shares of our common stock at a purchase price of $33.54 per share. Gilead also has the right, at its option, to purchase additional shares from us, up to a maximum ownership of 35% of our then-outstanding voting common stock, from time to time over the next five years, at a purchase price equal to the greater of a 20% premium to market (based on a trailing five-day average closing price) at the time Gilead exercises such option, and the $33.54 initial purchase price. The Equity Agreements also include a three-year standstill and a two-year lockup and provide Gilead with registration rights commencing at the end of the lockup period, pro rata participation rights in certain future financings and the right to designate two individuals to be appointed to our Board of Directors.

On January 31, 2021, we and Gilead entered into an Amended and Restated Common Stock Purchase Agreement, which amended and restated in its entirety the Common Stock Purchase Agreement, pursuant to which Gilead purchased from us 5,650,000 shares of our common stock at a purchase price of $39.00 per share. All other terms of the original Common Stock Purchase Agreement, including Gilead's option to purchase additional shares from us, up to a maximum ownership of 35% of our then-outstanding common stock, remain unchanged.

Taiho Option and License Agreement

In 2017, we entered into the Taiho Agreement, pursuant to which Taiho provided $35.0 million of non-refundable, non-creditable cash payments to us during the first three years of the agreement in exchange for an exclusive option, over a five-year period (the Option Period), to in-license the development and commercialization rights to clinical stage investigational products from our portfolio (each, an Arcus Program) for Japan and certain other territories in Asia (excluding China) (the Taiho Territory). As of December 31, 2019, Taiho has paid us the full $35.0 million obligation pursuant to the terms of the agreement. If we do not initiate IND-enabling studies for at least five Arcus Programs prior to the expiration of the Option Period, Taiho may elect to extend the Option Period, up to a maximum of seven years for the Option Period, subject to an extension fee. If Taiho elects to exercise any such options, the license described above will be granted under terms and conditions set forth in the agreement. Under such terms, Taiho is obligated to pay an option exercise payment for each option exercise of between $3.0 million to $15.0 million, with the amount dependent on the development stage of the applicable Arcus Program for which the option is exercised. In addition, Taiho is obligated to pay to us clinical, regulatory and commercialization milestones of up to $275.0 million with respect to each program for which Taiho exercises the option and been granted the applicable license, as well as royalties ranging from high single digits to mid-teens, on net sales in Taiho's territories. Royalties will be payable on a licensed product-by-licensed product and country-by-country basis during the period of time commencing on the first commercial sale of a licensed product in a country and ending upon the later of: (i) ten (10) years from the date of first commercial sale of such licensed product in such country; and (ii) expiration of the last-to-expire valid claim of our patents covering the manufacture, use or sale or exploitation of such licensed product in such country.

In July 2018, Taiho exercised its option to our adenosine receptor antagonist program, which includes etrumadenant, and in November 2019, Taiho exercised its option to our anti-PD-1 program, which includes zimberelimab. Upon such exercises, Taiho is responsible for the development and commercialization of licensed products from within the programs in the Taiho Territory.

This agreement will remain in effect until (i) expiration of the last option exercise period if Taiho has not exercised any of its options or (ii) if Taiho has exercised any of its options, expiry of all royalty terms for the licensed products.

WuXi Biologics License Agreement

Our license agreement (the WuXi PD-1 Agreement) with WuXi Biologics Ireland Limited (successor-in-interest to WuXi Biologics (Cayman) Inc., WuXi Biologics), which we entered into in 2017 as subsequently amended, provides us with an exclusive license to develop, use, manufacture, and commercialize products that include an anti-PD-1 antibody, including zimberelimab, throughout the world except for Greater China and Thailand. We have made upfront and milestone payments under the WuXi PD-1 Agreement totaling $31.0 million and incurred sub-license fees of $11.3 million as of December 31, 2020 and we may be required to make additional clinical and regulatory milestone payments, commercialization milestone payments up to $375.0 million, and royalty payments that range from high single-digits to low teens of net sales beginning on the first commercial sale and ending on the later of (i) ten (10) years following such first commercial sale and (ii) the expiry of all patents that may subsequently be issued or granted that cover the product in such country, hereafter referred to as the royalty term. We are also required to pay WuXi Biologics a percentage in the low double digits of certain sublicense income that we receive from our sublicensees in direct connection with our sublicensees' rights to use WuXi Biologics's patents, patent applications and know-how. For the year ended December 31, 2020, we made milestone payments of $5.0 million and incurred sub-license fees of $10.1 million under the WuXi PD-1 Agreement, all recorded within research and development expense.

We are obligated to appoint WuXi Biologics as our exclusive manufacturer of such licensed products for a specified period of time subject to certain exceptions. Our sublicensees, however, may manufacture, at any time, certain portions of their requirements for such product subject to certain conditions. We made certain covenants not to commercialize any anti-PD-1 antibody licensed or obtained by us after the date of the license agreement with WuXi Biologics other than anti-PD-1 antibodies licensed from WuXi Biologics, subject to certain exceptions as set forth in the WuXi Agreement. This agreement terminates, on a licensed product-by-licensed product and country-by-country basis, on expiration of the royalty term for such licensed product for the applicable country.

Abmuno License Agreement

In 2016, we entered into a license agreement (the Abmuno Agreement) with Abmuno Therapeutics LLC (Abmuno) for a worldwide exclusive license to develop, use, manufacture, and commercialize products that include an anti-TIGIT antibody, including domvanalimab. Under the agreement, we have made upfront and milestone payments totaling $9.6 million as of December 31, 2020 and we may be required to make additional clinical, regulatory and commercialization milestone payments of up to $98.0 million.

The Abmuno Agreement terminates on the latest of (i) the expiry of the last-to-expire Abmuno licensed patent that covers a product that contains an anti-TIGIT antibody, (ii) the date on which there is no longer an Abmuno licensed patent application that is still pending and has been pending for a certain period of time that covers a product that contains an anti-TIGIT antibody and (iii) 10 years from the date of first commercial sale.

Manufacturing and Supply

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our investigational products for preclinical and clinical testing, as well as for commercial manufacture if any of our investigational products obtain marketing approval. We also rely, and expect to continue to rely, on third parties to package, label, store and distribute our investigational products, as well as for our commercial products if marketing approval is obtained. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment and personnel while also enabling us to focus our expertise and resources on the development of our investigational products. Despite the COVID-19 pandemic, our third-party contract manufacturers continue to operate at or near normal levels and, at this time and subject to further COVID-19

implications, we believe we currently have sufficient drug supply for our ongoing clinical studies and we do not anticipate any disruptions to our drug supply chain.

To date, we have obtained active pharmaceutical ingredients (API) and drug product for our investigational products from single-source third party contract manufacturers. We are in the process of developing our supply chain for each of our investigational products and intend to put in place framework agreements under which third-party contract manufacturers will generally provide us with necessary quantities of API and drug product on a project-by-project basis based on our development needs. With respect to zimberelimab, we agreed, as part of our license agreement with WuXi Biologics, that WuXi Biologics would be our exclusive manufacturer of zimberelimab with respect to clinical and commercial supplies until a certain number of years after marketing approval for zimberelimab, subject to certain exceptions.

As we advance our investigational products through development, we will consider our lack of redundant supply for the API and drug product for each of our investigational products to protect against any potential supply disruptions.

We generally expect to rely on third parties for the manufacture of any companion diagnostics we may develop.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technology, development experience and scientific knowledge provide us with competitive advantages, we face potential competition from many different sources, including large pharmaceutical and biotechnology companies, academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for the research, development, manufacturing and commercialization of cancer immunotherapies. Any investigational products that we successfully develop and commercialize will compete with new immunotherapies that may become available in the future.

We will compete in the segments of the pharmaceutical, biotechnology and other related markets that develop immuno-oncology treatments. There are many other companies that have commercialized and/or are developing immuno-oncology treatments for cancer including large pharmaceutical and biotechnology companies, such as AstraZeneca, Bristol-Myers Squibb, Merck, Pfizer in partnership with Merck KGaA, Regeneron in partnership with Sanofi Genzyme and Roche/Genentech.

For our dual adenosine receptor antagonist, etrumadenant, we are aware that Incyte has initiated clinical development of a dual adenosine receptor antagonist and we are aware of clinical-stage selective adenosine $A_{2a}R$ antagonists being developed by other companies, including AstraZeneca, Corvus, CStone, iTeos Therapeutics and Novartis, and a clinical-stage selective adenosine $A_{2b}R$ antagonist being developed by Palobiofarma. To our knowledge, there are no adenosine receptor antagonists approved for the treatment of cancer and the most advanced is in Phase 2 development.

For our small molecule CD73 inhibitor, AB680, we are aware of several pharmaceutical companies developing antibodies against this target, including Akeso, AstraZeneca, Bristol-Myers Squibb, Corvus, Novartis, Symphogen and Tracon/I-Mab, all of whom have advanced their CD73 antibodies into clinical development. Other pharmaceutical companies, such as Boehringer Ingelheim, Calithera, Eli Lilly, Merck and ORIC, have small-molecule programs against this target, of which only Eli Lilly has advanced its CD73 inhibitor into clinical development. To our knowledge, there are no approved CD73 inhibitors and the most advanced is in Phase 2 development.

For our anti-PD-1 antibody, zimberelimab, multiple large pharmaceutical companies have already received regulatory approvals for their anti-PD-1/PD-L1 antibodies, including AstraZeneca, Bristol-Myers Squibb, Merck, Pfizer in partnership with Merck KGaA, Regeneron in partnership with Sanofi Genzyme and Roche/Genentech, and there are also many other anti-PD-1 and anti-PD-L1 antibodies in clinical development.

For our anti-TIGIT antibody, domvanalimab, we are aware of several pharmaceutical companies developing antibodies against this target, including Agenus, Beigene, Bristol-Myers Squibb, Compugen, Roche/Genentech, Innovent, iTeos Therapeutics, Merck KGaA, Mereo and Seattle Genetics. To our knowledge, there are no approved anti-TIGIT antibodies and the most advanced agent is in Phase 3 development.

Many of the companies against which we may compete have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory

approvals and marketing approved drugs 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 potential competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and enrolling subjects for our clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

We could see a reduction or elimination of our commercial opportunity if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we or our collaborators may develop. Our competitors also may obtain FDA or foreign 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 or our collaborators are able to enter the market. The key competitive factors affecting the success of all of our investigational products, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics (if required), the level of biosimilar or generic competition and the availability of reimbursement from government and other third-party payors.

Intellectual Property

Our commercial success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries for our investigational products, to operate without infringing valid and enforceable patents and proprietary rights of others, and to prevent others from infringing on our proprietary or intellectual property rights. We seek to protect our proprietary position by filing, in the United States and other foreign jurisdictions, patent applications intended to cover the composition of matter of our investigational products, their methods of use, and related discoveries, technologies, inventions and improvements that may be commercially important to our business. We may also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. We also intend to take advantage of regulatory protection afforded through data exclusivity, market exclusivity and patent term extensions where available.

As of February 1, 2021, we have issued U.S. patents directed to compositions of matter with respect to our adenosine receptor antagonist, CD73 inhibitor and anti-TIGIT antibody programs. As of February 1, 2021, our company-owned and licensed patent portfolio consists of 18 pending or issued U.S. patent applications, 8 pending Patent Cooperation Treaty (PCT) patent applications, and approximately 250 pending or issued foreign patent applications directed to compositions of matter, methods of synthesis and methods of use. The term of any patents that issue will vary in accordance with the laws of each jurisdiction, but is typically 20 years from the earliest effective filing date. Our issued patents and any patents that may issue in the future from our company-owned or licensed pending applications are projected to expire between 2035 and 2041, absent any patent term adjustments or extensions.

The patent positions for biotechnology and pharmaceutical companies like us are generally uncertain and can involve complex legal, scientific and factual issues. Changes in either the patent laws or their interpretation in the United States and other countries may diminish our ability to protect our investigational products and enforce the patent rights that we own or license, and could affect the value of such intellectual property. With respect to both company-owned and licensed intellectual property, we cannot guarantee that the patent applications we are currently pursuing or may file in the future will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Our competitors may independently develop similar investigational products or technologies that are outside the scope of the rights granted under any issued patents that we own or exclusively in-license. We cannot be sure that any patents granted to us will be commercially useful in protecting our products or their methods of use or manufacture. Moreover, even issued patents do not guarantee us the right to commercialize our products. For example, third parties may have blocking patents that could be used to prevent us from commercializing or manufacturing our investigational products.

Because of the extensive time required for development, testing and regulatory review of an investigational product, it is possible that, before a product can be commercialized, any patent protection for such product may expire or remain in force for only a short period following commercialization, thereby reducing the commercial advantage the patent provides. In the United States, the term of a patent covering an FDA-approved product may, in certain cases, be eligible for a patent term extension under the Hatch-Waxman Act as compensation for the loss of patent term

during the FDA regulatory review process. The period of extension may be up to five years, but cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. Only one patent among those eligible for an extension and only those claims covering the approved product, a method for using it or a method for manufacturing it may be extended. Similar provisions are available in Europe and in certain other jurisdictions to extend the term of a patent that covers an approved product. While we intend to seek patent term extensions in any jurisdictions where they are available, there is no guarantee that the applicable authorities, including the FDA, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

Government Regulation

Government Regulation and Product Approval

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

FDA Approval Process

In the United States, the Food and Drug Administration (FDA) regulates drugs and biological products under the Federal Food, Drug, and Cosmetic Act (FDCA), the Public Health Service Act (PHSA), and implementing regulations. These laws and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of therapeutic products. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as clinical hold, FDA refusal to approve pending regulatory applications, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

The process required by the FDA before a drug or biological product may be marketed in the United States generally includes the following:

- Completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices (GLP) or other applicable regulations;
- Submission to the FDA of an investigational new drug application (IND), which must become effective before human clinical trials may begin in the United States;
- Performance of adequate and well-controlled human clinical trials according to Good Clinical Practices (GCP), to establish the safety and efficacy of the investigational product for its intended use;
- Submissions to the FDA of a New Drug Application (NDA) or Biologic License Application (BLA) for a new product.
- Satisfactory completion of an FDA inspection of the facility or facilities where the investigational product is manufactured to assess compliance with the FDA's current good manufacturing practices (cGMP), to assure that the facilities, methods and controls are adequate to preserve the investigational product's identity, strength, quality, purity, and potency;
- Potential FDA audit of the preclinical and clinical trial sites that generated the data in support of the NDA/BLA; and
- FDA review and approval of the NDA/BLA.

Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity, and novelty of the investigational product or disease. A clinical hold may occur at any time during the life of an IND and may affect one or more specific trials or all trials conducted under the IND.

Preclinical tests include laboratory evaluation of an investigational product's chemistry, formulation, and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the investigational product. The conduct of the preclinical tests must comply with federal regulations and requirements, including GLP. The results of preclinical testing are submitted to the FDA as part of an IND along with other information, including information about an investigational product's chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted. A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin. Clinical trials involve the administration of the investigational product to healthy volunteers or subjects under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal regulations; (ii) in compliance with GCP, an international standard meant to protect the rights and health of subjects and to define the roles of clinical trial sponsors, administrators, and monitors; as well as (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. subjects and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time, or impose other sanctions if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial subjects. The trial protocol and informed consent information for subjects in clinical trials must also be submitted to an institutional review board (IRB) for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions. The study sponsor may also suspend a clinical trial at any time on various grounds, including a determination that the subjects are being exposed to an unacceptable health risk.

Clinical trials to support NDAs/BLAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the investigational product usually into healthy human subjects, the investigational product is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence on effectiveness. Phase 2 usually involves trials in a limited patient population to determine the effectiveness of the investigational product for a particular indication, dosage tolerance, and optimal dosage, and to identify common adverse effects and safety risks. If an investigational product demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain additional information about clinical efficacy and safety in a larger number of subjects, typically at geographically dispersed clinical trial sites, to permit the FDA to evaluate the overall benefit risk relationship of the investigational product and to provide adequate information for the labeling of the investigational product. In most cases, the FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the investigational product. A single Phase 3 trial may be sufficient in certain circumstances.

Concurrent with clinical trials, sponsors usually complete additional animal safety studies and also develop additional information about the chemistry and physical characteristics of the investigational product and finalize a process for manufacturing commercial quantities of the investigational product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the investigational product and the manufacturer must develop methods for testing the quality, purity and potency of the investigational product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the investigational product does not undergo unacceptable deterioration over its proposed shelf-life. After completion of the required clinical testing, an NDA, for a drug investigational product, or a BLA, for a biological investigational product, is prepared and submitted to the FDA. FDA approval of the NDA or BLA is required before marketing of the product may begin in the United States. The NDA or BLA must include the results of all preclinical, clinical, and other testing and a compilation of data relating to the investigational product's pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA or BLA is substantial. The submission of most NDAs and BLAs is additionally subject to a substantial application user fee, and the applicant under an approved NDA or BLA is also subject to program user fees. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA or BLA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. The FDA may refuse to file any NDA or BLA that it deems incomplete or not properly reviewable at the time of submission, and may request additional information. In this event, the NDA or BLA must be resubmitted with the additional information and the resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of NDAs and BLAs. Most such applications for standard review investigational products are reviewed within ten months of the date the FDA files the NDA or BLA; most applications for priority review investigational products are reviewed within six months of the date the FDA files the NDA or BLA. Priority review can be applied to an investigational product that the FDA determines has the potential to treat a serious or life-threatening condition and, if approved, would be a significant improvement in safety or effectiveness compared to available therapies. The review process for both standard and priority review may be extended by the FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

Among other things, the FDA reviews an NDA to determine whether the product is safe and effective for its intended use, a BLA to determine whether the product is safe, pure, and potent, and in each case, whether the investigational product is being manufactured in accordance with cGMP. The FDA may also refer applications for novel investigational products, or investigational products that present difficult questions of safety or efficacy, to an advisory committee—typically a panel that includes clinicians and other experts—for review, evaluation, and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations.

Before approving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the investigational product is manufactured. The FDA will not approve the investigational 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. To assure GCP and cGMP compliance, an applicant must incur significant expenditures of time, money and effort in the areas of training, record keeping, production and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval and deny approval. Data obtained from clinical trials are not always conclusive. The FDA may disagree with our trial design or interpret data from preclinical studies and clinical trials differently than we interpret the same data. If the agency decides not to approve the NDA or BLA in its present form, the FDA will issue a complete response letter that describes all of the specific deficiencies in the application identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. If a complete response letter is issued, the applicant may either resubmit the NDA or BLA, addressing the deficiencies identified in the letter, or withdraw the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA or BLA, the FDA will issue an approval letter. An approval letter authorizes commercial marketing of the drug or biological product in the United States with specific prescribing information for specific indications.

Even if an investigational product receives regulatory approval, the approval may be significantly limited to specific indications and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a risk evaluation and mitigation strategy (REMS), or otherwise limit the scope of any approval. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use (ETASU). ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the product. In addition, the FDA may require post marketing clinical trials, sometimes referred to as "Phase 4" clinical trials, designed to further assess a product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

Foreign Clinical Trials to Support an IND, NDA, or BLA

The FDA will accept as support for an IND, NDA, or BLA a well-designed, well-conducted, non-IND foreign clinical trial if it was conducted in accordance with GCP and the FDA is able to validate the data from the trial through an on-site inspection, if necessary. A sponsor or applicant who wishes to rely on a non-IND foreign clinical trial to support an IND must submit the following supporting information to the FDA to demonstrate that the trial conformed to GCP:

- the investigator's qualifications;
- a description of the research facilities;
- a detailed summary of the protocol and trial results and, if requested, case records or additional background data;
- a description of the drug substance and drug product, including the components, formulation, specifications, and, if available, the bioavailability of the investigational product;
- information showing that the trial is adequate and well controlled;
- the name and address of the independent ethics committee that reviewed the trial and a statement that the independent ethics committee meets the required definition;

- a summary of the independent ethics committee's decision to approve or modify and approve the trial, or to provide a favorable opinion;
- a description of how informed consent was obtained;
- a description of what incentives, if any, were provided to subjects to participate;
- a description of how the sponsor monitored the trial and ensured that the trial was consistent with the protocol;
- a description of how investigators were trained to comply with GCP and to conduct the trial in accordance with the trial protocol; and
- a statement on whether written commitments by investigators to comply with GCP and the protocol were obtained.

Regulatory applications based solely on foreign clinical data meeting these criteria may be approved if the foreign data are applicable to the U.S. population and U.S. medical practice, the trials have been performed by clinical investigators of recognized competence, and the data may be considered valid without the need for an on-site inspection by FDA or, if FDA considers such an inspection to be necessary, FDA is able to validate the data through an on-site inspection or other appropriate means. Failure of an application to meet any of these criteria may result in the application not being approvable based on the foreign data alone.

Expedited Development and Review Programs

The FDA has various programs, including Fast Track, priority review, accelerated approval and breakthrough therapy, which are intended to expedite or simplify the process for reviewing investigational products, or provide for the approval of an investigational product on the basis of a surrogate endpoint. Even if an investigational product qualifies for one or more of these programs, the FDA may later decide that the investigational product no longer meets the conditions for qualification or that the time period for FDA review or approval will be lengthened. Generally, investigational products that are eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs and those that offer meaningful benefits over existing treatments. For example, Fast Track is a process designed to facilitate the development and expedite the review of investigational products to treat serious or life-threatening diseases or conditions and fill unmet medical needs. Priority review is designed to give an investigational product that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness, an initial review within eight months as compared to a standard review time of twelve months.

Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated investigational product and expedite review of the application for an investigational product designated for priority review. Accelerated approval provides for an earlier approval for a new investigational product that meets the following criteria: is intended to treat a serious or life-threatening disease or condition, generally provides a meaningful advantage over available therapies and demonstrates 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 (IMM) that is reasonably likely to predict an effect on IMM or other clinical benefit. A surrogate endpoint is a laboratory measurement or physical sign used as an indirect or substitute measurement representing a clinically meaningful outcome. As a condition of approval, the FDA may require that a sponsor of an investigational product receiving accelerated approval perform post-marketing clinical trials to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the product may be subject to accelerated withdrawal procedures.

In addition to the Fast Track, accelerated approval and priority review programs discussed above, the FDA also provides Breakthrough Therapy designation. A sponsor may seek FDA designation of an investigational product as a "breakthrough therapy" if the investigational product is intended, alone or in combination with one or more other therapeutics, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the investigational product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biological product intended to treat a rare disease or condition—generally a disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making a product available in the United States for such disease or condition will be recovered from sales of the product.

Orphan drug designation must be requested before submitting a marketing application for the therapeutic for that particular disease or condition. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding toward clinical trial costs, tax advantages and user-fee waivers. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The FDA may revoke orphan drug designation, and if it does, it will publicize the drug is no longer designated as an orphan drug.

If an investigational product with orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the investigational product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same investigational product for the same indication, except in very limited circumstances, for seven years. Orphan drug exclusivity, however, could also block the approval of one of our investigational products for seven years if a competitor obtains approval of the same investigational product as defined by the FDA or if our investigational product is determined to be contained within the competitor's investigational product for the same indication or disease.

Patent Term Restoration and Marketing Exclusivity

After approval, owners of relevant drug or biological product patents may apply for up to a five year patent extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The allowable patent term extension is calculated as half of the product's testing phase—the time between IND and NDA or BLA submission—and all of the review phase—the time between NDA or BLA submission and approval, up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years.

For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to four times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the U.S. Patent and Trademark Office must determine that approval of the investigational product covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for an investigational product for which an NDA or BLA has not been submitted.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the U.S. to the first applicant to gain approval of an NDA for a new chemical entity. An investigational product is a new chemical entity if the FDA has not previously approved any other new investigational product containing the same active moiety, which is the molecule or ion responsible for the action of the investigational product substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application (ANDA) or a 505(b)(2) NDA submitted by another company for another version of such investigational product where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an approved NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, for new indications, dosages or strengths of an existing investigational product. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for investigational products containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Biosimilars

The Biologics Price Competition and Innovation Act of 2009 (BPCIA) created an abbreviated approval pathway for biological investigational products shown to be highly similar to or interchangeable with an FDA licensed reference biological product. Biosimilarity sufficient to reference a prior FDA-approved product requires that there be no differences in conditions of use, route of administration, dosage form, and strength, and no clinically meaningful differences between the biological investigational product and the reference product in terms of safety, purity, and potency. Biosimilarity must be shown through analytical trials, animal trials, and a clinical trial or trials, unless the Secretary of Health and Human Services waives a required element. A biosimilar investigational product may be deemed interchangeable with a prior approved product if it meets the higher hurdle of demonstrating that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

A reference biologic is granted 12 years of exclusivity from the time of first licensure of the reference product, and no application for a biosimilar can be submitted for four years from the date of licensure of the reference product. The first biologic investigational product submitted under the abbreviated approval pathway that is determined to be interchangeable with the reference product has exclusivity against a finding of interchangeability for other biologics for the same condition of use for the lesser of (i) one year after first commercial marketing of the first interchangeable biosimilar, (ii) 18 months after the first interchangeable biosimilar is approved if there is no patent challenge, (iii) 18 months after resolution of a lawsuit over the patents of the reference biologic in favor of the first

interchangeable biosimilar applicant, or (iv) 42 months after the first interchangeable biosimilar's application has been approved if a patent lawsuit is ongoing within the 42-month period.

Post-approval Requirements

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. 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 FDA review and approval. In addition, the FDA may under some circumstances require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA under some circumstances has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs. Any product manufactured or distributed by us or our collaborators pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things:

- record-keeping requirements;
- reporting of adverse experiences associated with the product;
- providing the FDA with updated safety and efficacy information;
- therapeutic sampling and distribution requirements;
- notifying the FDA and gaining its approval of specified manufacturing or labeling changes;
- registration and listing requirements; and
- complying with FDA promotion and advertising requirements, which include, among other things, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product's approved labeling, limitations on industry-sponsored scientific and educational activities and requirements for promotional activities involving the internet.

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 may be subject to significant liability. However, physicians may, in their independent medical judgment, prescribe legally available products for off-label uses. The FDA does not regulate the behavior of physicians in their choice of treatments but the FDA does restrict manufacturer's communications on the subject of off-label use of their products.

Manufacturers, their subcontractors, and other entities involved in the manufacture and distribution of approved drug and biological products are required to register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and some state agencies for compliance with cGMP, including data integrity requirements, and other laws. The FDA periodically inspects manufacturing facilities to assess compliance with ongoing regulatory requirements, including cGMP, which impose extensive procedural, substantive and record-keeping requirements upon us and third-party manufacturers engaged by us if our products are approved. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require FDA approval before being implemented. FDA regulations would also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and our third-party manufacturers. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory actions, such as warning letters, suspension of manufacturing, seizures of products, injunctive actions or other civil penalties. We cannot be certain we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If we or our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials or require us to recall a product from distribution.

In addition, therapeutic manufacturers in the United States must comply with applicable provisions of the Drug Supply Chain Security Act and provide and receive product tracing information, maintain appropriate licenses, ensure they only work with other properly licensed entities, and have procedures in place to identify and properly handle suspect and illegitimate product.

Disclosure of Clinical Trial Information

Sponsors of clinical drug trials (other than Phase 1 trials) are required to register and disclose certain clinical trial information. Information related to the investigational product, comparator(s), patient population, phase of investigation, trial sites and investigators and other aspects of the clinical trial is made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of certain trials may be delayed until the new product or new indication being studied has been approved. However, there are evolving rules and increasing requirements for publication of trial-related information, and it is possible that data and other information from trials involving drugs that never garner approval could in the future be required to be disclosed. In addition, publication policies of major medical journals mandate certain registration and disclosures as a pre-condition for potential publication, even when this is not presently mandated as a matter of law. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Additional Controls for Biological Products

To help reduce the increased risk of the introduction of adventitious agents, the PHSA emphasizes the importance of manufacturing controls for products whose attributes cannot be precisely defined. The PHSA also provides authority to the FDA to immediately suspend licenses in situations where there exists a danger to public health, to prepare or procure products in the event of shortages and critical public health needs, and to authorize the creation and enforcement of regulations to prevent the introduction or spread of communicable diseases in the United States and between states.

After a BLA is approved, the biological product may also be subject to official lot release as a condition of approval. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA together with a release protocol showing a summary of the history of manufacture of the lot and the results of all of the manufacturer's tests performed on the lot. The FDA may also perform certain confirmatory tests on lots of some products, such as viral vaccines, before releasing the lots for distribution by the manufacturer.

In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products. As with drugs, after approval of biological products, manufacturers must address any safety issues that arise, are subject to recalls or a halt in manufacturing, and are subject to periodic inspection after approval.

FDA Regulation of Companion Diagnostics

If use of an *in vitro* diagnostic is essential to safe and effective use of a drug or biologic product, then the FDA generally will require approval or clearance of the diagnostic, known as a companion diagnostic and regulated by FDA as a medical device, at the same time that the FDA approves the investigational product. The review of an *in vitro* companion diagnostic in conjunction with the review of an investigational product involves coordination of review between internal organizations within FDA. Most companion diagnostics require approval of a premarket approval application (PMA). The PMA process, including the gathering of clinical and preclinical data and the submission to and review by the FDA, can take several years or longer. It involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMAs are subject to a substantial application fee. In addition, PMAs for certain devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. In particular, for a diagnostic, the applicant must demonstrate that the diagnostic produces reproducible results when the same sample is tested multiple times by multiple users at multiple laboratories. As part of the PMA review, the

FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation (QSR) which imposes elaborate testing, control, documentation and other quality assurance requirements.

PMA approval is not guaranteed, and the FDA may ultimately respond to a PMA submission with a not approvable determination based on deficiencies in the application and require additional clinical trial or other data that may be expensive and time-consuming to generate and that can substantially delay approval. If the FDA's evaluation of the PMA application is favorable, the FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, in order to secure final approval of the PMA. If the FDA concludes that the applicable criteria have been met, the FDA will issue a PMA for the approved indications, which can be more limited than those originally sought by the applicant. The PMA can include post-approval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution.

After a device is placed on the market following appropriate approval or clearance from the FDA, it remains subject to significant regulatory requirements. Medical devices may be marketed only for the uses and indications for which they are cleared or approved. Device manufacturers must also establish registration and device listings with the FDA. A medical device manufacturer's manufacturing processes and those of its suppliers are required to comply with the applicable portions of the QSR, which cover the methods and documentation of the design, testing, production, processes, controls, quality assurance, labeling, packaging and shipping of medical devices. Domestic facility records and manufacturing processes are subject to periodic unscheduled inspections by the FDA. The FDA also may inspect foreign facilities that export products to the United States.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare & Medicaid Services, or CMS, other divisions of the U.S. Department of Health and Human Services (such as the Office of Inspector General and the Health Resources and Service Administration), the U.S. Department of Justice (DOJ) and individual U.S. Attorney offices within the DOJ, and state and local governments. For example, sales, marketing and scientific/educational grant programs may have to comply with the anti-fraud and abuse provisions of the Social Security Act, the false claims laws, the privacy and security provisions of the Health Insurance Portability and Accountability Act (HIPAA) and similar state laws, each as amended, as applicable.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between therapeutic product manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. 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 and practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an 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 Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor.

Additionally, the intent standard under the Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (ACA), to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act (FCA) (discussed below).

The federal false claims, including the FCA, which imposes significant penalties and can be enforced by private citizens through civil qui tam actions, and civil monetary penalty laws prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false or fraudulent claim for payment to, or

approval by, the federal healthcare programs, including Medicare and Medicaid, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. government. For instance, historically, pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, off-label, and thus generally non-reimbursable, uses.

HIPAA created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the Anti-Kickback Statute, the ACA amended the intent standard for certain healthcare fraud statutes under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

Also, many states have similar, and typically more prohibitive, 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. Additionally, to the extent that our product is sold in a foreign country, we may be subject to similar foreign laws.

We may be subject to data privacy and security regulations 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 (HITECH) and its implementing regulations, imposes requirements on "covered entities," including certain healthcare providers, health plans, and healthcare clearinghouses, and their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity as well as their covered subcontractors relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to business associates. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, many state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways, are often not pre-empted by HIPAA, and may have a more prohibitive effect than HIPAA, thus complicating compliance efforts.

Certain of our products, once approved, may be administered by a physician. Under currently applicable U.S. law, certain products not usually self-administered (including injectable drugs) may be eligible for coverage under Medicare through Medicare Part B. Medicare Part B is part of original Medicare, the federal health care program that provides health care benefits to the aged and disabled, and covers outpatient services and supplies, including certain pharmaceutical products, that are medically necessary to treat a beneficiary's health condition. As a condition of receiving Medicare Part B reimbursement for a manufacturer's eligible drugs or biologicals, the manufacturer is required to participate in other government healthcare programs, including the Medicaid Drug Rebate Program and the 340B Drug Pricing Program. The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services (HHS) as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. Under the 340B Drug Pricing Program, the manufacturer must extend discounts to entities that participate in the program.

In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price (ASP) and best price. Penalties may apply in some cases when such metrics are not submitted accurately and timely. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. It is difficult to predict how Medicare coverage and reimbursement policies will be applied to our products in the

future and coverage and reimbursement under different federal healthcare programs are not always consistent. Medicare reimbursement rates may also reflect budgetary constraints placed on the Medicare program.

Additionally, the federal Physician Payments Sunshine Act (Sunshine Act) within the ACA, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to CMS information related to certain payments or other transfers of value made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives during the previous year. Failure to report accurately could result in penalties. In addition, many states also govern the reporting of payments or other transfers of value, many of which differ from each other in significant ways, are often not pre-empted, and may have a more prohibitive effect than the Sunshine Act, thus further complicating compliance efforts.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical and biotechnology companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

Ensuring business arrangements with third parties comply with applicable healthcare laws and regulations is a costly endeavor. If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other current or future governmental regulations that apply to us, we may be subject to significant penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any investigational products for which we may obtain regulatory approval. In the United States and in foreign markets, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for such products. In the United States, third-party payors include federal and state healthcare programs, private managed care providers, health insurers and other organizations. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid in the United States, and commercial payors are critical to new product acceptance.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which therapeutics they will pay for and establish reimbursement levels. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a therapeutic is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

We cannot be sure that reimbursement will be available for any product that we commercialize and, if coverage and reimbursement are available, what the level of reimbursement will be. Coverage may also be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Reimbursement may impact the demand for, or the price of, any product for which we obtain regulatory approval. Additionally, our collaborators will be required to obtain coverage and reimbursement for any companion diagnostic tests they develop separate and apart from the coverage and reimbursement we seek for our product candidates, once approved.

Third-party payors are increasingly challenging the price, examining the medical necessity, and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with branded drugs and drugs administered under the supervision of a physician. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA approvals. Our investigational products may not be considered medically necessary or cost-effective. Obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our product on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any investigational product that we successfully develop.

Different pricing and reimbursement schemes exist in other countries. In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. 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 investigational product to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs has become intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any investigational products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care, the increasing influence of health maintenance organizations, and additional legislative changes in the United States has increased, and we expect will continue to increase, the pressure on healthcare pricing. The downward pressure on the rise in healthcare costs in general, particularly prescription medicines, medical devices and surgical procedures and other treatments, has become very intense. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of investigational products, restrict or regulate post-approval activities, and affect the ability to profitably sell investigational products for which marketing approval is obtained. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

For example, the ACA has substantially changed healthcare financing and delivery by both governmental and private insurers. Among the ACA provisions of importance to the pharmaceutical and biotechnology industries, in addition to those otherwise described above, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively, and capped the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price (AMP);
- a new Medicare Part D coverage gap discount program, in which manufacturers must now agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the 340B Drug Discount Program;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- expansion of healthcare fraud and abuse laws, including the FCA and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- 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;
- requirements to report certain financial arrangements with physicians and teaching hospitals;
- a requirement to annually report certain information regarding drug samples that manufacturers and distributors provide to physicians;
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending; and
- a licensure framework for follow on biologic products.

There remain legal and political challenges to certain aspects of the ACA. For example, in December 2017, Congress repealed the tax penalty for an individual's failure to maintain ACA-mandated health insurance that is commonly referred to as the "individual mandate" as part of a tax reform bill. On December 14, 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. Additionally, on December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. The United States Supreme Court is currently reviewing this case, but it is unknown when a decision will be reached. Although

the U.S. Supreme Court has yet to rule on the constitutionality of the ACA, on January 28, 2021, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021 through May 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructs certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how the Supreme Court ruling, other such litigation, and the healthcare reform measures of the Biden administration will impact the ACA and our business.

Further legislation or regulation could be passed that could harm our business, financial condition and results of operations. Other legislative changes have been proposed and adopted since the ACA was enacted. For example, in August 2011, President Obama signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee on Deficit Reduction did not achieve a targeted deficit reduction of at least $1.2 trillion for fiscal years 2012 through 2021, triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect beginning on April 1, 2013 and will stay in effect through 2030 unless additional Congressional action is taken. However, the Medicare sequester reductions under the Budget Control Act of 2011 are suspended from May 1, 2020 through March 31, 2021 due to the COVID-19 pandemic.

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 U.S. Congressional inquiries and proposed federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration budget proposal for fiscal year 2021 included a $135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. Further, the Trump administration previously released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contained proposals to increase drug manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products, and reduce the out of pocket costs of drug products paid by consumers. On July 24, 2020 and September 13, 2020, the Trump administration announced several executive orders related to prescription drug pricing that attempt to implement several of the administration's proposals. The FDA also released a final rule, effective November 30, 2020, implementing a portion of the importation executive order providing guidance for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, HHS finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The implementation of this rule has been delayed by the Biden administration from January 1, 2022 to January 1, 2023 in response to ongoing litigation. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a new safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers, the implementation of which have also been delayed pending review by the Biden administration until March 22, 2021. On November 20, 2020, CMS issued an interim final rule implementing President Trump's Most Favored Nation executive order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries, effective January 1, 2021. On December 28, 2020, the United States District Court in Northern California issued a nationwide preliminary injunction against implementation of the interim final rule. However, it is unclear whether the Biden administration will work to reverse these measures or pursue similar policy initiatives. Individual states in the United States have also become increasingly aggressive 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.

We anticipate that current and future healthcare reform measures could result in additional downward pressure on coverage and the price that we receive for any approved product, and could seriously harm our business. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. Such reforms could have an adverse effect on anticipated revenue from investigational products that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop investigational products. Further, it is possible that additional government action is taken in response to the COVID-19 pandemic.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (FCPA), prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

Other Regulations

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, and disposal of hazardous or potentially hazardous substances. We may incur significant costs to comply with such laws and regulations now or in the future.

Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval to conduct clinical trials or market a product, we must obtain the requisite approvals from regulatory authorities in foreign jurisdictions prior to the commencement of clinical trials or marketing of the product in those countries. The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials must be conducted in accordance with GCP and the applicable regulatory requirements. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries.

Australia

Conducting clinical trials for therapeutic drug candidates in Australia is subject to regulation by Australian regulatory bodies. The Therapeutic Goods Administration (TGA) and the National Health and Medical Research Council set the codes of Good Clinical Practice (GCP) for clinical research in Australia, and compliance with these codes is mandatory. Australia has also adopted international codes, such as those promulgated by the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (the ICH). The ICH guidelines must be complied with across all fields of clinical research, including those related to pharmaceutical quality, nonclinical and clinical data requirements and trial designs. The basic requirements for preclinical data to support a first-in-human trial under ICH guidelines are applicable in Australia. Requirements related to adverse event reporting in Australia are similar to those required in other major jurisdictions.

Clinical trials conducted using “unapproved therapeutic goods” in Australia, being those which have not yet been evaluated by the TGA for quality, safety and efficacy must occur pursuant to either the Clinical Trial Notification Scheme (CTN Scheme), or the Clinical Trial Exemption Scheme (CTX Scheme). In each case, the trial is supervised by a Human Research Ethics Committee (HREC) an independent review committee set up under guidelines of the Australian National Health and Medical Research Council that ensures the protection of rights, safety and well-being of human subjects involved in a clinical trial. A HREC does this by reviewing, approving and providing continuing examination of trial protocols and amendments, and of the methods and material to be used in obtaining and documenting informed consent of the trial subjects.

The CTN Scheme broadly involves:

- completion of pre-clinical laboratory and animal testing;
- submission to a HREC, of all material relating to the proposed clinical trial, including the trial protocol;
- the institution or organization at which the trial will be conducted, referred to as the "Approving Authority", giving final approval for the conduct of the trial at the site, having regard to the advice from the HREC;
- the investigator submitting a 'Notification of Intent to Conduct a Clinical Trial' form (the CTN Form) to the TGA. The CTN form must be signed by the sponsor, the principal investigator, the chairman of the HREC and a person responsible from the Approving Authority. The TGA does not review any data relating to the clinical trial however CTN trials cannot commence until the trial has been notified to the TGA.

Under the CTX Scheme:

- a sponsor submits an application to conduct a clinical trial to the TGA for evaluation and comment; and
- a sponsor must forward any comments made by the TGA Delegate to the HREC(s) at the sites where the trial will be conducted.

A sponsor cannot commence a trial under the CTX Scheme until written advice has been received from the TGA regarding the application and approval for the conduct of the trial has been obtained from an ethics committee and the institution at which the trial will be conducted.

Approval for inclusion in the Australian Register of Therapeutic Goods (ARTG) is required before a pharmaceutical product may be marketed (or imported, exported or manufactured) in Australia. In order to obtain registration of the product on the ARTG, it is required that:

- adequate and well-controlled clinical trials demonstrate the quality, safety and efficacy of the therapeutic product;
- evidence is compiled which demonstrates that the manufacture of the therapeutic product complies with the principles of cGMP;
- manufacturing and clinical data is derived to submit to the Advisory Committee on Prescription Medicines, which makes recommendations to the TGA as to whether or not to grant approval to include the therapeutic product in the ARTG; and
- an ultimate decision is made by the TGA whether to include the therapeutic product in the ARTG.

Europe

Similar to the United States and Australia, the conduct of clinical trials in the EU are subject to regulatory controls. Under the current EU Clinical Trials Directive 2001/20/EC (Directive), before a clinical trial can be initiated in the EU, it must be approved in each of the EU countries where the trial is to be conducted by two distinct bodies: the national Competent Authority and one or more Ethics Committees. In 2014, the EU adopted a new Clinical Trials Regulation 536/2014 (Regulation) to replace the current Directive, with a three-year transition period. The Regulation aims to simplify and streamline the approval of clinical trials in the EU. For example, the sponsor shall submit a single application for approval of a clinical trial via the EU portal. As part of the application process, the sponsor shall propose a reporting Member State, who will coordinate the validation and evaluation of the application. The reporting Member State shall consult and coordinate with the other concerned Member States. If an application is rejected, it can be amended and resubmitted through the EU portal. If an approval is issued, the sponsor can start the clinical trial in all concerned Member States. However, a concerned Member State can in limited circumstances declare an "opt-out" from an approval. In such a case, the clinical trial cannot be conducted in that Member State. The Regulation also aims to streamline and simplify the rules on safety reporting, and introduces enhanced transparency requirements such as mandatory submission of a summary of the clinical trial results to the EU database. The Regulation will become directly applicable in all EU Member States once the centralized portal and database for clinical trials are fully functional.

The Directive will still apply for three years from the date of application of the Regulation for clinical trial applications submitted before the date of application of the Regulation and for clinical trial applications submitted under the Directive within one year after the date of application of the Regulation.

Commercialization of our investigational products may only occur in the EU following approval of a marketing application, which can be obtained through either a centralized or a decentralized procedure:

- Under the centralized procedure, a marketing application is submitted to the European Medicines Agency (EMA), where it will be evaluated by the Committee for Medicinal Products for Human Use. If this committee delivers a favorable opinion, this typically results in the grant by the European Commission of a single marketing authorization that is valid for all European Union member states. The centralized procedure is mandatory for certain types of drugs, such as biotechnology medicinal drugs, orphan medicinal drugs, and medicinal drugs containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The centralized procedure is optional for drugs containing a new active substance not yet authorized in the EEA, or for drugs that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.
- Under the decentralized procedure, an identical dossier is submitted to the competent authorities of each of the Member States in which a marketing authorization is sought, one of which is selected by the applicant as the Reference Member State (RMS). The competent authority of the RMS prepares a draft assessment report, a draft summary of the drug characteristics (SPC) and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, labeling, or packaging proposed by the RMS, the drug is subsequently granted a national marketing authorization in all the Member States (*i.e.*, in the RMS and the Member States Concerned).

We will be subject to additional regulations with respect to any activities we conduct in the EU. For example, the EU General Data Protection Regulation (GDPR) applies to health-related and other personal data of individuals in the European Union. The GPDR, which went into effect in May 2018, imposes more stringent operational requirements on processors and controllers of personal data, including, for example, expanded disclosures about how personal data is collected, used and shared, limitations on retention of personal data, more stringent requirements pertaining to genetic, biometric and health data, mandatory data breach notification requirements, and higher standards for controllers to demonstrate valid consent for certain data processing activities. The GDPR further provides that European Union Member States may implement their own additional laws and regulations in relation to the processing of genetic, biometric or health data, which could result in differences in the GDPR's implementation among Member States. The GDPR increases our responsibility and liability in relation to personal data that we process, and we must put in place additional mechanisms to ensure compliance with the new EU data protection rules.

Human Capital Resources

Our culture and values can be defined by one overarching concept: We do the right things for the right reasons. We take pride in hard work and approach our mission—to create, develop and commercialize highly differentiated combination cancer therapies that have the potential to cure—with a great sense of urgency. We recognize that our employees are a critical component to our success and we strive to attract the best talent from a range of sources, including an internship program through which we have developed strong relationships with multiple universities to foster talent and attract skilled graduates. In 2020, we added 105 new employees to our team and expect more growth in 2021, with a focus on expanding our expertise and capabilities in research, clinical development and across our organization.

We recognize that attracting skilled talent is only one part of the equation. We endeavor to retain and motivate our employees by empowering them to make the decisions they are most qualified and best positioned to decide and by providing opportunities for growth and development, such as through our education reimbursement program. We focus on wellness through our CEO-funded lunch program, a quarterly stipend to assist with wellness and commuter expenses, and our coverage of 95% of the costs for healthcare benefits. Since the COVID pandemic, we have increased our focus on safety and wellness. In March 2020, we voluntarily transitioned our employees, including our laboratory-based personnel, to work-from-home prior to the institution of state and local shelter-in-place orders. While we were able to transition our non-laboratory operations to remote work arrangements, this was not possible for our laboratory-based personnel. Despite a shutdown in our laboratory operations into June 2020, we did not institute any furlough or salary reductions. In connection with the resumption of our laboratory operations, we instituted regular COVID-19 testing services in order to minimize the risk to our employees.

As of February 1, 2021, we had 236 full-time employees, 92 of whom hold Ph.D. or M.D. degrees or R.N. certifications. Of these employees, 184 were engaged in research and development activities and 52 were engaged in general and administrative activities. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 2015. Our principal executive offices are located at 3928 Point Eden Way, Hayward, CA 94545, and our telephone number is (510) 694-6200. Our website address is www.arcusbio.com. The information on, or that can be accessed through, our website is not incorporated by reference into this Annual Report on Form 10-K.

We operate and manage our business as one reportable and operating segment. See Note 2 to our audited financial statement included elsewhere in this Annual Report on Form 10-K for additional information.

We file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other information with the Securities and Exchange Commission (SEC). Our filings with the SEC are available free of charge on the SEC's website at *www.sec.gov* and on our website under the "Investors" tab as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Item 1A. Risk Factors.

You should consider carefully the following risk factors, together with all the other information in this report, including our consolidated financial statements and notes thereto, and in our other public filings with the SEC. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the risk factors described when evaluating our business.

Risks Related to the Impact of COVID-19

The impact of the COVID-19 pandemic and related risks could have a material adverse impact on our research and development programs and financial condition.

The degree to which COVID-19 impacts our business operations, research and development programs and financial condition will depend on future developments, including the ultimate duration and/or severity of the outbreak, the impact of any resurgences and new strains that emerge, actions by government authorities to contain the spread of the virus, the timing, availability and effectiveness of any vaccines, and when and to what extent normal economic and operating conditions can resume. The American Cancer Society has reported that the pandemic has led to declines in screening, diagnosis and treatment for patients, which will adversely impact the enrollment of patients in clinical trials targeting early stage cancers and retention of patients overall in our trials. While we conduct our clinical trials in the U.S. and internationally in geographic regions that are impacted by COVID-19 to varying degrees, due to the foregoing factors, we are unable to predict the full impact of this pandemic on our clinical programs.

Our discovery programs were impacted by the suspension in our laboratory-based operations from mid-March to late June. Despite the return of our laboratory-based personnel back into our facilities, our laboratories are operating at reduced capacity due to employee safety measures, such as social distancing requirements and shift work. This has delayed the advancement of one of two preclinical programs that we had expected would enter the clinic in the first quarter of 2021. A clinical trial for the first program is expected to begin shortly; however, the pandemic has delayed the second program until the second half of 2021.

The full impact of the COVID-19 outbreak remains highly uncertain and subject to change. In connection with our resumption of laboratory operations, we instituted regular COVID-19 testing services in order to minimize the risk to our employees. These additional operating costs, along with the absence of any furlough or measures to reduce personnel costs despite reduced laboratory capacity, will have an adverse impact on our financial condition.

In addition, the impact of the COVID-19 pandemic, including governmental and other actions to combat it such as the imposition of the shelter-in-place and other public health orders, may exacerbate the effects of the risks described below.

Risks Related to our Limited Operating History, Financial Position and Capital Requirements

We are an early-stage immuno-oncology company with a limited operating history. We have incurred annual net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have never generated any revenue from product sales and may never be profitable.

We are an early-stage immuno-oncology company with a limited operating history that may make it difficult to evaluate the success of our business to date and to assess our future viability. All of our investigational products are in development, and none have been approved for commercial sale. We have never generated any revenue from product sales and have incurred net losses each year since we commenced operations. For the years ended December 31, 2020 and 2019, our net losses were $122.9 million and $84.7 million, respectively. As of December 31, 2020, we had an accumulated deficit of $328.2 million. We expect that it will be several years, if ever, before we have an investigational product ready for commercialization. We expect to incur increasing levels of operating losses over the next several years and for the foreseeable future as we advance our investigational products. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity (deficit) and working capital.

To become and remain profitable, we must develop and eventually commercialize a product with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials of our investigational products, obtaining marketing approval for these investigational products, manufacturing, marketing and selling those products for which we may obtain marketing approval and satisfying any post-marketing requirements. We may never succeed in these activities and, even if we succeed in commercializing one or more of our investigational products, we may never generate revenues that are significant or large enough to achieve profitability. In addition, as a young business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown challenges. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis and we will continue to incur substantial research and development and other expenditures to develop and market additional investigational products. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause our stockholders to lose all or part of their investment.

We may need to obtain additional funding to finance our operations and complete the development and any commercialization of our investigational products. If we do not receive substantial opt-in, milestone or royalty payments from our existing collaboration agreements, or are unable to raise additional capital when needed, we may be forced to restrict our operations or delay, reduce or eliminate our product development programs.

The development of biopharmaceutical investigational products is capital intensive. Since our inception, we have used substantial amounts of cash to fund our operations and expect our expenses to increase substantially during the next few years as our investigational products enter and advance through preclinical studies and clinical trials and we expand our clinical, regulatory, quality and manufacturing capabilities. In addition, if we obtain marketing approval for any of our investigational products, we expect to incur significant commercialization expenses related to marketing, sales, manufacturing and distribution.

As of December 31, 2020, we had $735.1 million of cash, cash equivalents and investments. In February 2021 we raised an additional $220.4 million from the sale to Gilead Sciences, Inc. (Gilead) of 5,650,000 shares of our common stock. While we believe that our cash position will be sufficient to fund our anticipated level of operations through 2023, our future capital requirements will depend on many factors, including:

- the scope, rate of progress and costs of clinical trials for our investigational products as well as drug discovery, preclinical development activities, and laboratory testing;
- the number and scope of clinical programs we decide to pursue;
- the scope and costs of manufacturing development and commercial manufacturing activities;
- the timing and number of programs Gilead exercises its option to obtain an exclusive license to our current and future clinical programs, subject to the rights of our existing partners, and the costs associated with our share of the global development plan for such optioned programs;

- the timing and amount of milestone payments we receive from Taiho Pharmaceuticals Co., Ltd. (Taiho) under our option and license agreement (the Taiho Agreement) and the Gilead Collaboration Agreement, and option fees under the Gilead Collaboration Agreement;
- the extent to which we acquire or in-license other investigational products and technologies;
- the cost, timing and outcome of regulatory review of our investigational products;
- the cost and timing of establishing sales and marketing capabilities, if any of our investigational products 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 collaborations on favorable terms, if at all;
- our efforts to enhance operational systems and our ability to attract, hire and retain qualified personnel, including personnel to support the development of our investigational products;
- the costs associated with being a public company; and
- the cost associated with commercializing our investigational products, if they receive marketing approval.

We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. 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 investigational products. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts. In addition, if we are able to raise additional capital, raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or investigational products.

Risks Related to the Discovery and Development of our Investigational Products

We are early in our development efforts. If we are unable to develop, obtain regulatory approval for and commercialize our investigational products, or experience significant delays in doing so, our business will be materially harmed.

We have no products approved for sale and our most advanced investigational products are in Phase 2 trials and concurrently advancing into registrational trials. We may subsequently learn of certain information or data that the FDA may request, which may necessitate conducting additional preclinical studies or generating additional information at significant cost in terms of both time and expense, including under a clinical hold imposed on an investigational new drug application (IND). Even if we conducted the additional studies or generated the additional information requested, the FDA could disagree that we have satisfied their requirements, all of which will cause significant delays and expense to our programs.

As we advance our clinical programs, we will need to expand our clinical operations, quality and regulatory capabilities to support these activities. In part because of our limited infrastructure, experience conducting clinical trials as a company and regulatory interactions, we cannot be certain that our clinical trials will be completed on time, that our planned clinical trials will be initiated on time, if at all, that our planned development programs would be acceptable to the FDA or other comparable foreign regulatory authorities, or that, if approval is obtained, such investigational products can be successfully commercialized.

Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on our ability to successfully complete the above activities and any other activities required for the successful development and eventual commercialization of one or more of our investigational products. The success of our investigational products will further depend on factors such as:

- the success of our collaboration with Gilead;
- successful completion of preclinical studies;

- permission to proceed under regulatory applications for our planned clinical trials or future clinical trials;
- successful enrollment in, and completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing manufacturing capabilities or arrangements with third party manufacturers for clinical supply and, if and when approved, for commercial supply;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in combination with others;
- acceptance of our products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- developing and implementing marketing and reimbursement strategies;
- obtaining and maintaining third party coverage and adequate reimbursement;
- obtaining and maintaining patent, trade secret and other intellectual property protection and regulatory exclusivity for our investigational products;
- the ability to obtain clearance or approval of companion diagnostic tests, if required, on a timely basis, or at all; and
- maintaining a continued acceptable safety profile of any product following approval.

If we do not achieve one or more of these factors in a timely manner, we could experience significant delays or an inability to successfully commercialize our investigational products, which would materially harm our business.

Clinical drug development is a lengthy, expensive and uncertain process. The results of preclinical studies and early clinical trials are not always predictive of future results. Any investigational product that we advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval.

The research and development of drugs and biological products is an extremely risky industry. Only a small percentage of investigational products that enter the development process ever receive marketing approval. Before obtaining marketing approval from regulatory authorities for the sale of any investigational product, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our investigational products in humans. Clinical testing is expensive, can take many years to complete and its outcome is uncertain.

The results of preclinical and early clinical trials of our investigational products and other products with the same mechanism of action may not be predictive of the results of later-stage clinical trials. Clinical trial failure may result from a multitude of factors including flaws in study design, dose selection, placebo effect, patient enrollment criteria and failure to demonstrate favorable safety or efficacy traits. As such, failure in clinical trials can occur at any stage of testing. A number of companies in the biopharmaceutical industry have suffered setbacks in the advancement of clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we may decide, or regulators may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from clinical trials are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may further delay, limit or prevent marketing approval. In particular, results from uncontrolled trials, meaning trials in which there is no control group such as a placebo group, are inherently difficult to interpret. Clinical trials evaluating two or more investigational products in combination that have not yet been approved can compound these difficulties. As a key element of our strategy is the development of intra-portfolio combinations, our early clinical trials may test more than one investigational product in uncontrolled studies, such as our Phase 1/1b clinical trials for etrumadenant in which we evaluated etrumadenant in combination with zimberelimab. Furthermore, as more investigational products within a particular class of drugs proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change.

We currently have four investigational products in clinical development and their risk of failure is high. We are unable to predict if these investigational products or any of our future investigational products that advance into clinical trials will prove safe or effective in humans or will obtain marketing approval. If we are unable to complete preclinical or clinical trials of current or future investigational products, due to safety concerns, or if the results of these trials are not satisfactory to convince regulatory authorities of their safety or efficacy, we will not be able to obtain marketing approval for commercialization. Even if we are able to obtain marketing approvals for any of our investigational products, those approvals may be for indications that are not as broad as desired or may contain other limitations that would adversely affect our ability to generate revenue from sales of those products. Moreover, if we are not able to differentiate our product against other approved products within the same class of drugs, or if any of the other circumstances described above occur, our business would be materially harmed and our ability to generate revenue from that class of drugs would be severely impaired.

Enrollment and retention of subjects in clinical trials is expensive and time consuming, can be made more difficult or rendered impossible by competing treatments, clinical trials of competing investigational products, and public health epidemics, each of which could result in significant delays and additional costs in our product development activities, or in the failure of such activities.

We may encounter delays in enrolling, or be unable to enroll and maintain, a sufficient number of subjects to complete any of our clinical trials. Patient enrollment and retention in clinical trials is a significant factor in the timing of clinical trials and depends on many factors, including the size of the patient population required for analysis of the trial's primary endpoints, the nature of the trial protocol, our ability to recruit clinical trial investigators with the appropriate competencies and experience, the existing body of safety and efficacy data with respect to the investigational product, the number and nature of competing products or investigational products and ongoing clinical trials of competing investigational products for the same indication, the proximity of subjects to clinical trial sites, the eligibility criteria for the clinical trial and our ability to obtain and maintain subject consents.

For example, enrollment of oncology subjects in our clinical trials evaluating zimberelimab may be hampered by nivolumab from Bristol-Myers Squibb and pembrolizumab from Merck, both of which are approved and on the market. Subjects may opt to be treated with an approved product rather than our anti-PD-1 antibody investigational product. In addition, Roche/Genentech have initiated Phase 3 trials with their anti-TIGIT antibody, which could reduce the number of clinical sites and subjects available for ARC-7, our Phase 2 trial evaluating combinations with domvanalimab (our anti-TIGIT antibody) and ARC-10, our Phase 3 trial evaluating zimberelimab monotherapy and zimberelimab plus domvanalimab combination therapy versus chemotherapy. Similarly, we are aware that AstraZeneca is conducting a broad clinical program with its $A_{2a}R$ antagonist in metastatic castration-resistant prostate cancer (mCRPC), and we may compete for clinical sites and enrollment in this patient population, which may adversely impact the rate of enrollment of the different cohorts of our Phase 2 platform trial evaluating combinations with etrumadenant in mCRPC.

Public health outbreaks, such as the COVID-19 pandemic, will also have an adverse impact our clinical trial operations. The limited resources available at investigational sites will limit their ability to initiate new studies, screen and enroll subjects, conduct and report all patient assessments and hinder their ability to collect all patients samples, which may impact our ability to assess the activity of our investigational products in a timely manner.

Furthermore, any negative results that we may report in clinical trials of our investigational products may make it difficult or impossible to recruit and retain subjects in other clinical trials of that same investigational product. Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our investigational products. Failures in planned subject enrollment or retention may result in increased costs or program delays and could render further development impossible.

If we do not achieve our product development goals in the time frames we announce and expect, the commercialization of our investigational products may be delayed, our share price may decline and our commercial prospects may be adversely affected.

Drug development is inherently risky and uncertain. The actual timing of our development milestones can vary significantly compared to our estimates, in some cases for reasons beyond our control, for any number of reasons, including:

- delays in completing IND-enabling preclinical studies or developing manufacturing processes and associated analytical methods that meet cGMP requirements;
- the FDA placing a clinical trial on hold;
- subjects failing to enroll or remain in our trial at the rate we expect;
- subjects choosing an alternative treatment or other investigational products, or participating in competing clinical trials;
- lack of adequate funding to continue our clinical trials;
- subjects experiencing severe or unexpected drug-related adverse effects;
- any interruptions or delays in the supply of our investigational products for our clinical trials;
- a facility manufacturing any of our investigational products or any of their components being ordered by the FDA or comparable foreign regulatory authorities to temporarily or permanently shut down due to violations of good manufacturing practice (cGMP) regulations or other applicable requirements, or infections or cross-contaminations of investigational products in the manufacturing process;
- any changes to our manufacturing process or product specifications that may be necessary or desired;
- any failure or delay in reaching an agreement with contract research organizations (CROs) and clinical trial sites;
- third-party clinical investigators losing the licenses or permits necessary to perform our clinical trials, not performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol, good clinical practices (GCP) or regulatory requirements or other third parties not performing data collection or analysis in a timely or accurate manner;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other comparable foreign regulatory authorities for violations of applicable regulatory requirements, in which case we may need to find a substitute contractor, and we may not be able to use some or all of the data produced by such contractors in support of our marketing applications;
- one or more Institutional Review Boards (IRBs) refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial;
- changes in regulatory requirements and policies, which may require us to amend clinical trial protocols to comply with these changes and resubmit our clinical trial protocols to IRBs for reexamination; or
- health crises and other epidemics, such as the COVID-19 pandemic, which has led to mandatory quarantines that has restricted the ability of trial sites to initiate new trials, screen patients for enrollment or treat enrolled patients, and has diverted clinical trial site resources away from the conduct of our clinical trials.

These and other factors may also lead to the suspension or termination of clinical trials, and ultimately the denial of regulatory approval of an investigational product. Any delays in achieving our development goals may allow our competitors to bring products to market before we do and adversely affect our commercial prospects and cause our stock price to decline.

Preliminary and interim data from our clinical studies that we announce or publish from time to time are subject to audit and verification procedures that could result in material changes in the final data and may change as more patient data become available.

From time to time, we publish preliminary or interim data from our clinical studies. Preliminary data remain subject to audit confirmation and verification procedures that may result in the final data being materially different from the preliminary data we previously published. Interim data are also subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. As a result, preliminary and interim data should be viewed with caution until the final data are available. Material adverse changes in the final data could significantly harm our business prospects.

Serious adverse events, undesirable side effects or other unexpected properties of our investigational products may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our investigational products or limitations on the use of our investigational products or, if discovered following marketing approval, revocation of marketing authorizations or subsequent limitations on the use of our investigational products.

To date, we have only tested our clinical-stage investigational products in a relatively small number of oncology subjects. As we continue our development of these investigational products and initiate clinical trials of our additional investigational products, serious adverse events, undesirable side effects or unexpected characteristics may emerge causing us to abandon these investigational products or limit their development to more narrow uses or subpopulations in which the serious adverse events, undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Even if our investigational products initially show promise in these early clinical trials, the side effects of drugs are frequently only detectable after they are tested in large, Phase 3 clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. Sometimes, it can be difficult to determine if the serious adverse or unexpected side effects were caused by the investigational product or another factor, especially in oncology subjects who may suffer from other medical conditions and be taking other medications. If serious adverse or unexpected side effects are identified during development and are determined to be attributed to our investigational product, we may be required to develop a Risk Evaluation and Mitigation Strategy (REMS) to mitigate those serious safety risks, which could impose significant distribution and use restrictions on our products.

Drug-related side effects could also affect subject recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business prospects significantly.

In addition, if one or more of our investigational products receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- regulatory authorities may impose subsequent limitations on the use of the product;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

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

Adverse findings from clinical trials conducted by third parties investigating the same investigational products as us in different territories could adversely affect our development program.

Lack of efficacy, adverse events, undesirable side effects or other adverse findings may emerge in clinical trials conducted by third parties investigating the same investigational products as us in different territories. For example,

we and Guangzhou Gloria Biosciences, Co. (Gloria Biosciences, formerly known as Harbin Gloria Pharmaceuticals Co. Ltd.) each licensed our rights to the same anti-PD-1 antibody (which we refer to as zimberelimab) from WuXi Biologics (Cayman) Inc. (WuXi Biologics). Gloria Biosciences refers to this antibody as GLS-010 and is conducting clinical trials with GLS-010 in China. We have no control over their clinical trials or development program, and adverse findings from the results or their conduct of clinical trials could adversely affect our development of zimberelimab or even the viability of zimberelimab as an investigational product. We may be required to report Gloria Biosciences' adverse events or unexpected side effects to the FDA or comparable foreign regulatory authorities, which could, among other things, order us to cease further development of zimberelimab. We may face similar risks from any independent development conducted with our investigational products by Taiho and Gilead, following any exercise of their respective options to our programs.

A key element of our strategy is the development of intra-portfolio combinations. If we are not successful in discovering, developing and commercializing investigational products that take advantage of different mechanisms of action to achieve superior outcomes relative to the use of single agents or other combination therapies, our ability to achieve our strategic objectives would be impaired.

A key element of our strategy is to build a broad portfolio of investigational products that will allow for the development of intra-portfolio combinations. We believe that by developing or licensing these investigational products, we can control the combinations we pursue and, if and when approved, maximize the commercial potential of these combinations. However, these combinations have not been tested before and may fail to demonstrate synergistic activity against immunological targets, may fail to achieve superior outcomes relative to the use of single agents or other combination therapies, may exacerbate adverse events associated with one of the investigational products when used as monotherapy, or may fail to demonstrate sufficient safety or efficacy traits in clinical trials to enable us to complete those clinical trials or obtain marketing approval for the combination therapy. In addition, our early clinical trials may test more than one investigational product in uncontrolled studies, and it may be difficult to interpret the results of those uncontrolled trials.

We expect that our anti-PD-1 antibody, zimberelimab, will form the backbone of many of our intra-portfolio combinations. In the event that zimberelimab were to fail to demonstrate sufficient safety and efficacy, we would need to identify alternatives for accessing an anti-PD-1 antibody. In the event we are unable to do so or are unable to do so on commercially reasonable terms, our business and prospects would be materially harmed.

All of our investigational products are targeting mechanisms that other companies are pursuing as either monotherapy or combination products. As such, even if we are successful in developing combination therapies, competition from other investigational products in the same class which are either already approved or further along in development than ours may prevent us from realizing the commercial potential of our combination therapies and prevent us from achieving our strategic objectives.

Our intra-portfolio combination strategy relies on discovering, developing and commercializing highly differentiated small molecules. If we are not able to differentiate our small molecules from other products which are approved or in development, our business prospects would be materially adversely affected.

Our combination therapy strategy relies on discovering and developing differentiated small molecules with ideal pharmacologic properties for the targeted pathway to complement our antibody investigational products, which we believe will form the backbone of our combination therapies. We conduct in our laboratories those activities that we consider to be critical for creating a development candidate with optimal properties. These activities include medicinal chemistry, assay development, assessment of compound potency and selectivity, *in vitro* and *in vivo* pharmacokinetic profile evaluation, *in vivo* pharmacology and exploratory safety evaluation, among others. As such, we have invested heavily in these internal capabilities and over 75% of our current workforce is dedicated to research and development.

In addition, any small molecules we discover and design may, on further study, be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be medicines that will receive marketing approval and achieve market acceptance. If we are unable to identify suitable compounds with ideal pharmacological properties and which are differentiated from other investigational products in development for preclinical and clinical development, our business and prospects would be materially harmed.

Certain of our investigational products may require companion diagnostics in certain indications. Failure to successfully develop, validate and obtain regulatory clearance or approval for such tests could harm our product development strategy or prevent us from realizing the full commercial potential of our investigational products.

Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as a medical device and may require separate regulatory authorization prior to commercialization. Certain clinical trials that we are conducting, or may in the future conduct, include the use of a diagnostic test to help identify eligible patients. For example, we are conducting a clinical trial in collaboration with Strata Oncology (Strata) to evaluate zimberelimab in patients in a tumor-agnostic fashion utilizing Strata's precision drug development platform and proprietary biomarkers. We also have significant efforts directed to identifying changes in various cells and proteins to understand their relationship, if any, to the clinical activity observed in our clinical trials and to assess if such cells and/or proteins could be used as predictive biomarkers to select for patients more likely to respond to our investigational products. However, we cannot be certain that we will be able to identify any such biomarkers, that such biomarkers will result in us identifying the appropriate patients for our investigational products or that we or any third party collaborators will be able to validate any diagnostic tests incorporating any predictive biomarkers we may identify.

We currently do not have any plans to develop diagnostic tests internally. We are therefore dependent on the sustained cooperation and effort of third-party collaborators in developing and, if our investigational products are approved for use only with an approved companion diagnostic test, obtaining approval and commercializing these tests. If these parties are unable to successfully develop companion diagnostics for these investigational products, or experience delays in doing so, the development of our investigational products may be adversely affected and we may not be able to obtain marketing authorization for these investigational products. Furthermore, our ability to market and sell, as well as the commercial success, of any of our investigational products that require a companion diagnostic will be tied to, and dependent upon, the receipt of required regulatory authorization and the continued ability of such third parties to make the companion diagnostic commercially available on reasonable terms in the relevant geographies. Any failure to develop, validate, obtain and maintain marketing authorization and supply for a companion diagnostic we need will harm our business prospects.

The design or our execution of our ongoing and future clinical trials may not support marketing approval.

The design or execution of a clinical trial can determine whether its results will support marketing approval, and flaws in the design or execution of a clinical trial may not become apparent until the clinical trial is well advanced. In some instances, there can be significant variability in safety or efficacy results between different trials with the same investigational product due to numerous factors, including differences in trial protocols, size and type of the patient populations, variable adherence to the dosing regimen or other protocol requirements and the rate of dropout among clinical trial participants. The FDA and comparable foreign regulatory authorities have substantial discretion in the approval process and in determining when or whether marketing approval will be obtained for any of our investigational products. Our investigational products may not be approved even if they achieve their primary endpoints in any Phase 3 clinical trials or registrational trials we or our collaborators conduct. The FDA or comparable foreign regulatory authorities may disagree with our trial designs and our interpretation of data from preclinical studies or clinical trials. In addition, any of these regulatory authorities may change requirements for the approval of an investigational product even after reviewing and providing comments or advice on a protocol for a pivotal Phase 3 or registrational clinical trial that has the potential to result in FDA or other comparable foreign regulatory authorities' approval. Any of these regulatory authorities may also approve an investigational product for fewer or more limited indications than we request or may grant approval contingent on the performance of costly post-marketing clinical trials. Even if the FDA or comparable foreign regulatory authorities approve an investigational product, they may not approve the labeling claims that we believe would be necessary or desirable for the successful commercialization of our investigational products.

We have conducted, and continue to conduct, portions of our clinical trials outside the United States, and the FDA may not accept data from trials conducted in foreign locations.

We have conducted, and we expect to continue to conduct, portions of our clinical trials outside the United States. For example, ARC-10, our Phase 3 trial evaluating zimberelimab monotherapy and zimberelimab plus domvanalimab combination therapy versus chemotherapy, does not include any clinical sites in the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of these data is subject to certain conditions imposed by the FDA. For example, the clinical trial must be well designed and

conducted and performed by qualified investigators in accordance with ethical principles. The trial population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. In general, the patient population for any clinical trials conducted outside the United States must be representative of the population for whom we intend to label the product in the United States. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will be dependent upon its determination that the trials also complied with all applicable U.S. laws and regulations. We cannot assure you that the FDA will accept data from trials conducted outside the United States. If the FDA does not accept the data from such clinical trials, we would likely need to conduct additional trials, which would be costly and time-consuming and delay or permanently halt our development of our investigational products.

Risks Related to Reliance on Third Parties, Manufacturing and Commercialization

We expect to depend on our collaboration with Gilead for the research, development, manufacture and commercialization of our investigational products. If this collaboration is not successful, our business could be adversely affected.

In May 2020, we entered into an option, license and collaboration agreement (the Gilead Collaboration Agreement) with Gilead Sciences, Inc. (Gilead) pursuant to which Gilead obtained an exclusive option to all of our current and future programs during the 10-year collaboration term contingent upon Gilead's payment of up to $400.0 million. Upon Gilead's exercise of its option to a program, the companies will co-develop and equally share global development costs, subject to certain opt-out rights for us, and expense caps on our spending and related subsequent adjustments. For each optioned program, provided we have not exercised our opt-out rights, we have an option to co-promote in the United States and share equally all associated profits and losses. Gilead has the right to exclusively commercialize any optioned programs outside of the U.S., subject to the rights of our existing partners to any territories, and will pay us tiered royalties as a percentage of revenues ranging from the high teens to the low twenties. In connection with the entering into of the Gilead Collaboration Agreement, we and Gilead also entered into a common stock purchase agreement and an investor rights agreement. Our agreements with Gilead pose a number of risks including, but not limited to, the following:

- we may not be successful in this collaboration due to various factors, including our ability to demonstrate proof of concept in one or more clinical studies so that Gilead will exercise its option to these programs;
- if our collaborations on research and development candidates do not result in the successful development and commercialization of products or if Gilead terminates the collaboration agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our investigational products could be delayed and we may need additional resources to develop our investigational products;
- conflicts may arise between us and Gilead, such as conflicts regarding the combinations or indications to pursue or concerning the interpretation of clinical data, the commercial potential of any optioned investigational products, the interpretation of financial provisions or the ownership of intellectual property developed during the collaboration. Any such conflicts could slow or prevent the development or commercialization of our investigational products;
- we will be heavily dependent on Gilead for its further development and commercialization of the investigational products from the programs that it opts into;
- we have appointed two individuals designated by Gilead to our board of directors pursuant to the terms of the investor rights agreement, and Gilead owns approximately 19.5% of our outstanding common stock and will have the right (but not the obligation) to acquire additional shares from us up to an amount resulting in Gilead owning a total of 35% of our outstanding common stock and, as a result, may be able to exert significant influence over our company;
- Gilead could independently develop, or develop with third parties, products that compete directly or indirectly with our investigational products if Gilead believes that competitive products are more likely

to be successfully developed or can be commercialized under terms that are more economically attractive than ours; and

- because Gilead has an option to all of our programs, it will be difficult for us to enter into new collaborations.

We rely on third parties to conduct our clinical trials and perform some of our research and preclinical studies. If these third parties do not satisfactorily carry out their contractual duties or fail to meet expected deadlines, our development programs may be delayed or subject to increased costs, each of which may have an adverse effect on our business and prospects.

We do not have the ability to conduct all aspects of our preclinical testing or clinical trials ourselves. As a result, we are and expect to remain dependent on third parties to conduct our ongoing clinical trials and any future clinical trials of our investigational products. The timing of the initiation and completion of these trials will therefore be partially controlled by such third parties and may result in delays to our development programs. Specifically, we expect CROs, clinical investigators, and consultants to play a significant role in the conduct of these trials and the subsequent collection and analysis of data. However, we will not be able to control all aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, Australian Therapeutic Goods Administration and comparable foreign regulatory authorities for all of our investigational products in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, clinical trial investigators and clinical trial sites. If we or any of our CROs or clinical trial sites fail to comply with applicable GCP requirements, the data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to stop and/or repeat clinical trials, which would delay the marketing approval process.

There is no guarantee that any such CROs, clinical trial investigators or other third parties on which we rely will devote adequate time and resources to our development activities or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, otherwise performs in a substandard manner, or terminates its engagement with us, the timelines for our development programs may be extended or delayed or our development activities may be suspended or terminated. If any of our clinical trial sites terminates for any reason, we may experience the loss of follow-up information on subjects enrolled in such clinical trials unless we are able to transfer those subjects to another qualified clinical trial site, which may be difficult or impossible. In addition, clinical trial investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA or comparable foreign regulatory authorities concludes that the financial relationship may have affected the interpretation of the trial, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection of any marketing application we submit by the FDA or any comparable foreign regulatory authority. Any such delay or rejection could prevent us from commercializing our investigational products.

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

We contract with third parties for the manufacturing and supply of investigational products for use in preclinical testing and clinical trials, which supply may become limited or interrupted or may not be of satisfactory quality and quantity.

We do not have any manufacturing facilities. We produce in our laboratory relatively small quantities of compounds for evaluation in our research programs. We rely, and expect to continue to rely, on third parties for the manufacture

of our investigational products for preclinical and clinical testing, as well as for commercial manufacture if any of our investigational products are approved. We currently have limited manufacturing arrangements and expect that each of our investigational products will only be covered by single source suppliers for the foreseeable future. In particular, we have an exclusive relationship with WuXi Biologics, located in China, for the manufacture of our investigational biologics, zimberelimab and domvanalimab. While we have not yet experienced any disruptions in the supply of our investigational products as a result of the COVID-19 health crisis, our reliance on limited manufacturing and supply relationships increases the risk that we will not have sufficient quantities of our investigational products or products, if approved, or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

Furthermore, all entities involved in the preparation of therapeutics for clinical trials or commercial sale, including our existing contract manufacturers for our investigational products, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in clinical trials must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants, or to inadvertent changes in the properties or stability of our investigational products that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of a New Drug Application (NDA) or Biologics License Application (BLA) on a timely basis and must adhere to the FDA's Good Laboratory Practice regulations and cGMP regulations enforced by the FDA through its facilities inspection program. Comparable foreign regulatory authorities may require compliance with similar requirements. The facilities and quality systems of our third-party contractor manufacturers must pass a pre-approval inspection for compliance with the applicable regulations as a condition of marketing approval of our investigational products. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMP regulations.

In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third party, which we may not be able to do on commercially reasonable terms, if at all. In particular, any replacement of our manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. In some cases, the technical skills or technology required to manufacture our investigational products may be unique or proprietary to the original manufacturer and we may have difficulty transferring such skills or technology to another third party and a feasible alternative may not exist. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third party manufacture our investigational products. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop investigational products in a timely manner or within budget. Our or a third party's failure to execute on our manufacturing requirements, to do so on commercially reasonable terms and comply with cGMP could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of our investigational products under development;
- delay in submitting regulatory applications, or receiving marketing approvals, for our investigational products;
- loss of the cooperation of an existing or future collaborator, including option exercises by Taiho or Gilead under the Taiho Agreement or Gilead Collaboration Agreement, respectively;
- subjecting third-party manufacturing facilities or our manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease development or to recall batches of our investigational products; and
- in the event of approval to market and commercialize our investigational products, an inability to meet commercial demands for our product or any other future investigational products.

We, or our third-party manufacturers, may be unable to successfully produce or scale-up manufacturing of our investigational products in sufficient quality and quantity, which would delay or prevent us and/or our third-party collaborators from conducting clinical trials and developing our investigational products.

We, or our third-party manufacturers, will need to manufacture and supply large quantities of our investigational products to support our clinical development plans. With respect to investigational products from optioned programs, we, or our third-party manufacturers, may need to produce additional quantities to support the scope of our joint clinical development program with Gilead, Gilead's additional evaluations with its own proprietary products or Taiho's independent clinical development plans. Furthermore, we are a party to various collaboration and supply arrangements, such as our clinical trial collaboration with Genentech to evaluate etrumadenant and atezolizumab utilizing the MORPHEUS platform. We, or our manufacturing partners, may be unable to successfully increase the manufacturing capacity for any of our investigational products in a timely or cost-effective manner, or at all, to support these collective needs. In addition, quality issues may arise during scale-up activities. If we or our manufacturing partners are unable to successfully produce or scale up the manufacture of our investigational products in sufficient quality and quantity, the development, testing and clinical trials of that investigational product may be delayed or become infeasible, and marketing approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

Changes in methods of investigational product manufacturing or formulation may result in additional costs or delay.

As investigational products progress through preclinical to late stage clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as the investigational product's specifications, manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our investigational products to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our investigational products and jeopardize our ability to commercialize our investigational products and generate revenue.

The manufacture of biologics is complex and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our investigational products for clinical trials or our products for patients, if approved, could be delayed or prevented.

Manufacturing biologics, especially in large quantities, is often complex and may require the use of innovative technologies to handle living cells. Each lot of an approved biologic must undergo thorough testing for identity, strength, quality, purity and potency. Manufacturing biologics requires facilities specifically designed for and validated for this purpose, and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of our manufacturer, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business. The use of biologically derived ingredients can also lead to allegations of harm, including infections or allergic reactions, or closure of product facilities due to possible contamination.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with good manufacturing practices, lot consistency and timely availability of raw materials. Even if we obtain marketing approval for any of our investigational products, there is no assurance that our manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other comparable foreign regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential commercial launch of the product or to meet potential future demand. If our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, our development and commercialization efforts

would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

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

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with will likely expect to be granted rights to publish data arising out of such collaboration and any joint research and development programs may require us to share trade secrets under the terms of our research and development or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

Our employees, clinical trial investigators, CROs, consultants, vendors, collaboration partners and any potential commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, clinical trial investigators, CROs, consultants, vendors, collaboration partners and any potential commercial partners. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates: (i) FDA laws and regulations or those of comparable foreign regulatory authorities, including those laws that require the reporting of true, complete and accurate information, (ii) manufacturing standards, (iii) federal and state health and data privacy, security, fraud and abuse, government price reporting, transparency reporting requirements, and other healthcare laws and regulations in the United States and abroad, or (iv) laws that require the true, complete and accurate reporting of financial information or data. Such misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of conduct applicable to all of our employees, as well as a disclosure program and other applicable policies and procedures, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Even if we receive marketing approval, we may not be successful in commercializing our investigational products.

We have no sales, marketing or distribution capabilities or experience. If any of our investigational products ultimately obtains regulatory approval, we, whether alone or in collaboration with Gilead for programs that we commercialize together, may not be able to effectively or successfully market the product due to a number of factors, including:

- the imposition by regulatory authorities of significant restrictions on a product's indicated uses, marketing or distribution;
- the imposition by regulatory authorities of costly and time-consuming post-approval studies, post-market surveillance or additional clinical trials;
- our failure to establish sales and marketing capabilities;
- the failure of our products to achieve the degree of market acceptance by physicians, patients, hospitals, cancer treatment centers, healthcare payors and others in the medical community necessary for commercial success;
- unfavorable pricing regulations or third-party coverage and reimbursement policies;
- inaccuracies in our estimates of the addressable patient population resulting in a smaller market opportunity than we believed.

If any of our investigational products for which we have or retain sales and marketing responsibilities are approved, we must either develop a sales and marketing organization, which would be expensive and time consuming, or outsource these functions to other third parties. We may be unable to recruit and retain adequate numbers of effective sales and marketing personnel, and if we enter into arrangements with third parties to perform sales, marketing and distribution services our product revenue or the profitability of these product revenue to us are likely to be lower than if we were to market and sell any medicines that we develop ourselves.

Our or our collaborators' inability to successfully market and sell any of our investigational products, if approved, could have a material adverse effect on our business and our overall financial condition.

Even if we receive marketing approval for one or more of our investigational products, our commercial success is dependent on obtaining coverage and reimbursement approval for a product from a government or other third-party payor, which coverage may be delayed or may not be sufficient to cover our costs.

Our commercial success is dependent on obtaining coverage and reimbursement approval for a product from a government or other third-party payor, which is a time-consuming and costly process that could require us and any collaborators to provide supporting scientific, clinical and cost effectiveness data for the use of our products to the payor. There may be significant delays in obtaining such coverage and reimbursement for newly approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a product will be paid for in all cases or at a rate that covers our costs, including research, development, intellectual property, manufacture, sale and distribution expenses. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with branded therapeutics and therapeutics administered under the supervision of a physician. Additionally, our collaborators, will be required to obtain coverage and reimbursement for any related companion diagnostics tests they develop separate and apart from the coverage and reimbursement we seek for our product candidates, once approved.

Reimbursement may also impact the demand for, and the price of, any product for which we obtain marketing approval. Assuming we obtain coverage for a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with those medications. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of our products. Therefore, coverage and adequate reimbursement is critical to new product acceptance and we expect to experience pricing pressures in connection with the sale of any of our investigational products due to the

trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes.

Our ability to obtain coverage and reimbursement approval for any of our investigational products, if approved, could have a material adverse effect on the demand for that investigational product, and on our business and our overall financial condition.

Even if our investigational products are approved by the FDA, they may never be approved or commercialized outside the United States, which would limit our ability to realize their full market potential.

In order to market any products outside the United States, we or our collaborators must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. 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 and additional administrative review periods. Seeking foreign regulatory approvals could result in significant delays, difficulties and costs for us or our collaborators and may require additional preclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, our or our collaborators' failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We do not have any investigational products approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we or our collaborators fail to comply with regulatory requirements in international markets or fail to obtain and maintain required approvals, our ability to realize the full market potential of our products will be harmed.

Any investigational products for which we intend to seek approval as biologic products may face competition sooner than anticipated.

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

Zimberelimab and domvanalimab are biological products and we may develop additional biological products in the future. We believe that any of our current and future investigational products approved as a biological product under a BLA should qualify for the twelve-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to Congressional action or otherwise, or that the FDA will not consider our investigational products to be reference products for competing products, potentially creating the opportunity for biosimilar 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, could be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products will depend on a number of marketplace and regulatory factors that are still developing.

Risks Related to our In-Licenses and Other Strategic Agreements

We are currently party to several in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our investigational products. If we breach our obligations under these agreements, we may be required to pay damages, lose our rights to these investigational products or both, which would adversely affect our business and prospects.

We rely, in part, on license and other strategic agreements, which subject us to various obligations, including diligence obligations with respect to development and commercialization activities, reporting and notification obligations, payment obligations for achievement of certain milestones and royalties on product sales, negative covenants and other material obligations. We may need to devote substantial time and attention to ensuring that we successfully integrate these transactions into our existing operations and are compliant with our obligations under these agreements, which may divert management's time and attention away from our research and development programs or other day-to-day activities. If we fail to comply with the obligations under our license agreements or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and our licensors may have the right to terminate the license. If our license agreements are terminated, we may not be able to develop, manufacture, market or sell the products covered by our agreements and those being tested or approved in combination with such products. Such an occurrence could materially adversely affect the value of the investigational product being developed under any such agreement and any other investigational products being developed or tested in combination. For example, we intend to test many of our small-molecule investigational products with zimberelimab, which we in-licensed from WuXi Biologics. In the event we breach our license agreement with WuXi Biologics, and WuXi Biologics terminates our license agreement, we would be unable to test those combinations, or we would have to negotiate a new or reinstated agreement, which may not be available to us on equally favorable terms, or at all.

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

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant research program or investigational product and our business, financial condition, results of operations and prospects could suffer.

We may not realize the benefits of any acquisitions, in-license or other collaborations or strategic alliances that we enter into.

We have entered into in-license agreements with multiple licensors and option agreements to enable the development and commercialization of our investigational products worldwide. In the future, we may seek to enter into acquisitions or additional licensing arrangements with third parties to expand our pipeline or that we believe will complement or augment our development and commercialization efforts with respect to our investigational products and any future investigational products that we may develop. These transactions can entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, investigational products or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. As a result, if we enter into in-license, acquisition or collaboration agreements, or strategic partnerships, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business.

We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction or such other benefits that led us to enter into the arrangement. For example, under the Gilead Collaboration Agreement, for each program Gilead exercises its option to, it will pay an option fee that ranges from $200 million to $275 million for our current clinical programs, and $150 million per program for all other programs that enter clinical development. Furthermore, we and Gilead will equally share global development costs, as well as profits and losses for the United States, subject to certain opt-out rights for us, and expense caps on our spending and related subsequent adjustments. If Gilead does not exercise its option to develop a program, our capital requirements relating to that development program will significantly increase and we may need to seek a new partner in order to develop and commercialize our investigational products from that program. Failure to realize the benefits of any collaborations or strategic alliances may further cause us to curtail the development of an investigational product, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any planned sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we will need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our investigational products or bring them to market and generate product sales revenue, which would harm our business prospects, financial condition and results of operations.

We may wish to acquire rights to future assets through in-licensing or may attempt to form collaborations in the future with respect to our investigational products, but may not be able to do so, which may cause us to alter or delay our development and commercialization plans.

The development and potential commercialization of our investigational products may require substantial additional capital to fund expenses. Pursuant to the Gilead Collaboration Agreement, Gilead has an exclusive option to acquire an exclusive license to all of our current and future clinical programs during the 10-year collaboration term. Given the breadth of the collaboration, our ability to form new collaborations in the future will be limited. If Gilead declines to exercise its option to a program, we may need to enter into new collaborations for such programs with companies that have more resources and experience than us. We may not be successful in these efforts because third parties may not view our investigational products as having the requisite potential to demonstrate safety and efficacy. If and when we collaborate with a third party for development and commercialization of an investigational product, we can expect to relinquish some or all of the control over the future success of that investigational product to the third party. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the following:

- the design or results of clinical trials;
- the likelihood of approval by the FDA or comparable foreign regulatory authorities;
- the potential market for the investigational product;
- the costs and complexities of manufacturing and delivering such investigational product to patients;
- the potential of competing products;
- the existence of uncertainty with respect to our ownership of technology or other rights, which can exist if there is a challenge to such ownership without regard to the merits of the challenge; and
- industry and market conditions generally.

The collaborator may also consider alternative investigational products or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our investigational product. We may also be restricted under any license agreements from entering into agreements on certain terms or at all with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators and changes to the strategies of the combined company. As a result, we may not be able to negotiate collaborations on a timely

basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of such investigational product, reduce or delay one or more of our other development programs, delay the potential commercialization or reduce the scope of any planned sales or marketing activities for such investigational product, or increase our expenditures and undertake development, manufacturing or commercialization activities at our own expense. If we elect to increase our expenditures to fund development, manufacturing or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our investigational products or bring them to market and generate product revenue.

Our operating activities may be restricted by certain covenants in our license and other strategic agreements, which could limit our development and commercial opportunities.

In connection with certain of our acquisitions, in-license or other collaborations or strategic alliances, we may agree to and be bound by negative covenants which may limit our development and commercial opportunities. For example, pursuant to our in-license of anti-PD-1 antibodies from WuXi Biologics, we made certain covenants to not commercialize any anti-PD-1 antibody licensed or obtained by us after the date of the license agreement with WuXi Biologics other than anti-PD-1 antibodies licensed from WuXi Biologics, subject to certain exceptions as set forth in our license agreement with WuXi Biologics. Furthermore, we agreed in our license agreement that WuXi Biologics would be our exclusive manufacturer of anti-PD-1 antibodies licensed thereunder until a certain number of years has elapsed following commercialization of such an anti-PD-1 antibody and that we would utilize WuXi Biologics as our exclusive provider of CMC development services for our biologic investigational products for five years from the date of our license agreement, subject to certain exceptions in each case. These exclusivity provisions may inhibit our development efforts, prevent us from forming strategic collaborations to develop and potentially commercialize any other anti-PD-1 antibody investigational products and may materially harm our business, financial condition, results of operations and prospects.

Risks Related to Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our investigational products, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be adversely affected.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our investigational products and research programs. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel discoveries and technologies that are important to our business, however, we cannot predict:

- if and when patents may issue based on our patent applications;
- the scope of protection of any patent issuing based on our patent applications;
- whether the claims of any patent issuing based on our patent applications will protect our investigational products and their intended uses or prevent others from commercializing competitive technologies or products;
- whether or not third parties will find ways to invalidate or circumvent our patent rights;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; and/or
- whether we will need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose.

Obtaining and enforcing patents is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain and/or enforce patents that may issue based on our patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development results before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators,

contract research organizations, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach these agreements and disclose such results before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

We also cannot be certain that the claims in our pending patent applications directed to our investigational products and/or technologies will be considered patentable by the U.S. Patent and Trademark Office (USPTO) or by patent offices in foreign countries. One aspect of the determination of patentability of our inventions depends on the scope and content of the "prior art," information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Even if the patents do issue based on our patent applications, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our investigational products is threatened, it could dissuade companies from collaborating with us to develop and threaten our ability to commercialize our investigational products. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third party patent which might adversely affect our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our investigational products in any jurisdiction.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our investigational products. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

In the future, we may need to obtain additional licenses of third-party technology that may not be available to us or are available only on commercially unreasonable terms, and which may cause us to operate our business in a more costly or otherwise adverse manner that was not anticipated.

From time to time we may be required to license technology from additional third parties to further develop or commercialize our investigational products. Should we be required to obtain licenses to any third-party technology, including any such patents required to manufacture, use or sell our investigational products, such licenses may not be available to us on commercially reasonable terms, or at all. The inability to obtain any third-party license required to develop or commercialize any of our investigational products could cause us to abandon any related efforts, which could seriously harm our business and operations.

We may become involved in lawsuits alleging that we have infringed the intellectual property rights of third parties or to protect or enforce our patents or other intellectual property, which litigation could be expensive, time consuming and adversely affect our ability to develop or commercialize our investigational products.

The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our products candidates. Third parties may assert infringement claims against us based on existing or future intellectual property rights. For example, we are aware of certain patents owned or exclusively licensed by Bristol-Myers Squibb (BMS) having claims directed broadly to treating cancer with anti-PD-1 antibodies (the BMS Patents), which expire in 2023 and 2024. The BMS Patents have been and may in the future be

the subject of litigation. If the validity of the BMS Patents is upheld following all such challenges, and if we receive regulatory approval for zimberelimab prior to expiration of the BMS Patents, then we may need to delay our commercialization of zimberelimab or we may need to obtain a license from BMS, which license may not be available on commercially reasonable terms, or at all. If we were sued for patent infringement, we would need to demonstrate that our investigational products, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity may be difficult. For example, in the United States, proving invalidity in court requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing investigational product or product. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing investigational product. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our investigational products or force us to cease some of our business operations, which could materially harm our business.

In addition, we may find that competitors are infringing our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects and financial condition. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks. Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy.

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 litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock. Moreover, we cannot assure you that we will have sufficient financial or other resources to defend or pursue such litigation, which typically last for years before they are concluded. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could have a material adverse effect on our business and operations. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our issued patent, any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our company or our stockholders. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We could in the future be subject to claims that we or our employees have inadvertently or otherwise used or disclosed alleged trade secrets or other confidential information of former employers or competitors. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may become subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement, or that we or these individuals have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of a former employer or competitor.

While we may litigate to defend ourselves against these claims, even if we are successful, litigation could result in substantial costs and could be a distraction to management. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our investigational products, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Moreover, any such litigation or the threat thereof may adversely affect our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would have an adverse effect on our business, results of operations and financial condition.

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

Patents are of national or regional effect, and filing, prosecuting and defending patents on all of our investigational products throughout the world would be prohibitively expensive. As such, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Further, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to pharmaceuticals or biologics, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. In addition, certain developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

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

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. However, the patent position of biopharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation, resulting in court decisions, including Supreme Court decisions, that have increased uncertainties as to the ability to obtain and enforce patent rights in the future. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries could increase the uncertainties and costs. For example, in September 2011 the Leahy-Smith America Invents Act (the America Invents Act) was signed into law and included a number of significant changes to U.S. patent law as then existed. 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. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. After March 2013, under the America Invents Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. However, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

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. 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 or to enforce our existing patents and patents that we might obtain in the future.

We may rely on trade secret and proprietary know-how which can be difficult to trace and enforce and, if we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and investigational products, we may also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. Elements of our investigational product, including processes for their preparation and manufacture, may involve proprietary know-how, information, or technology that is not covered by patents, and thus for these aspects we may consider trade secrets and know-how to be our primary intellectual property. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

Trade secrets and know-how can be difficult to protect. We require our employees to enter into written employment agreements containing provisions of confidentiality and obligations to assign to us any inventions generated in the course of their employment. We and any third parties with whom we share facilities enter into written agreements that include confidentiality and intellectual property obligations to protect each party's property, potential trade secrets, proprietary know-how, and information. We further seek to protect our potential trade secrets, proprietary know-how, and information in part, by entering into non-disclosure and confidentiality agreements with parties who are given access to them, such as our corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors and other third parties. With our consultants, contractors, and outside scientific collaborators, these agreements typically include invention assignment obligations. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be harmed.

We may become subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our investigational products or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

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

Patent rights are of limited duration. Given the amount of time required for the development, testing and regulatory review of new investigational products, patents protecting such candidates might expire before or shortly after such investigational products are commercialized. Even if patents covering our investigational products are obtained, once the patent life has expired for a product, we may be open to competition from biosimilar or generic products. A patent term extension based on regulatory delay may be available in the United States. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single product. Moreover, the scope of protection during the period of the patent term extension does not extend to the full scope of the claim, but instead only to the scope of the product as approved. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, 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. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

Risks Related to our Business Operations

We expect to expand our research and development capabilities and, as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

In order to maximize the potential of our Gilead Collaboration Agreement, we expect to significantly grow our discovery and clinical development capabilities. To support this growth, we will need to increase the number of employees in clinical operations, biostatistics and data management, quality, regulatory affairs and, if any of our investigational products receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must:

- identify, recruit, integrate, maintain and motivate additional qualified personnel;
- manage our development efforts effectively, including the initiation and conduct of clinical trials for our investigational products, both as monotherapy and in combination with other intra-portfolio investigational products; and
- improve our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to develop, manufacture and commercialize our investigational products will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert financial and other resources, and a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time, to managing these growth activities.

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

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

Our industry has experienced a high rate of turnover in recent years. Our ability to compete in the highly competitive biopharmaceuticals industry depends upon our ability to attract, retain and motivate highly skilled and experienced personnel with scientific, medical, regulatory, manufacturing and management skills and experience. We conduct our operations in the San Francisco Bay Area, a region that is home to many other biopharmaceutical companies as well as many academic and research institutions, resulting in fierce competition for qualified personnel. We may not be able to attract or retain qualified personnel in the future due to the intense competition for a limited number of qualified personnel among biopharmaceutical companies. Many of the other biopharmaceutical companies against which we compete have greater financial and other resources, different risk profiles and a longer history in the industry than we do. Our competitors may provide higher compensation, more diverse opportunities

and/or better opportunities for career advancement. Any or all of these competing factors may limit our ability to continue to attract and retain high quality personnel, which could negatively affect our ability to successfully develop and commercialize our investigational products and to grow our business and operations as currently contemplated.

We are highly dependent on the services of our founders, Terry Rosen, Ph.D., who serves as our Chief Executive Officer, and Juan Jaen, Ph.D., who serves as our President.

We are highly dependent on the services of our founders, Terry Rosen, Ph.D., who serves as our Chief Executive Officer, and Juan Jaen, Ph.D., who serves as our President. Although we have entered into employment agreements with them, they are not for a specific term and each of them may terminate their employment with us at any time, though we are not aware of any present intention of either of these individuals to leave us.

Drs. Rosen and Jaen have significant experience identifying and developing biopharmaceuticals. We believe that their drug discovery and development experience, and overall biopharmaceutical company management experience, would be difficult to replace. However, the historical results, past performance and/or acquisitions of companies with which they were affiliated do not necessarily predict or guarantee similar results for our company. Further, Drs. Rosen and Jaen have certain other business and personal commitments outside of serving as the Chief Executive Officer and President of Arcus, including serving on the boards of other companies and foundations, which may result in diversion of their focus and attention on our company.

We face substantial competition, which may result in others discovering, developing or commercializing products more quickly or marketing them more successfully than us. If their investigational products are shown to be safer or more effective than ours, then our commercial opportunity will be reduced or eliminated.

We compete in the segments of the pharmaceutical, biotechnology and other related markets that develop immunotherapies for the treatment of cancer, which is highly competitive with rapidly changing standards of care. As such, our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop or that would render any products that we may develop obsolete or non-competitive. Our competitors also may obtain marketing 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.

Some of the other products in the same class as our investigational products have already been approved or are further along in development. With respect to our dual adenosine receptor antagonist, etrumadenant, we are aware that Incyte has initiated clinical development of a dual adenosine receptor antagonist and we are aware of clinical-stage selective adenosine $A_{2a}R$ antagonists being developed by other companies, including AstraZeneca, Corvus, CStone, iTeos Therapeutics and Novartis, and a clinical-stage selective adenosine $A_{2b}R$ antagonist being developed by Palobiofarma. For our small-molecule CD73 inhibitor, AB680, we are aware of several pharmaceutical companies developing antibodies against this target, including Akeso, AstraZeneca, Bristol-Myers Squibb, Corvus, Novartis, Symphogen and Tracon/I-Mab, all of whom have advanced their CD73 antibodies into clinical development. Other pharmaceutical companies, such as Boehringer Ingelheim, Calithera, Eli Lilly, Merck and ORIC, have small-molecule programs against this target, of which only Eli Lilly has advanced its CD73 inhibitor into clinical development. Regarding our anti-PD-1 antibody, zimberelimab, multiple large pharmaceutical companies have already received regulatory approvals for their anti-PD-1/PD-L1 antibodies, including AstraZeneca, Bristol-Myers Squibb, Merck, Pfizer in partnership with Merck KGaA, Regeneron in partnership with Sanofi Genzyme and Roche/Genentech, and there are also many other anti-PD-1 and anti-PD-L1 antibodies in clinical development. With respect to our anti-TIGIT antibody, domvanalimab, we are aware of several pharmaceutical companies developing antibodies against this target, including Agenus, Beigene, Bristol-Myers Squibb, Compugen, Roche/Genentech, Innovent, iTeos Therapeutics, Merck KGaA, Mereo and Seattle Genetics. To our knowledge, there are no approved anti-TIGIT antibodies and the most advanced agent is in Phase 3 development.

As more investigational products within a particular class of drugs proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change. Consequently, the results of our clinical trials for investigational products in those class will likely need to show a risk benefit profile that is competitive with or more favorable than those products and investigational products in order to obtain marketing approval or, if approved, a product label that is favorable for

commercialization. If the risk benefit profile is not competitive with those products or investigational products, or if the approval of other agents for an indication or patient population significantly alters the standard of care with which we tested our investigational products, we may have developed a product that is not commercially viable, that we are not able to sell profitably or that is unable to achieve favorable pricing or reimbursement. In such circumstances, our future product revenue and financial condition would be materially and adversely affected.

Many of our competitors, such as large pharmaceutical and biotechnology companies like AstraZeneca, Bristol-Myers Squibb, Merck, Novartis and Roche/Genentech, have longer operating histories and significantly greater financial resources and expertise in research and development, manufacturing, preclinical studies, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and subject enrollment for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The key competitive factors affecting the success of all of our programs are likely to be their efficacy, safety, convenience, and availability of reimbursement. If we are not successful in developing, commercializing and achieving higher levels of reimbursement than our competitors, we will not be able to compete against them and our business would be materially harmed.

The development and commercialization of zimberelimab may face strong competition from other anti-PD-1 antibodies that have already received marketing approval by larger companies with substantial resources and more experience developing, manufacturing and commercializing biologic compounds.

As discussed above, some companies, such as AstraZeneca, Bristol-Myers Squibb, Merck, Pfizer in partnership with Merck KGaA, Regeneron in partnership with Sanofi Genzyme and Roche/Genentech, have anti-PD-1/PD-L1 antibodies that are approved and on the market, and continue to develop and seek regulatory approval for their respective anti-PD-1/PD-L1 antibodies for additional oncology indications. For example, in June 2020, the U.S. FDA granted accelerated approval to Keytruda® (pembrolizumab) for the treatment of patients with solid tumors that have high tumor mutational burden. Many other companies are developing anti-PD-1/PD-L1 antibodies for various oncology indications that are further along in development than zimberelimab. This competitive environment could limit our development opportunities for zimberelimab or compromise our ability to successfully enroll our ongoing and future clinical trials with zimberelimab by limiting the availability of clinical trial investigators, sites and/or subjects which could slow, delay or limit the progress of zimberelimab's development. As a result of these or other problems and risks, we may never receive marketing approval for zimberelimab, may not realize the full commercial potential of zimberelimab as monotherapy or in combination with our other investigational products, may never recoup our financial investment or may never generate significant value or revenue from this asset.

Our internal information technology systems, or those of our third-party CROs or other contractors or consultants, are subject to failure, security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our investigational products' development programs, compromise sensitive information related to our business or prevent us from accessing critical information, potentially exposing us to notification obligations, liability or reputational damage and otherwise adversely affecting our business.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit confidential information, including but not limited to intellectual property, proprietary business information and personal information. It is critical that we do so in a secure manner to maintain the confidentiality, integrity and availability of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third party contractors who have access to our confidential information.

Despite the implementation of security measures, given their size and complexity and the increasing amounts of confidential information that they maintain, our internal information technology systems and those of our third-party CROs and other contractors and consultants are vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, contractors,

consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure or lead to data leakage. We have experienced at least one intrusion into our computer systems, and, although our investigation indicates that it did not have a material adverse effect on our operations, there can be no assurance of a similar result in the future. We cannot assure you that our data protection efforts and our investment in information technology will prevent other breakdowns, data leakages, breaches in our systems or other cyber incidents that could have a material adverse effect upon our reputation, business, operations or financial condition. Furthermore, as the cyber-threat landscape evolves, these attacks are growing in frequency, sophistication and intensity, and becoming increasingly difficult to detect. There can be no assurance that we and our third-party CROs and other contractors and consultants will be successful in detecting, preventing or fully recovering systems or data from all breakdowns, service interruptions, attacks or breaches of systems that could adversely affect our business and operations and/or result in the loss or disclosure of critical or sensitive data, which could result in financial, legal, business or reputational harm to us.

To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and reputational damage and the further development and commercialization of our drug candidates could be delayed. In addition, the loss of clinical trial data for our investigational products could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Furthermore, significant disruptions of our internal information technology systems or security breaches could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. In particular, any such event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our clinical trial subjects or employees, could harm our reputation directly, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business.

Unfavorable global economic and trade 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 and global trade. The current global economic conditions are highly volatile due to the COVID-19 pandemic and government restrictions on movement, which may lead to disruptions in the capital and credit markets and reduce our ability to raise additional capital when needed on acceptable terms, if at all. Furthermore, we conduct, and we expect to continue to conduct, portions of our clinical trials outside the United States, and unfavorable economic conditions resulting in the weakening of the U.S. dollar would make those clinical trials more costly to operate. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption.

Adverse trade conditions may further impact our operating results or financial condition by increasing the cost of our operations. For example, we have an exclusive relationship with WuXi Biologics, located in China, for the manufacture of zimberelimab and domvanalimab and for biologics CMC development and if tariffs are imposed on the investigational products they manufacture for us, such tariffs would have an adverse impact on our operating results and financial condition. 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 future growth may depend, in part, on our ability to operate in foreign markets, 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 investigational products in foreign markets for which we may rely on collaboration with third parties. We are not permitted to market or promote any of our investigational products before we receive marketing approval from the applicable regulatory authority in that foreign market, and we may never receive such marketing approval for any of our investigational products. To obtain marketing approval in many foreign countries, we must comply with numerous and varying regulatory

requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our investigational products, and we cannot predict success in these jurisdictions. If we obtain approval of our investigational products and ultimately commercialize our investigational products in foreign markets, we would be subject to additional risks and uncertainties, including:

- our customers' ability to obtain reimbursement for our investigational products in foreign markets;
- our inability to directly control commercial activities because we are relying on third parties;
- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;
- different medical practices and customs in foreign 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;
- reduced protection of intellectual property rights in some foreign 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 foreign laws in the event of a contract dispute.

Foreign sales of our investigational products could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

We or the third parties upon whom we depend may be adversely affected by earthquakes, fires or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our headquarters and main research facility are located in the San Francisco Bay Area, which in the past has experienced severe earthquakes and fires. If these earthquakes, fires, other natural disasters, terrorism and similar unforeseen events beyond our control prevented us from using all or a significant portion of our headquarters or research facility, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. We do not have a disaster recovery or business continuity plan in place and may incur substantial expenses as a result of the absence or limited nature of our internal or third party service provider disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business. Furthermore, integral parties in our supply chain are operating from single sites, increasing their vulnerability to natural disasters or other sudden, unforeseen and severe adverse events. If such an event were to affect our supply chain, it could have a material adverse effect on our ability to conduct our clinical trials, our development plans and business.

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

We have incurred substantial losses during our history and our ability to generate profits in the future is uncertain. Unused losses for the tax year ended December 31, 2017 and prior tax years will carry forward to offset future taxable income, if any, until such unused losses expire. Unused losses generated after December 31, 2017, under current tax law will not expire and may be carried forward indefinitely, but the deductibility of such net operating losses in tax years beginning after December 31, 2020 will be limited to 80% of current year taxable income in any given year. In addition, both our current and our future unused losses may be subject to limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (IRC), if we undergo an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period. We performed an analysis under IRC Section 382 and 383 through October 31, 2020 with respect to our net operating loss and credit carryforwards. We concluded that an ownership change, as defined under IRC Section 382, occurred in the current year and in previous years. While we do not expect such ownership changes to result in the expiration of our net operating loss and credit carryforwards prior to utilization,

we are subject to an annual limitation on the use of tax attributes. The limitation on our ability to use our net operating loss and credit carryforwards could reduce our ability to use a portion of our tax attributes to offset future taxable income, which could result in us being required to make material cash tax payments.

However, our sale of 5,650,000 shares of our common stock to Gilead in February 2021, as well as future equity issuances, may result in an additional ownership change. As a result, our ability to use all of our pre-change net operating loss carryforwards (NOLs) and other pre-change tax attributes (such as research tax credits) to offset our post-change income or taxes may be subject to limitations that could result in increased future tax liability to us. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, including a recent California franchise tax law change limiting the usability of California state NOLs to offset taxable income in taxable years beginning on or after January 1, 2020 and before January 1, 2023, which could accelerate or permanently increase state taxes owed. Therefore, even if we attain profitability, we may be unable to use all or a material portion of our NOLs and other tax attributes, which could adversely affect our future cash flows.

Risks Related to Our Industry

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

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

- delay or termination of clinical trials;
- decreased demand for any investigational products or products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial subjects;
- initiation of investigations by regulators;
- significant costs to defend the related litigation and diversion of management's time and our resources;
- substantial monetary awards to study subjects or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

Although we maintain product liability insurance coverage, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as our investigational products advance through clinical trials and if we successfully commercialize any products. 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.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators may be subject to federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the FTC Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) as

amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH). Depending on the facts and circumstances, we could be subject to significant penalties if we violate HIPAA.

The legislative and regulatory landscape for privacy and data security continues to evolve, and we expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data security in the United States, the EU and other jurisdictions. This increased focus on privacy and data security issues may negatively affect our operating results and our business. For example, the California Consumer Privacy Act of 2018 (CCPA), which took effect on January 1, 2020, gives California residents expanded rights to access and require deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. In addition, the CCPA authorizes private lawsuits to recover statutory damages for certain data breaches. While it exempts some data regulated by HIPAA and certain clinical trials data, the CCPA may increase our compliance costs and potential liability with respect to other personal information we collect about California residents. Some observers note that the CCPA could mark the beginning of a trend toward more stringent privacy legislation in the U.S., which could increase our potential liability and adversely affect our business.

International data protection laws also apply to health-related and other personal data obtained outside the United States. In the European Union, Regulation (EU) 2016/679 (General Data Protection Regulation) took effect in May 2018 and imposes, in some cases, stricter obligations than data protection laws in the United States on the use of health-related and other personal data. These requirements include the obligation to appoint data protection officers in certain circumstances, rights for individuals to be "forgotten" and to data portability, and the obligation to make public notification of significant data breaches. Under the General Data Protection Regulation, data protection authorities can also impose administrative fines of up to 4% of our total worldwide turnover or up to €20 million (whichever is higher). In addition, the General Data Protection Regulation only permits the transfer of personal data outside the European Economic Area (EEA) to countries that offer a level of data protection deemed adequate by the European Commission, unless an approved data transfer mechanism is in place. One such mechanism was invalidated by the European Court of Justice, adding to the complexity of transferring personal data outside the EEA. The General Data Protection Regulation increases our responsibility and liability in relation to personal data that we process, and we must put in place additional mechanisms to ensure compliance with the new EU data protection rules.

Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, 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.

Our business operations expose us to broadly applicable fraud and abuse, transparency, government price reporting, and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Our operations are subject, either directly or indirectly through our customers and third party payors, to various U.S. federal and state health care laws, including fraud and abuse, transparency and other healthcare laws and regulations, and similar laws in other jurisdictions in which we conduct our business. These laws may impact, among other things, our research and proposed sales, marketing and education programs and constrain the business of financial arrangements and relationships with healthcare providers, physicians and other parties through which we market, sell and distribute our products for which we obtain marketing approval. The laws that may affect our ability to operate include, but are not limited to the federal Anti-Kickback Statute; federal civil and criminal false claims laws, such as the False Claims Act (FCA); HIPAA; federal and state consumer protection and unfair competition laws; the federal transparency requirements under the Physician Payments Sunshine Act; state and foreign law equivalents of each of these federal laws; and state and foreign laws that require pharmaceutical companies to implement compliance programs. Many of these laws are discussed in detail in "Item 1. Business" above.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform. Federal and state enforcement bodies have continued 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. Responding to investigations can be time-and resource-consuming and can divert management's attention from the business. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. We have entered into consulting and advisory board arrangements with physicians and other healthcare providers, including some who could influence the use of our investigational products, if approved. Because of the complex and far-reaching nature of these laws, regulatory agencies may view these transactions as prohibited arrangements that must be restructured, or discontinued, or for which we could be subject to other significant civil, criminal and administrative penalties such as fines, disgorgement, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could substantially disrupt our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of investigational products, restrict or regulate post-approval activities, and affect the ability to profitably sell investigational products for which marketing approval is obtained. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. For additional detail regarding health care reform activities that may impact our business, see "Business—Government Regulation—Healthcare Reform" above.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations. We can face serious consequences for violations.

U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations (collectively, Trade Laws) prohibit, among other things, companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We also expect our non-U.S. activities to increase over time. We expect to rely on third parties for research, preclinical studies, and clinical trials and/or to obtain necessary permits, licenses, patent registrations, and other marketing approvals. We can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

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

We, and the third parties with whom we share our facilities, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Each of our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Each of our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. We could be held liable for

any resulting damages in the event of contamination or injury resulting from the use of hazardous materials by us or the third parties with whom we share our facilities, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

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

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

Risks Related to Owning our Common Stock

The stock price of our common stock has been and may continue to be volatile or may decline regardless of our operating performance.

The market price of our common stock has fluctuated and may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- overall performance of the equity markets;
- our operating performance and the performance of other similar companies;
- results from our ongoing clinical trials and future clinical trials with our current and future investigational products or of our competitors;
- changes in our projected operating results that we provide to the public, our failure to meet these projections or changes in recommendations by securities analysts that elect to follow our common stock;
- regulatory, trade or legal developments in the United States and other countries, including changes in tariffs or other trade restrictions and the changes in the structure of healthcare payment systems;
- the level of expenses related to future investigational products or clinical development programs;
- our failure to achieve product development goals in the timeframe we announce;
- announcements of acquisitions, strategic alliances or significant agreements by us or by our competitors;
- recruitment or departure of key personnel;
- the economy as a whole and market conditions in our industry;
- trading activity by a limited number of stockholders who together beneficially own a majority of our outstanding common stock;
- the size of our market float; and
- any other factors discussed in this report.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many immuno-oncology companies. Stock prices of many immuno-oncology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have filed securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business.

The amount of our future losses is uncertain and our quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

Our quarterly and annual operating results may fluctuate significantly in the future due to a variety of factors, many of which are outside of our control and may be difficult to predict, including the following:

- the timing and success or failure of clinical trials for our investigational products or competing investigational products, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- our progress towards the achievement of any product development goals or milestones we announce, including any delays or failures which lead to the suspension or termination of any clinical trial or development program;
- the timing and cost of, and level of investment in, research and development activities relating to our investigational products, which may change from time to time;
- option fees received by us in connection with option exercises by Taiho and/or Gilead pursuant to their respective option agreements;
- amounts payable by us in connection with the achievement of development, regulatory and commercial milestones under our in-license and other strategic agreements;
- our ability to attract, hire and retain qualified personnel;
- expenditures that we will or may incur to develop additional investigational products;
- our ability to obtain marketing approval for our investigational products, and the timing and scope of any such approvals we may receive;
- the changing and volatile U.S. and global economic environments; and
- future accounting pronouncements or changes in our accounting policies.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated guidance we may provide.

The concentration of our stock ownership will likely limit our stockholders' ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval.

Based upon shares outstanding as of February 12, 2021, our executive officers, directors and the holders of more than 5% of our outstanding common stock, in the aggregate, beneficially owned approximately 36.4% of our common stock. Gilead also owns approximately 19.5% of our outstanding common stock, and we have appointed its two designees to our board of directors pursuant to the terms of our investor rights agreement. As a result, these stockholders, acting together, will have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if other stockholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by a majority vote of our entire board of directors, the chairman of our board of directors or our chief executive officer, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the management of our business or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for our stockholders to realize value in a corporate transaction.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation and our bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General

Corporation Law, our certificate of incorporation or our bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine. In addition, to prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our bylaws provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits. While the Delaware courts have determined that these types of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of these provisions, which may require significant additional costs associated with resolving such action in other jurisdictions, and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

General Risk Factors

Sales of substantial amounts of our outstanding shares may cause the price of our common stock to decline.

The price of our common stock could decline if there are substantial sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, or if there is a large number of shares of our common stock available for sale and the market perceives that sales will occur. Certain of our stockholders have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders, subject to market standoff and lockup agreements. We have also registered shares of common stock that we have issued and may issue under our employee equity incentive plans. These shares can be sold freely in the public market upon issuance, subject to vesting conditions and, in the case of our affiliates, volume limitations under Rule 144 under the Securities Act of 1933, as amended.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could result in sanctions or other penalties that would harm our business.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of the New York Stock Exchange. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected. Accordingly, we cannot assure you that we will not in the future identify one or more material weaknesses in our internal control over financial reporting, which may have a negative impact on our ability to timely and accurately produce financial statements, may result in a material misstatement of our consolidated financial statements or may negatively impact the confidence level of our stockholders and other market participants with respect to our reported financial information.

Ensuring that we have adequate internal controls over financial reporting is a costly and time-consuming effort that needs to be re-evaluated frequently. To the extent necessary, implementing any changes to our internal controls may distract our officers and employees, entail substantial costs to modify our existing processes and take significant time to complete. These changes may not, however, be effective in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and harm our business.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2020, our corporate headquarters, which includes executive offices and research and development and business operations, consist of approximately 136,293 square feet of leased office and laboratory space in an office park in Hayward, California. We also lease approximately 109,237 square feet of space in Brisbane, California in a lease expected to commence in 2021. The lease terms for these facilities expire from 2025 to 2031, subject to options for us to extend the lease term. We intend to add new facilities or expand existing facilities as we add employees and enter new locations, and we believe that suitable additional or substitute space will be available as needed to accommodate any such expansion of our operations.

Item 3. Legal Proceedings

We are not currently a party to any material legal proceedings. From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity, reputational harm and other factors.

Item 4. Mine Safety Disclosures

None.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information and Holders of Record

Our common stock trades on the New York Stock Exchange under the symbol "RCUS."

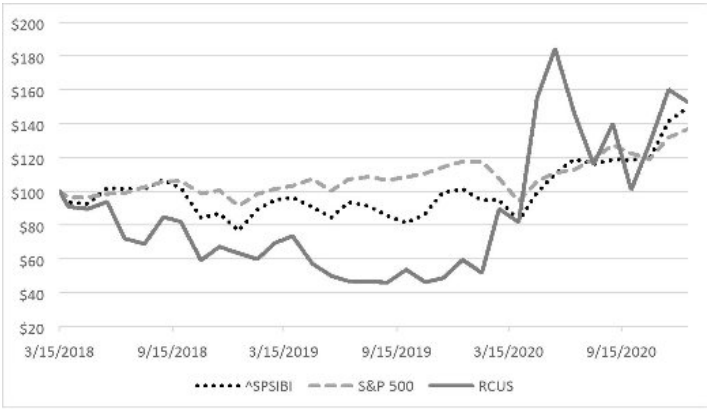
As of January 31, 2021, we had 80 stockholders of record as reported by our transfer agent. This does not include beneficial owners whose shares are held in street name.

Dividend Policy

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors.

Performance Graph

The following graph compares the cumulative stockholders returns from March 15, 2018 (first day of trading of our common stock), through December 31, 2020 for (i) our common stock, (ii) the S&P Biotechnology Index and (iii) S&P 500 Index, assuming $100 invested on March 15, 2018, and reinvestment of dividends if paid. The stockholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns. This graph shall not be deemed "soliciting material" or be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



$100 investment in stock or index	Ticker	3/15/2018	12/31/2018	12/31/2019	12/31/2020
Arcus Biosciences, Inc.	RCUS	$ 100	$ 63	$ 59	$ 153
S&P Biotechnology Index	^SPSIBI	$ 100	$ 77	$ 101	$ 150
S&P 500 Index	S&P 500	$ 100	$ 91	$ 118	$ 137

Issuer Purchases of Equity Securities

The following table summarizes repurchases of our common stock during the fourth quarter of fiscal 2020:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Repurchased Under the Plans or Programs
October 1, 2020 to October 31, 2020	769	4.59	-	-
November 1, 2020 to November 30, 2020	79	2.57	-	-
December 1, 2020 to December 31, 2020	18,270	4.02	-	-
Total	19,118		-	-

All of the shares repurchased, as reflected in the table above, were repurchases of unvested shares of our common stock that had been issued upon early exercise of stock options. Upon termination of employment of a person holding unvested shares, we are entitled to repurchase the unvested shares.

Item 6. Selected Financial Data

The following selected financial data should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8, "Financial Statements and Supplemental Data" of this Annual Report on Form 10-K.

	Year Ended December 31,				
(in thousands, except share and per share data)	2020	2019	2018	2017	2016
Consolidated Statements of Operations Data:					
Revenues:					
License revenue	$ 55,096	$ 8,000	$ 3,000	$ -	$ -
Collaboration revenue	22,421	7,000	5,353	1,413	-
Total license and collaboration revenue (1)	77,517	15,000	8,353	1,413	-
Operating expenses:					
Research and development	159,348	78,481	49,646	47,218	14,247
General and administrative	42,404	25,228	13,566	7,636	3,935
Total operating expenses	201,752	103,709	63,212	54,854	18,182
Loss from operations	(124,235)	(88,709)	(54,859)	(53,441)	(18,182)
Total non-operating income, net	1,377	3,999	5,265	359	212
Net loss	$ (122,858)	$ (84,710)	$ (49,594)	$ (53,082)	$ (17,970)
Net loss per share, basic and diluted (2)	$ (2.24)	$ (1.93)	$ (1.43)	$ (29.03)	$ (20.80)
Weighted-average number of shares used to compute basic and diluted net loss per common share	54,787,118	43,825,991	34,618,237	1,828,262	863,983

(1) Includes $70.5 million of revenue related to Gilead transaction in 2020. Please see Note 7 of our consolidated financial statements for further information on our licensing agreements.
(2) See Note 10 to our consolidated financial statements for an explanation of the calculation of our basic and diluted net loss per share.

(in thousands)	As of December 31, 2020	2019	2018	2017	2016
Consolidated Balance Sheet Data:					
Cash and investments in marketable securities	$ 735,086	$ 188,270	$ 259,725	$ 175,703	$ 98,896
Working capital (1)	614,146	169,999	242,013	164,143	94,145
Total assets	772,292	203,110	274,925	190,486	109,702
Convertible preferred stock	-	-	-	226,196	119,454
Accumulated deficit	(328,184)	(205,326)	(122,828)	(73,234)	(20,152)
Total stockholders' equity	502,304	163,842	234,942	(72,328)	(19,994)

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements for further details regarding our current assets and current liabilities.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with "Item 6. Selected Financial Data" and our financial statements and related notes included elsewhere in this Annual Report. This discussion and other parts of this report contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations, and intentions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this report titled "Risk Factors."

Overview

We are a clinical-stage biopharmaceutical company focused on creating best-in-class cancer therapies. Our initial focus has been on well-characterized biological pathways with significant scientific data supporting their importance. We have built a robust and highly efficient drug discovery capability to create highly differentiated small molecules, which we have the ability to develop in combinations with our monoclonal antibodies through rationally designed, indication-specific clinical trial designs. Our vision is to create, develop and commercialize highly differentiated combination cancer therapies.

We currently have four investigational products in clinical development. In 2020, we entered into an Option, License and Collaboration Agreement (Gilead Collaboration Agreement) with Gilead Sciences, Inc. (Gilead), whereby Gilead obtained rights to zimberelimab and a time-limited exclusive option to all of our current and future programs during the 10-year collaboration term. For each program to which Gilead exercises their option, the parties will co-develop globally and co-commercialize in the U.S., subject to certain exceptions, and Gilead will have the right to commercialize the program outside of the United States, subject to the rights of our existing partners to certain territories. In 2017, we entered into an Option and License Agreement (Taiho Agreement) with Taiho Pharmaceutical Co., Ltd. (Taiho) pursuant to which Taiho has a time-limited option to exclusively license the development and commercialization rights to each of our programs for Japan and certain other territories in Asia (excluding China). To date, Taiho has exercised their option rights to our adenosine receptor antagonist program (including etrumadenant) and our anti-PD-1 program (including zimberelimab).

Domvanalimab (formerly referred to as AB154), our anti-TIGIT monoclonal antibody, is being evaluated in combination with zimberelimab with or without etrumadenant vs. zimberelimab monotherapy in ARC-7, our randomized Phase 2 trial in first-line metastatic PD-L1≥50% non-small cell lung cancer. In February 2021, we initiated ARC-10, our first registrational trial evaluating domvanalimab in combination with zimberelimab and zimberelimab monotherapy vs. chemotherapy in this same setting.

Etrumadenant (formerly referred to as AB928), our small molecule dual A_{2a}/A_{2b} adenosine receptor antagonist, is being evaluated by us in several randomized or Phase 2 trials across major tumor types, including in our ARC-4, ARC-6, ARC-7, and ARC-9 studies, as well as in two randomized Phase 1b/2 trials being conducted by Genentech (the Morpheus trials).

AB680, our small-molecule CD73 inhibitor, is being evaluated in a Phase 1/1b study for the treatment of first-line metastatic pancreatic cancer (ARC-8) as well as late-line metastatic prostate cancer (ARC-6).

Zimberelimab (formerly referred to as AB122), our anti-PD-1 monoclonal antibody, is the cornerstone of our combination strategy. We are currently evaluating zimberelimab, either alone or in combination with other agents across several tumor types, including non-small cell lung cancer in ARC-7, our Phase 2 trial, and ARC-10, our recently initiated registrational trial which is designed to support the approval of zimberelimab.

COVID-19 Pandemic

The degree to which COVID-19 impacts our business operations, research and development programs and financial condition will depend on future developments, including the ultimate duration and/or severity of the outbreak, the impact of any resurgences and new strains that emerge, actions by government authorities to contain the spread of the virus, the timing, availability and effectiveness of any vaccines, and when and to what extent normal economic and operating conditions can resume. Our management continues to actively monitor this health crisis and its effects on our operations, key vendors and workforce.

We conduct our clinical trials in the U.S. and internationally in geographic regions that are impacted by COVID-19 to varying degrees. While we have seen relatively robust enrollment across our ongoing Arcus-sponsored studies,

we expect to see volatility as local governments respond to resurgences and the emergence of new strains, each of which may result in the prolonged reinstitution, extension or enhancement of shelter-in-place measures. The American Cancer Society has also reported that the pandemic has led to declines in screening, diagnosis and treatment for cancer patients, which will impact the enrollment of patients in clinical trials targeting early stage cancers and retention of patients overall in our trials. Patient safety remains our paramount concern and we continue to collaborate with our existing and with new investigational sites to implement measures to minimize disruptions to patients and ensure continued access to treatment, in accordance with health authority guidance. We are unable to predict the full impact of this pandemic on our clinical programs.

With respect to manufacturing and supply, we believe we currently have sufficient drug supply for our ongoing clinical studies. Our third-party contract manufacturers continue to operate at or near normal levels and, at this time and subject to further COVID-19 implications, we do not anticipate any disruptions to our drug supply chain.

Our discovery programs were impacted by the suspension in our laboratory-based operations from mid-March to late June. Despite the return of our laboratory-based personnel back into our facilities, our laboratories are operating at reduced capacity due to employee safety measures, such as social distancing requirements and shift work. This has delayed the advancement of one of two preclinical programs that we had expected would enter the clinic in the first quarter of 2021. We expect a clinical trial for the first of these programs, AB308, our FcR-enabled anti-TIGIT antibody, to begin shortly; however, the pandemic has delayed the second of these programs until the second half of 2021.

The full impact of the COVID-19 outbreak remains highly uncertain and subject to change. In connection with our resumption of laboratory operations, we instituted regular COVID-19 testing services in order to minimize the risk to our employees. These additional operating costs, along with the absence of any furlough or measures to reduce personnel costs despite reduced laboratory capacity, will have a negative impact on our operations and financial condition. We do not expect the forward impact will be material due to adjustments in operations that we have made. However, there are many uncertainties around the COVID pandemic and future developments, which are unpredictable, may result in a material, negative impact to our operations and financial condition.

Financial Overview

Since commencing operations in 2015, we have devoted substantially all of our efforts and financial resources to building our research and development capabilities, advancing our investigational product pipeline, and establishing our corporate infrastructure.

To date, we have derived all of our revenue from non-refundable payments we received under the option and license agreements we entered into with Taiho Pharmaceutical Co., Ltd. (the Taiho Agreement) and Gilead Sciences, Inc. (the Gilead Agreements). We have not generated any revenue from product sales and we have never had a profitable fiscal year. We have incurred net losses since the commencement of our operations. As of December 31, 2020, we had an accumulated deficit of $328.2 million. We incurred a net loss of $122.9 million during the year ended December 31, 2020. We do not expect to generate revenue from product sales unless and until we obtain regulatory marketing approval and commercially launch a product candidate. We cannot assure you that we will ever generate significant revenue or profits.

Through December 31, 2020, we have financed our operations primarily through net proceeds of approximately $677 million from equity offerings and proceeds of approximately $421 million from our collaboration agreements. As of December 31, 2020, we had $735.1 million of cash, cash equivalents and investments. In February 2021 we raised an additional $220.4 million from the sale to Gilead of 5,650,000 shares of our common stock. We believe our cash, cash equivalents and investments will be sufficient to fund our planned operations through 2023. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

We expect to incur substantial expenditures in the foreseeable future as we expand our pipeline and advance our investigational products through clinical development, the regulatory approval process and, if approved, commercial launch activities. Specifically, in the near term we expect to incur substantial expenses relating to our ongoing and planned clinical trials, the development and validation of our manufacturing processes, and other preclinical, research and discovery development activities.

We have no internal manufacturing facilities, and thus all of our manufacturing activities are contracted to third parties. We currently utilize third-party clinical research organizations to manage and execute various aspects of our clinical development and trials.

We will need substantial additional funding to support our continuing operations and pursue our development strategy. Until such time that we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, including existing or potential collaborations with other companies or other strategic transactions. Adequate funding may not be available to us on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of our product candidates or delay our efforts to expand our product pipeline.

Gilead Collaboration

On May 27, 2020, we entered into the Gilead Collaboration Agreement, a Common Stock Purchase Agreement (the Stock Purchase Agreement), and an Investor Rights Agreement, (collectively, the Gilead Agreements), each with Gilead. The transaction closed on July 13, 2020 following expiration of the antitrust waiting period. Upon closing, Gilead made an upfront payment of $175 million pursuant to the Gilead Collaboration Agreement, Gilead made an equity investment of approximately $200 million in us by purchasing 5,963,029 shares of our common stock at a per share price of $33.54 pursuant to the Stock Purchase Agreement. Gilead made an additional equity investment in us of approximately $56.7 million, net of offering costs, by purchasing 2,200,000 shares of our common stock at a per share price of $27.50 in our May 2020 Public Offering. We also appointed Gilead's designees, Merdad Parsey, M.D., Ph.D. and Michael Quigley, Ph.D., to our Board of Directors pursuant to the Investor Rights Agreement.

Pursuant to the terms of the Gilead Collaboration Agreement, Gilead has an exclusive license to develop and commercialize zimberelimab in certain markets and obtained exclusive options to acquire an exclusive license to develop and commercialize all of our current and future clinical programs during the 10-year collaboration term, contingent upon Gilead's payment of $400 million, with the first payment of $100 million in 2022 and an additional $100 million payment due at Gilead's option on each of the fourth, sixth, and eighth anniversaries of the agreement. For those programs that enter clinical development prior to the end of the collaboration term, Gilead's option rights will extend for up to an additional three years thereafter. Gilead may exercise its option, on a program-by-program basis, upon payment of an option fee that ranges from $200 million to $275 million per program for our clinical programs in existence at the date of the agreement, and $150 million per program for all other programs that enter clinical development thereafter. If Gilead exercises its option with respect to our TIGIT program, we are also eligible to receive up to $500 million in potential U.S. regulatory approval milestones with respect to domvanalimab.

Upon Gilead's exercise of its option to a program, the two companies will co-develop and equally share global development costs, subject to certain of our opt-out rights, and expense caps on our spending and related subsequent adjustments. For each optioned program, provided we have not exercised our opt-out rights, we have an option to co-promote in the United States with equal sharing of related profits and losses. Gilead has the right to exclusively commercialize any optioned programs outside of the U.S., subject to the rights of our existing partners to any territories, and Gilead will pay to us tiered royalties as a percentage of revenues ranging from the high teens to the low twenties.

Pursuant to the Stock Purchase Agreement and the Investor Rights Agreement, Gilead has the right, at its option, to purchase additional shares from us, up to a maximum ownership of 35% of our then-outstanding voting common stock, from time to time over the next five years, at a purchase price equal to the greater of a 20% premium to market (based on a trailing five-day average closing price) at the time Gilead exercises such option, and the $33.54 initial purchase price. The Investor Rights Agreement also includes a three-year standstill and a two-year lockup and provides Gilead with registration rights commencing at the end of the lockup period, pro rata participation rights in certain future financings and the right to designate two individuals to be appointed to our Board of Directors.

On January 31, 2021, we and Gilead entered into an Amended and Restated Common Stock Purchase Agreement, which amended and restated in its entirety the Common Stock Purchase Agreement, pursuant to which Gilead purchased from us 5,650,000 shares of our common stock at a purchase price of $39.00 per share. All other terms of the original Common Stock Purchase Agreement, including Gilead's option to purchase additional shares from us, up to a maximum ownership of 35% of our then-outstanding common stock, remain unchanged.

AstraZeneca Agreement

On October 29, 2020 we announced a collaboration with AstraZeneca to evaluate domvanalimab, our investigational anti-TIGIT antibody, in combination with AstraZeneca's Imfinzi (durvalumab) in a registrational Phase 3 clinical trial in patients with unresectable Stage III non-small cell lung cancer (NSCLC). Under the terms of the agreement, each company will retain existing rights to their respective molecules and any future commercial economics. AstraZeneca will conduct the trial, and each company will supply its respective anti-cancer agent to support the trial. Pursuant to the terms of the agreement, the parties will share costs for the trial.

Consistent with the terms of the recently completed Gilead Agreements, Gilead maintains an option to co-develop and co-commercialize domvanalimab. If Gilead exercises its option to domvanalimab, the trial from this AstraZeneca collaboration is expected to form part of the Arcus and Gilead joint development program and Arcus's portion of the trial costs would be shared with Gilead.

Other Licenses and Collaborations

We in-licensed rights to zimberelimab from WuXi Biologics, and in-licensed rights to products that include an anti-TIGIT antibody, including domvanalimab, from Abmuno Therapeutics LLC (Abmuno). We also have a co-development and collaboration agreement with Strata Oncology, Inc. (Strata).

Components of Operating Results

Collaboration and License Revenue

Our collaboration and license revenue consists of revenue recognized from the upfront and periodic payments received from Taiho and Gilead, for research and development services performed by us to develop our investigational products under the terms of our collaboration agreements, and from any option exercise payments.

Operating Expenses

Research and Development Expenses

Our research and development expenses consist of expenses incurred in connection with the research and development of our pipeline programs. These expenses include pre-clinical and clinical expenses, payroll and personnel expenses, including stock-based compensation for our employees, laboratory supplies, product licenses, consulting costs, contract research, and depreciation. Shared facility expenses are allocated to functional groups proportionally based on usage. Under certain collaboration agreements we agree to share research and development expenses with our partners or to reimburse our partners for qualified expenses. We expense both internal and external research and development costs as they are incurred. We record advance payments for services that will be used or rendered for future research and development activities as prepaid expenses and recognize them as an expense as the related services are performed.

We do not allocate our costs by investigational product, as a significant amount of research and development expenses include internal costs, such as payroll and other personnel expenses, and certain external costs that are not recorded at the investigational product level. In particular, with respect to internal costs, several of our departments support multiple research and development programs, and we do not allocate those costs by investigational product.

We expect our research and development expenses to increase substantially during the next few years due to our Gilead collaboration and as we seek to complete existing clinical trials and advance our programs into later-stage clinical trials, pursue regulatory approval for our investigational products, and advance other programs into the clinic. Later-stage clinical trials typically include a larger number of subjects, are of a longer duration and include more geographic regions. As we advance our clinical-stage programs and prepare to seek regulatory approval, we will also need to conduct certain validation activities with respect to our manufacturing processes for the investigational products in each program. Moreover, in order to maximize the potential of our collaboration with Gilead, we believe it will be important to grow our discovery capabilities and pipeline. As a result, we expect our preclinical, clinical, and contract manufacturing expenses to increase significantly relative to what we have incurred to date. The level of our future research and development investment will depend on a number of factors and uncertainties, including clinical outcomes from our ongoing clinical trials, whether our collaborators opt into any of our programs, the amount of opt-in and milestone payments we receive from our collaborators, and the breadth of any joint development program agreed to with Gilead for programs they opt into. In addition, under our license

agreements with WuXi Biologics and Abmuno, and our co-development and collaboration agreements with Strata, and AstraZeneca, we may be required to pay additional clinical and regulatory milestone payments based on the development progress of our investigational products. Therefore, we are unable to predict the timing or the final cost to complete our clinical programs or validation of our manufacturing and supply processes and delays may occur due to numerous factors. Factors that could cause or contribute to delays or additional costs include, but are not limited to, those discussed in "Item 1A. Risk Factors."

General and Administrative Expenses

General and administrative expenses consist principally of personnel-related costs including payroll and stock-based compensation for personnel in executive, finance, human resources, information technology, business and corporate development, and other administrative functions. Shared facility expenses are allocated to functional groups proportionally based on usage. Our general and administrative expenses also include professional fees for legal, consulting, and accounting services, rent and other facilities costs, fixed asset depreciation, and other general operating expenses not otherwise classified as research and development expenses.

We anticipate that our general and administrative expenses will increase substantially during the next few years as we support our growing research and development activities, including due to staff expansion, additional occupancy costs, and other costs associated with increased infrastructure needs.

Other Non-Operating Income, net

Other non-operating income, net consists primarily of interest earned on our investments in fixed-income marketable securities as well as activity related to our equity method investment in PACT Pharma, Inc (PACT Pharma). To date, gains have consisted of gains on dilution of our investment in PACT Pharma, typically occurring upon PACT Pharma's new issuances of equity securities. Losses associated with the investment consist of our share of PACT Pharma's net losses.

Critical Accounting Policies, Significant Judgments and Use of Estimates

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

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

Revenue Recognition

At the inception of an arrangement, we evaluate if a counterparty to a contract is a customer, if the arrangement is within the scope of revenue from contracts with customers guidance, and the term of the contract. We recognize revenue when our customer obtains control of promised goods or services in a contract for an amount that reflects the consideration we expect to receive in exchange for those goods or services. For contracts with customers, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy each performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. As part of the accounting for contracts with customers, we must develop assumptions that require judgment to determine the standalone selling price of each performance obligation identified in the contract. We then allocate the total transaction price to each performance obligation based on the estimated standalone selling prices of each performance obligation. We then recognize as

revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The estimation of the standalone selling price may include such estimates as forecasted revenues or costs, development timelines, discount rates, and probabilities of technical and regulatory success. We evaluate each performance obligation to determine if it can be satisfied at a point in time or over time, and we measure the services delivered to the customer, which we periodically review based on the progress of the related program. The effect of any change made to an estimated input component and, therefore revenue or expense recognized, would be recorded as a change in estimate. In addition, variable consideration (e.g. milestone payments) must be evaluated to determine if it is constrained and, therefore, excluded from the transaction price.

Research and Development Expenses

We expense research and development costs as incurred. We estimate preclinical and clinical study and research expenses based on services performed, pursuant to contracts with third-party research organizations that conduct and manage preclinical and clinical studies and research services on our behalf. We estimate these expenses based on communications with internal personnel and external service providers as to the progress or stage of completion of services and the contracted fees to be paid for such services. If the actual timing of the performance of services or the level of effort varies from the original estimates, we will adjust the accrual accordingly. Payments associated with licensing agreements to acquire exclusive licenses to develop, use, manufacture and commercialize products that have not reached technological feasibility and do not have alternative future use are expensed as incurred. Payments made to third parties under these arrangements in advance of the performance of the related services are recorded as prepaid expenses until the services are rendered.

Stock-Based Compensation Expense

We account for stock-based compensation arrangements in accordance with ASC 718, *Stock Compensation*. Prior to January 1, 2019, we accounted for equity instruments issued to non-employees in accordance with ASC 505-50 *Equity Based Payments to Non-Employees*. Based on this guidance, we recorded awards at their fair value on the measurement date subject to periodic adjustments as the underlying equity instruments vest. We expensed the fair value of options granted to consultants when vested. On January 1, 2019, we adopted ASU *No. 2018-07 (Topic 718), Compensation – Stock Compensation,* which expanded the scope of Topic 718 to include share-based payment transactions with non-employees.

Stock-based awards granted include stock options and restricted stock units (RSUs). Accounting standards require the recognition of compensation expense, using a fair value-based method, for costs related to all stock-based payments. Our determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model, and is impacted by our common stock price as well as other variables including, but not limited to, expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends. Compensation expense associated with restricted stock units is based on the fair value of common stock on the date of grant.

Leases

Subsequent to the adoption of the new leasing standard effective as of January 1, 2020, we recognize a lease asset for its right to use the underlying asset and a lease liability for the corresponding lease obligation. We determine whether an arrangement is or contains a lease at contract inception. We recognize operating lease right-of-use assets and liabilities at the lease commencement date based on the present value of lease payments over the lease term. In determining the net present value of lease payments, we use an incremental borrowing rate based on the information available at the lease commencement date. The incremental borrowing rate represents the interest rate we would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease. We consider a lease term to be the noncancelable period that it has the right to use the underlying asset, including any periods where it is reasonably assured we will exercise the option to extend the contract. Periods covered by an option to extend are included in the lease term if the lessor controls the exercise of that option.

Income Taxes

We provide for income taxes under the asset and liability method. Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. We determine deferred

income tax assets and liabilities based on differences between the financial statement reporting and tax bases of assets and liabilities and net operating loss and credit carryforwards, and measure them using the enacted tax rates and laws that will be in effect when such items are expected to reverse. We reduce deferred income tax, as necessary, by a valuation allowance when management determines it is more likely than not that some or all of the tax benefits will not be realized.

Results of Operations

Comparison of the Years Ended December 31, 2020 and 2019

The following table summarizes our results of operations for the periods indicated (in thousands):

	Year Ended December 31,		$ Change	% Change
	2020	2019		
Revenues:				
License revenue	$ 55,096	$ 8,000	$ 47,096	*
Collaboration revenue	22,421	7,000	15,421	220%
Total collaboration and license revenue	77,517	15,000	62,517	417%
Operating expenses:				
Research and development	159,348	78,481	80,867	103%
General and administrative	42,404	25,228	17,176	68%
Total operating expenses	201,752	103,709	98,043	95%
Loss from operations	(124,235)	(88,709)	(35,526)	40%
Non-operating income, net	1,377	3,999	(2,622)	-66%
Net loss	$ (122,858)	$ (84,710)	$ (38,148)	45%

* Not meaningful

Collaboration and License Revenue

Collaboration and license revenue increased $62.5 million, from $15.0 million for the year ended December 31, 2019 to $77.5 million for the year ended December 31, 2020. The increase in collaboration and license revenue was primarily due to the recognition of $55.1 million in revenue from the zimberelimab license granted to Gilead and $15.4 million related to Gilead's ongoing rights to access our intellectual property in accordance with the Gilead Collaboration Agreement, partially offset by the recognition in 2019 of $8.0 million in revenue from Taiho's exercise of its option for our anti-PD-1 antibody program, including zimberelimab.

Research and Development Expenses

Research and development expenses increased $80.8 million, or 103%, from $78.5 million for the year ended December 31, 2019 to $159.3 million for the year ended December 31, 2020. The increase in research and development expenses was primarily due to an increase of $27.8 million in manufacturing costs required to supply our clinical studies, an increase of $24.2 million in clinical costs for our ongoing clinical studies, and an increase of $20.1 million in employee compensation costs primarily due to additional headcount, approximately $7.1 million of which consists of non-cash stock-based compensation. Expenses related to sublicense fees and milestone payments also increased $7.4 million, from $11.2 million for the year ended December 31, 2019 to $18.6 million for the year ended December 31, 2020, largely as a result of sublicense fees paid to WuXi. We incurred a $1.5 million additional increase on telecommunications and remote work infrastructure due to shelter-in-place orders amid the COVID pandemic, partially offset by a decrease of $1.3 million in lab supplies and equipment due to decreased lab activities for the same reason.

General and Administrative Expenses

General and administrative expenses increased $17.2 million, or 68%, from $25.2 million for the year ended December 31, 2019 to $42.4 million for the year ended December 31, 2020. The increase in general and administrative expenses was due primarily to $7.6 million in employee compensation costs primarily due to

additional headcount, approximately $5.8 million of which consists of non-cash stock-based compensation. We also incurred increased expense of $3.8 million in consulting expenses incurred in corporate development activities and $3.8 million in legal and accounting expenses incurred to support our expanding operations and ongoing compliance with public company requirements. We further incurred a $1.5 million additional increase on telecommunications and remote work infrastructure due to shelter-in-place orders amid the COVID pandemic.

Non-Operating Income, Net

Non-operating income, net decreased $2.6 million or 66%, from $4.0 million for the year ended December 31, 2019 to $1.4 million for the year ended December 31, 2020. The decrease was primarily due to lower interest income resulting from lower investment yields on our portfolio of marketable fixed-income securities during the year ended December 31, 2020 as compared to the same period in the prior year.

Comparison of the Years Ended December 31, 2019 and 2018

The following table summarizes our results of operations for the periods indicated (in thousands):

	Year Ended December 31,		$ Change	% Change
	2019	2018		
Revenues:				
License revenue	$ 8,000	$ 3,000	$ 5,000	167%
Collaboration revenue	7,000	5,353	1,647	31%
Total collaboration and license revenue	15,000	8,353	6,647	80%
Research and development	78,481	49,646	28,835	58%
General and administrative	25,228	13,566	11,662	86%
Total operating expenses	103,709	63,212	40,497	64%
Loss from operations	(88,709)	(54,859)	(33,850)	62%
Non-operating income, net	3,999	5,265	(1,266)	-24%
Net loss	$ (84,710)	$ (49,594)	$ (35,116)	71%

As described in Note 2 of the accompanying consolidated financial statements, in January 1, 2019, we adopted ASC 606. ASC 606 supersedes the guidance in ASC 605, Revenue Recognition. We adopted ASC 606 on a modified retrospective basis under which we recognized the $2.2 million cumulative effect of adoption as a reduction to opening accumulated deficit. We recorded revenue for the year ended December 31, 2018 under ASC 605, while we recorded revenue for year ended December 31, 2019 under ASC 606. Had we recognized revenue for the year ended December 31, 2019 using ASC 605, revenue would have been $14.7 million as compared to the $15.0 million recorded under ASC 606.

Collaboration and License Revenue

Collaboration and license revenue increased $6.6 million or 80%, from $8.4 million for the year ended December 31, 2018 to $15.0 million for the year ended December 31, 2019. The increase in collaboration and license revenue was due to an additional $1.6 million of revenue recognized resulting from a higher initial transaction price for the Taiho Agreement that we remeasured upon adoption of ASC 606 during 2019 and $8.0 million recognized following Taiho's exercise of its option for our anti-PD-1 antibody program, including zimberelimab, partially offset by $3.0 million recognized in 2018 from Taiho's exercise of its option for our adenosine receptor antagonist program, including etrumadenant.

Research and Development Expenses

Research and development expenses increased $28.9 million, or 58%, from $49.6 million for the year ended December 31, 2018 to $78.5 million for the year ended December 31, 2019. The increase in expenses included an increase of $14.3 million in clinical study costs and an increase of $1.3 million in clinical consulting costs related to all four of our programs in clinical development. Also contributing to the increase in 2019 was the achievement of certain development milestones which resulted in expenses of $8.7 million pursuant to the terms of our WuXi Agreement and $2.5 million pursuant to the terms of our Strata Agreement, compared to a $2.0 million

product licensing expense pursuant to our Abmuno Agreement that was recorded in the prior year. Additional expenses in 2019 included an increase of $5.2 million in employee compensation, an increase of $2.0 million in stock-based compensation and an increase of $0.7 million in facilities and office expenses, primarily driven by growth in our headcount. Those increases were partially offset by a decrease of $4.2 million in manufacturing costs primarily due to the completion of certain manufacturing activities for domvanalimab in 2018.

General and Administrative Expenses

General and administrative expenses increased $11.6 million, or 86%, from $13.6 million for the year ended December 31, 2018 to $25.2 million for the year ended December 31, 2019. The increase in expenses was primarily due to an increase of $4.0 million in employee compensation, an increase of $3.2 million in stock-based compensation and an increase of $2.0 million in facilities and office expenses, primarily due to growth in headcount. General and administrative expenses further increased due to increases of $1.3 million in consulting and $0.7 million in legal and accounting fees, supporting the expansion of our research and development activities and on-going public company regulatory compliance costs.

Non-Operating Income, Net

Non-operating income, net decreased $1.3 million or 24%, from $5.3 million for the year ended December 31, 2018 to $4.0 million for the year ended December 31, 2019. The decrease was primarily due to a gain on deemed sale recorded in conjunction with PACT Pharma's Series B convertible preferred financing in 2018 without a similar gain in 2019.

Liquidity and Capital Resources

To date, we have financed our operations primarily through net proceeds of approximately $677 million from equity offerings and proceeds of approximately $421 million from our collaboration agreements. As of December 31, 2020, we had $735.1 million of cash, cash equivalents and investments in marketable securities. In February 2021 we raised an additional $220.4 million from the sale to Gilead of 5,650,000 shares of our common stock. Our cash and investments are held in a variety of interest-bearing instruments, including money market funds, and investments in corporate notes, other debt securities, commercial papers and government agency obligations.

Based on our existing business plan, we believe that our existing cash, cash equivalents and investments will be sufficient to fund our anticipated level of operations through 2023.

We may require additional capital to complete the development and any commercialization of our investigational products. Our future capital requirements will depend on many factors, including:

- the scope, rate of progress and costs of clinical trials for our investigational products as well as drug discovery, preclinical development activities, and laboratory testing;
- the number and scope of clinical programs we decide to pursue;
- the scope and costs of manufacturing development and commercial manufacturing activities;
- the timing and amount of expense related to our current and future clinical programs, subject to the rights of our existing partners, and the costs associated with our share of the global development plan for such programs;
- the timing and amount of milestone payments we receive under the Taiho Agreement and Gilead Collaboration Agreement, and option fees under the Gilead Collaboration Agreement;
- the extent to which we acquire or in-license other investigational products and technologies;
- the cost, timing and outcome of regulatory review of our investigational products;
- the cost and timing of establishing sales and marketing capabilities, if any of our investigational products 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 collaborations on favorable terms, if at all;

- our efforts to enhance operational systems and our ability to attract, hire and retain qualified personnel, including personnel to support the development of our investigational products;
- the costs associated with being a public company; and
- the cost associated with commercializing our investigational products, if they receive marketing approval.

If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make certain investments and engage in certain merger, consolidation or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. If we are unable to raise additional funds when needed, we may be required to delay, reduce, or terminate some or all of our development programs and clinical trials. We may also be required to sell or license to others rights to our investigational products in certain territories or indications that we would prefer to develop and commercialize ourselves.

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

Summary Consolidated Statement of Cash Flows

The following table sets forth the primary sources and uses of cash, cash equivalents and restricted cash for each of the periods presented below (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Net cash provided by (used in):			
Operating activities	$ 111,170	$ (73,462)	$ (42,996)
Investing activities	(434,367)	59,212	(113,440)
Financing activities	438,675	1,123	129,074
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 115,478	$ (13,127)	$ (27,362)

Cash Provided by (Used in) Operating Activities

Net cash provided by operating activities for the year ended December 31, 2020 increased by $184.7 million to $111.2 million provided by operating activities as compared to $73.5 million cash used in operating activities for the prior year. The increase in cash provided is primarily due to $265.6 million in cash received at the close of the Gilead Collaboration Agreement in July 2020. The overall increase in net cash provided is partially offset by the $38.1 million increase in our net loss to $122.9 million and changes in non-cash items, including $12.8 million of increased expense from stock-based compensation, and changes in our asset and liability balances due to the timing of payments to or from our vendors and collaborators.

Net cash used in operating activities for the year ended December 31, 2019 increased by $30.5 million to $73.5 million as compared to $43.0 million for the prior year. The increase in cash used is primarily due to the $35.1 million increase in our net loss to $84.7 million. The change in our net loss is primarily a result of our expanded clinical development activities and general and administrative costs incurred to support our operations. The overall increase in cash used is partially offset by year-over-year changes in non-cash items, including increased expense from stock-based compensation. Additional increase in cash used resulted from changes in our asset and liability balances due to the timing of payments to or from our vendors and collaborators.

Cash Provided by (Used in) Investing Activities

Cash used in investing activities was $434.4 million for the year ended December 31, 2020 compared to $59.2 million cash provided in the prior year. The change in cash flow was primarily due to net purchases of our investments in fixed-income marketable securities, as we invested proceeds received from our May 2020 Public Offering, the Gilead Collaboration Agreement, and the Stock Purchase Agreement.

Cash provided by investing activities was $59.2 million for the year ended December 31, 2019 compared to $113.4 million cash used in the prior year. The change in cash flow was primarily due to year-over-year changes in the timing of purchases and maturities of our investments in fixed-income marketable securities.

Cash Provided by Financing Activities

Cash provided by financing activities was $438.7 million for the year ended December 31, 2020 compared to $1.1 million in the prior year. The increase in cash provided is primarily due to $326.2 million in net cash received from our May 2020 Public Offering, $107.5 million in net cash received under the Stock Purchase Agreement with Gilead, and funds received during the year for issuance of common stock pursuant to equity award plans.

Cash provided by financing activities was $1.1 million for the year ended December 31, 2019 compared to $129.1 million in the prior year. The decrease in cash provided is primarily due to a decrease in funds received in 2019 for issuance of common stock as compared to net proceeds received from our IPO in March 2018.

Contractual Obligations and Commitments

The following table summarizes our non-cancelable contractual obligations as of December 31, 2020 (in thousands):

	Payments due by period				
	Total	Less than 1 year	1 to 3 years	3 to 5 years	After 5 years
Operating lease obligations	$ 112,565	$ 4,041	$ 20,970	$ 24,125	$ 63,429

As of December 31, 2020, we had obligations consisting of operating leases for our operating facilities for approximately 245,530 square feet. Under the terms of the agreements, we have lease obligations consisting of $112.6 million in undiscounted minimum lease payments through 2031.

We enter into contracts in the normal course of business with third parties for clinical trial management and execution, non-clinical studies and testing, manufacturing, and other services and products for operating purposes. These contracts are generally cancelable on 30 days' notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

We have not included contingent milestone or royalty payments or other contractual payment obligations in the table to the extent the timing and amount of such obligations are unknown or uncertain.

Off-Balance Sheet Arrangements

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

Recent Accounting Pronouncements

See "Recent Accounting Pronouncements" in Note 2, "Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements for a discussion of recently adopted accounting pronouncements and accounting pronouncements not yet adopted, and their expected impact on our financial position and results of operations.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates or exchange rates. As of December 31, 2020, we had cash, cash equivalents and investments of $735.1 million, consisting of interest-bearing money market accounts and investments in corporate notes and U.S. government securities, for which the fair market value would be affected by changes in the general level of United States interest rates. However, due to the short-term maturities and the low-

risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our cash, cash equivalents and investments.

In addition, we are also exposed to foreign currency exchange rate risk inherent in our contracts with research institutions, contract research organizations, and contract manufacturing organizations as certain services are performed by them outside the United States. We made payments in the aggregate amount of $5.3 million AUD to our Australian vendors during the year ended December 31, 2020. We are subject to exposure due to fluctuations in foreign exchange rates in connection with these agreements and with our cash balance denominated in Australian dollars.

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

Item 8. Financial Statements and Supplementary Data

ARCUS BIOSCIENCES, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Arcus Biosciences, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Arcus Biosciences, Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at 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 U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 24, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter 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.

Revenue recognition for license and collaboration agreement with Gilead Sciences, Inc.

Description of the Matter

As described in Note 7 to the consolidated financial statements, the Company entered into an Option, License and Collaboration Agreement, Common Stock Purchase Agreement, and Investor Rights Agreement, with Gilead Sciences, Inc., collectively referred to as "the Gilead Agreements", which resulted in the recognition of $70.5 million of revenue for the year ended December 31, 2020.

Auditing the Company's revenue recognition for the Gilead Agreements is complex and required the Company to apply significant judgements, including the determination of performance obligations and transaction price, and the estimation of the standalone selling price of each identified performance obligation. The estimates of the standalone selling price for the performance obligations relating to the license of the Zimberelimab compound and the options for two other named compounds reflect management's assumptions, which may include forecasted revenues, development timelines, discount rates, and probabilities of technical and regulatory success. Changes to these assumptions can have a material effect on the allocation of the transaction price to the performance obligations as well as the amount and timing of revenue recognized.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls addressing the risks of material misstatement relating to the accounting for revenue recognition of license and collaboration agreements with multiple performance obligations. For example, we tested management's controls over the identification of performance obligations, the determination of the significant assumptions described above with respect to the estimation of the standalone selling price of the performance obligations relating to the license of the Zimberelimab compound and the options for two other named compounds, and the accuracy and completeness of underlying data used in estimating the standalone selling price.

Our audit procedures included, among others, obtaining and reading the license and collaboration agreement and evaluating the completeness of the performance obligations identified by management. We also evaluated management's estimates of the standalone selling price of certain performance obligations. For example, we evaluated the projected discounted cash flow assumptions used by the Company in developing the estimates of standalone selling price by comparing the significant assumptions described above to current industry trends using available information from other similar companies within the same industry and other relevant factors. We also performed a sensitivity analysis to evaluate the impact that changes in the significant assumptions would have on the estimated standalone selling price of performance obligations and the resulting impact on the allocation of transaction price to each performance obligation, as well as revenue recognized during the period. We involved our valuation professionals to assist in the assessment of the estimation methodology and the significant assumptions used in determining the estimated standalone selling price of the performance obligations.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2016.

Redwood City, California

February 24, 2021

ARCUS BIOSCIENCES, INC.
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	As of December 31,	
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 173,415	$ 57,937
Short-term investments	555,231	130,333
Receivable from collaboration partners ($943 and $0 from a related party)	1,049	132
Accrued interest receivable	649	251
Prepaid expenses and other current assets	5,471	4,052
Total current assets	735,815	192,705
Long-term investments	6,440	-
Property and equipment, net	10,807	9,330
Right-of-use assets	12,781	-
Restricted cash	203	203
Other long-term assets	6,246	872
Total assets	$ 772,292	$ 203,110
LIABILITIES		
Current liabilities:		
Accounts payable	$ 15,682	$ 4,704
Accrued research and development expenses	18,307	4,572
Other accrued liabilities	9,543	4,950
Deferred revenue, current ($67,571 and $0 to a related party)	74,571	7,000
Other current liabilities	3,566	1,480
Total current liabilities	121,669	22,706
Deferred revenue, noncurrent ($117,808 and $0 to a related party)	122,830	12,022
Operating lease liabilities, noncurrent	15,243	-
Deferred rent, non-current	-	3,734
Other long-term liabilities ($9,703 and $0 to a related party)	10,246	806
Total liabilities	269,988	39,268
Commitments (Note 12)		
Stockholders' equity:		
Preferred stock, $0.0001 par value, 10,000,000 shares authorized as of December 31, 2020 and 2019; no shares issued and outstanding as of December 31, 2020 and 2019	-	-
Common stock, $0.0001 par value, 400,000,000 shares authorized as of December 31, 2020 and 2019; 65,114,685 and 45,925,004 shares issued and outstanding as of December 31, 2020 and 2019, respectively	6	4
Additional paid-in capital	830,438	369,100
Accumulated deficit	(328,184)	(205,326)
Accumulated other comprehensive income	44	64
Total stockholders' equity	502,304	163,842
Total liabilities and stockholders' equity	$ 772,292	$ 203,110

The accompanying notes are an integral part of these Consolidated Financial Statements

ARCUS BIOSCIENCES, INC.
Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)

	Years Ended December 31,		
	2020	2019	2018
Revenues:			
License revenue ($55,096, $0 and $0 from a related party)	$ 55,096	$ 8,000	$ 3,000
Collaboration revenue ($15,421, $0 and $0 from a related party)	22,421	7,000	5,353
Total collaboration and license revenues	77,517	15,000	8,353
Operating expenses:			
Research and development (($3,446), $0 and $0 from a related party)	159,348	78,481	49,646
General and administrative	42,404	25,228	13,566
Total operating expenses	201,752	103,709	63,212
Loss from operations	(124,235)	(88,709)	(54,859)
Non-operating income (expense):			
Interest and other income, net	1,377	5,201	4,922
Gain on deemed sale from equity method investee	613	-	1,229
Share of loss from equity method investee	(613)	(1,202)	(886)
Total non-operating income, net	1,377	3,999	5,265
Net loss	(122,858)	(84,710)	(49,594)
Other comprehensive income (loss)	(20)	171	(65)
Comprehensive loss	$ (122,878)	$ (84,539)	$ (49,659)
Net loss per share, basic and diluted	$ (2.24)	$ (1.93)	$ (1.43)
Weighted-average number of shares used to compute basic and diluted net loss per share	54,787,118	43,825,991	34,618,237

The accompanying notes are an integral part of these Consolidated Financial Statements

ARCUS BIOSCIENCES, INC.
Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(In thousands, except share amounts)

	Convertible Preferred Stock		Common stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity(Deficit)
	Shares	Amount	Shares	Amount				
Balance at December 31, 2017	30,459,574	$ 226,196	3,278,129	$ -	$ 948	$ (73,234)	$ (42)	$ (72,328)
Conversion of preferred stock to common stock	(30,459,574)	(226,196)	30,459,574	3	226,195	-	-	226,198
Issuance of common stock upon IPO	-	-	9,200,000	1	124,734	-	-	124,735
Issuance of common stock upon exercise of stock options	-	-	67,349	-	95	-	-	95
Vesting of early exercised stock options and restricted stock	-	-	528,374	-	1,276	-	-	1,276
Issuance of common stock under Employee Stock Purchase Plan	-	-	77,397	-	751	-	-	751
Stock-based compensation	-	-	-	-	3,874	-	-	3,874
Other comprehensive loss	-	-	-	-	-		(65)	(65)
Net loss	-	-	-	-	-	(49,594)	-	(49,594)
Balance at December 31, 2018	-	-	43,610,823	4	357,873	(122,828)	(107)	234,942
Cumulative effect adjustment upon adoption of ASC 606	-	-	-	-	-	2,212	-	2,212
Issuance of common stock upon exercise of stock options	-	-	34,780	-	188	-	-	188
Vesting of early exercised stock options and restricted stock	-	-	417,883	-	1,029	-	-	1,029
Issuance of common stock under Employee Stock Purchase Plan	-	-	148,709	-	1,029	-	-	1,029
Stock-based compensation	-	-	-	-	8,981	-	-	8,981
Other comprehensive income	-	-	-	-	-	-	171	171
Net loss	-	-	-	-	-	(84,710)	-	(84,710)
Balance at December 31, 2019	-	-	44,212,195	4	369,100	(205,326)	64	163,842
Issuance of common stock in public offering, net of $21,629 offering costs (2,200,000 shares and $56,738, net of $3,762 offering costs, from a related party)	-	-	12,650,000	2	326,244	-	-	326,246
Issuance of common stock and rights to purchase additional shares in accordance with Gilead Stock Purchase Agreement, net of $1,931 offering costs	-	-	5,963,029	-	107,468	-	-	107,468
Issuance of common stock upon exercise of stock options and vesting of restricted stock			405,752	-	3,366	-	-	3,366
Vesting of early exercised stock options	-	-	258,824	-	848	-	-	848
Issuance of common stock under Employee Stock Purchase Plan	-	-	202,101	-	1,587	-	-	1,587
Stock-based compensation	-	-	-	-	21,825	-	-	21,825
Other comprehensive loss	-	-	-	-	-	-	(20)	(20)
Net loss	-	-	-	-	-	(122,858)	-	(122,858)
Balance at December 31, 2020	-	$ -	63,691,901	$ 6	$ 830,438	$ (328,184)	$ 44	$ 502,304

The accompanying notes are an integral part of these Consolidated Financial Statements

ARCUS BIOSCIENCES, INC.
Consolidated Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Cash flow from operating activities			
Net loss	$ (122,858)	$ (84,710)	$ (49,594)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation expense	21,825	8,981	3,874
Depreciation and amortization	3,149	3,578	3,664
Amortization of right-of-use assets	1,042	-	-
Share of loss (gain on deemed sale) from equity method investee, net	-	1,202	(343)
Amortization of premiums on investments	(46)	(2,638)	(1,752)
Other non-operating income	-	-	(177)
Changes in operating assets and liabilities:			
Receivable from collaboration partners (($943), $0 and $0 from a related party)	(917)	(132)	-
Amounts owed by PACT Pharma	-	83	(58)
Prepaid expenses and other current assets	(838)	(1,982)	(1,180)
Other long-term assets	(5,374)	(588)	(80)
Accounts payable	9,272	1,726	(69)
Accrued research and development expenses	13,735	1,756	1,623
Other accrued liabilities	4,593	1,743	1,874
Other current liabilities	-	57	43
Deferred revenue ($185,379, $0 and $0 to a related party)	178,379	(2,000)	(353)
Operating lease liabilities	(993)	-	-
Deferred rent	-	(538)	(468)
Other long-term liabilities ($9,703, $0 and $0 to a related party)	10,201	-	-
Net cash provided by (used in) operating activities	111,170	(73,462)	(42,996)
Cash flow from investing activities			
Purchases of short-term and long-term investments	(739,658)	(247,755)	(261,552)
Proceeds from maturities of short-term and long-term investments	307,343	308,892	151,855
Sales of short-term investments	1,003	-	-
Purchases of property and equipment	(3,055)	(1,925)	(3,743)
Net cash provided by (used in) investing activities	(434,367)	59,212	(113,440)
Cash flow from financing activities			
Proceeds from initial public offering, net of issuance costs	-	-	125,111
Proceeds from issuance of common stock and rights to purchase additional shares ($164,207, $0 and $0 from a related party)	433,776	-	-
Proceeds from issuance of common stock pursuant to equity award plans	4,953	1,217	4,098
Repurchase of unvested shares of stock	(54)	(94)	-
Payment of preferred stock issuance costs	-	-	(135)
Net cash provided by financing activities	438,675	1,123	129,074
Net increase (decrease) in cash, cash equivalents and restricted cash	115,478	(13,127)	(27,362)
Cash, cash equivalents and restricted cash at beginning of period	58,140	71,267	98,629
Cash, cash equivalents and restricted cash at end of period	$ 173,618	$ 58,140	$ 71,267
Supplemental disclosures:			
Cash paid for amounts included in measurement of lease liabilities	$ 2,105	$ -	$ -
Non-cash investing and financing activities:			
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 8,019	$ -	$ -
Unpaid portion of financing costs included in accounts payable	$ 61	$ -	$ -
Unpaid portion of property and equipment purchases included in accounts payable and accrued liabilities	$ 1,583	$ 12	136
Vesting of early exercised stock options and restricted stock	$ 848	$ 1,029	$ 1,276

The accompanying notes are an integral part of these Consolidated Financial Statements

Note 1. Organization

Description of Business

Arcus Biosciences, Inc. (the Company) is a clinical-stage biopharmaceutical company focused on creating best-in-class cancer therapies. The Company's initial focus has been on well-characterized biological pathways with significant scientific data supporting their importance. Since its inception in 2015, the Company has built a robust and highly efficient drug discovery capability to create highly differentiated small molecules, which the Company is developing in combination with its in-licensed monoclonal antibodies through rationally designed, indication-specific clinical trial designs. The Company currently has four investigational products in clinical development: domvanalimab (formerly referred to as AB154), etrumadenant (formerly referred to as AB928), AB680, and zimberelimab (formerly referred to as AB122).

Note 2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements and accompanying notes have been prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP) and include all adjustments necessary for the fair presentation of the Company's financial position for the periods presented.

Principles of Consolidation

The accompanying consolidated financial statements are comprised of Arcus Biosciences, Inc. and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the Company's consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, as well as related disclosure of contingent assets and liabilities. Estimates were used to determine the standalone selling price of performance obligations and the timing of revenue recognition, the value of stock-based awards and other issuances, accruals for research and development costs, useful lives of long-lived assets, and uncertain tax positions. Actual results could differ materially from the Company's estimates.

Risk and Uncertainties

The Company's future results of operations involve a number of risks and uncertainties. Factors that could affect the Company's future operating results and cause actual results to vary materially from expectations include, but are not limited to, uncertainty of clinical trial results and achievement of milestones, uncertainty of regulatory approval of the Company's potential drug candidates, uncertainty of market acceptance of the Company's product candidates, competition from substitute products and larger companies, securing and protecting proprietary technology, strategic relationships and dependence on key individuals and sole source suppliers.

The Company's investigational products require approval from the U.S. Food and Drug Administration (FDA) and comparable foreign regulatory agencies prior to commercial sales in their respective jurisdictions. There can be no assurance that any investigational products will receive the necessary approvals. If the Company does not obtain regulatory approval and does not successfully commercialize any of its investigational products, it would have a materially adverse impact on the Company.

Segments

The Company operates and manages its business as one reportable and operating segment, which is the business of developing and commercializing cancer therapies. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for purposes of allocating and evaluating financial performance. All long-lived assets are maintained in the United States of America.

Cash Equivalents and Investments

Cash equivalents consist of marketable securities having an original maturity of three months or less at the time of purchase. Short-term investments have maturities of greater than three months and less than twelve months at the time of purchase. Long-term investments have maturities greater than 12 months at the time of purchase. Collectively, cash equivalents, short-term and long-term investments are considered available-for-sale and are recorded at fair value. Unrealized gains and losses are recorded in accumulated other comprehensive loss. Realized gains and losses are included in interest and other income, net in the consolidated statements of operations and comprehensive loss. The basis on which the cost of a security sold or amount reclassified out of accumulated other comprehensive income into earnings is determined using the specific identification method.

Reconciliation of Cash, Cash Equivalents, and Restricted Cash as Reported in Consolidated Statements of Cash Flows

Restricted cash at December 31, 2020 and 2019 represents cash balances held as security in connection with the Company's facility lease agreements. The following table provides a reconciliation of cash, cash equivalents, and restricted cash within the consolidated balance sheets to the total shown in the consolidated statements of cash flows (in thousands):

	December 31, 2020	December 31, 2019
Cash and cash equivalents	$ 173,415	$ 57,937
Restricted cash	203	203
Cash, cash equivalents and restricted cash	$ 173,618	$ 58,140

Fair Value Measurements

Fair value accounting is applied for all financial assets and liabilities, including short-term and long-term investments, and non-financial assets and liabilities that are recognized or disclosed at fair value in the consolidated financial statements on a recurring basis (at least annually). The carrying amount of the Company's financial instruments, including receivable from a related party, accounts payable and accrued expenses and other current liabilities approximate fair value due to their short-term maturities.

Concentration of Credit Risk

Cash equivalents, short-term and long-term investments are financial instruments that potentially subject the Company to concentrations of credit risk. The Company invests in money market funds, treasury bills and notes, government bonds, commercial paper and corporate notes. The Company limits its credit risk associated with cash equivalents, short-term and long-term investments by placing them with banks and institutions it believes are highly credit worthy and in highly rated investments.

Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, ranging from one to five years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term. Upon retirement or sale, the cost and related accumulated depreciation are removed from the consolidated balance sheet and the resulting gain or loss is reflected in the consolidated statement of operations and comprehensive loss.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. An impairment charge would be recorded when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. Impairment, if any, is assessed using discounted cash flows or other appropriate measures of fair value. The Company did not recognize any impairment charges for the years ended December 31, 2020, 2019 and 2018.

Collaborative Arrangements and Contracts with Customers

The Company assesses whether its collaboration agreements are subject to Accounting Standards Codification (ASC) Topic 808, *Collaborative Arrangements* (ASC 808) based on whether they involve joint operating activities

and whether both parties have active participation in the arrangement and are exposed to significant risks and rewards. To the extent that the arrangement falls within the scope of ASC 808, the Company applies the unit of account guidance under ASC Topic 606, *Revenue from Contracts with Customers* (ASC 606), to identify distinct performance obligations, and then determine whether a customer relationship exists for each distinct performance obligation. If the Company determines a performance obligation within the arrangement is with a customer, it applies the guidance in ASC 606. If a portion of a distinct bundle of goods or services within an arrangement is not with a customer, then the unit of account is not within the scope of ASC 606, and the recognition and measurement of that unit of account shall be based on analogy to authoritative accounting literature or, if there is no appropriate analogy, a reasonable, rational, and consistently applied accounting policy election.

The Company recognizes revenue when its customer obtains control of promised goods or services in a contract for an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. For contracts with customers, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies each performance obligation. The Company only applies the five-step model to contracts when it is probable that Company will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. As part of the accounting for contracts with customers, the Company must develop assumptions that require judgment to determine the standalone selling price of each performance obligation identified in the contract. The Company then allocates the total transaction price to each performance obligation based on the estimated standalone selling prices of each performance obligation. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The estimation of the stand-alone selling price may include such estimates as forecasted revenues or costs, development timelines, discount rates, and probabilities of technical and regulatory success. The Company evaluates each performance obligation to determine if they can be satisfied at a point in time or over time, and the Company measures the services delivered to the customer, which are periodically reviewed based on the progress of the related program. The effect of any change made to an estimated input component and, therefore revenue or expense recognized, would be recorded as a change in estimate. In addition, variable consideration (e.g. milestone payments) must be evaluated to determine if it is constrained and, therefore, excluded from the transaction price.

The Company enters into collaborative arrangements that typically include one of more of the following: (i) license fees; (ii) milestone payments related to the achievement of developmental, regulatory, or commercial goals; (iii) royalties on net sales of licensed products; (iv) fees attributable to options to intellectual property; and (v) cost-sharing or research and development (R&D) funding arrangements. When a portion of non-refundable upfront fees or other payments received are allocated to continuing performance obligations under the terms of a collaborative arrangement, they are recorded as deferred revenue and recognized as revenue when (or as) the underlying performance obligation is satisfied. Fees attributable to options are deferred until the option expires or is exercised. The Company classifies contract liabilities as current when it expects to satisfy its performance obligations within one year, and noncurrent when the Company expects to satisfy those performance obligations in greater than one year. When an option is exercised, the performance obligations associated with the option are identified, which will determine the accounting for the transaction price attributable to the option.

As part of the accounting for these arrangements, the Company must develop estimates and assumptions that require judgment to determine the underlying stand-alone selling price for each performance obligation which determines how the transaction price is allocated among the performance obligation. To determine the stand-alone selling price, the Company may consider items such as forecasted revenues, development timelines, discount rates, and probabilities of technical and regulatory success. The Company evaluates each performance obligation to determine if it can be satisfied at a point in time or over time. In addition, variable consideration must be evaluated to determine if it is constrained and, therefore, excluded from the transaction price.

License Fees

If a license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over

time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone Payments and Variable Consideration

At the inception of each arrangement that includes milestone payments or variable consideration, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated value is included in the transaction price. Milestone payments that are not within the control of the Company or the Company's collaboration partner, such as regulatory approvals, are generally not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration or other revenues and earnings in the period of adjustment.

Cost-Sharing or R&D Funding Arrangements

Under certain collaborative arrangements, the Company has been reimbursed for a portion of its research and development expenses, including costs of drug supplies. When these R&D services are performed under a reimbursement or cost sharing model with a collaboration partner, the Company records these reimbursements as a reduction of R&D expense in its consolidated statements of operations.

Royalties

For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its collaborative arrangements.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist primarily of personnel costs for the Company's research and development employees, costs incurred to third-party service providers for the conduct of research, preclinical and clinical studies, laboratory supplies and equipment maintenance costs, consulting and other related expenses. Also included are payments under collaborative arrangements, including up-front and milestone payments, license and option fees and expense reimbursements to the collaboration partners, as well as non-personnel costs such as professional fees payable to third parties for preclinical and clinical studies and research services, laboratory supplies and equipment maintenance, product licenses, and other consulting costs.

The Company estimates research, preclinical and clinical service organizations, based on services performed, pursuant to contracts with third-party research and development organizations that conduct and manage research, preclinical and clinical activities on its behalf. Most of the Company's clinical studies are performed by third-party contract research organizations (CROs), and as a result clinical study costs are a significant component of research and development expenses. The Company estimates these expenses based on discussions with internal management personnel and external service providers as to the progress or stage of completion of services and the contracted fees to be paid for such services. If the actual timing of the performance of services or the level of effort varies from the original estimates, the Company will adjust the accrual accordingly. Payments associated with licensing agreements to acquire licenses to develop, use, manufacture and commercialize products that have not reached technological feasibility and do not have alternative future use are expensed as incurred. Payments made to third parties under these arrangements in advance of the performance of the related services by the third parties are recorded as prepaid expenses until the services are rendered.

Leases and Rent Expense

The Company leases laboratory and office space in an office park in Hayward, California under a non-cancelable operating lease with terms that expire from 2025 to 2029, subject to options for the Company to extend the lease term. The Company also leases space in Brisbane, California under a non-cancelable operating lease that is expected to commence in 2021 and extend through 2031. Prior to January 1, 2020, the Company recognized related rent expense on a straight-line basis over the term of the lease. Incentives granted under the Company's facilities lease, including allowances for leasehold improvements and rent holidays, were recognized as reductions to rental expense on a straight-line basis over the term of the lease. Deferred rent consisted of the difference between cash payments and the rent expense recognized.

Subsequent to the adoption of the new leasing standard on January 1, 2020, the Company recognizes a lease asset for its right to use the underlying asset and a lease liability for the corresponding lease obligation. The Company determines whether an arrangement is or contains a lease at contract inception. Operating leases are included in operating lease right-of-use assets, other accrued liabilities, and operating lease liabilities, noncurrent in our consolidated balance sheet at December 31, 2020. Operating lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. In determining the net present value of lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date. The incremental borrowing rate represents the interest rate the Company would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease. The Company considers a lease term to be the noncancelable period that it has the right to use the underlying asset, including any periods where it is reasonably assured the Company will exercise the option to extend the contract. Periods covered by an option to extend are included in the lease term if the lessor controls the exercise of that option.

The Company elected to not apply the recognition requirements of the new leasing standard to short-term leases with terms of 12 months or less which do not include an option to purchase the underlying asset that the Company is reasonably certain to exercise. For short-term leases, lease payments are recognized as operating expenses on a straight-line basis over the lease term.

Stock-Based Compensation

The Company accounts for stock-based compensation arrangements in accordance with ASC 718, *Stock Compensation*. Prior to January 1, 2019, equity instruments issued to non-employees were accounted for in accordance with ASC 505-50 *Equity Based Payments to Non-Employees*. Based on this guidance, awards were recorded at their fair value on the measurement date subject to periodic adjustments as the underlying equity instruments vest. The fair value of options granted to consultants was expensed when vested. On January 1, 2019, the Company adopted ASU *No. 2018-07 (Topic 718), Compensation – Stock Compensation,* which expanded the scope of Topic 718 to include share-based payment transactions with non-employees.

Stock-based awards granted include stock options and restricted stock units (RSUs). Accounting standards require the recognition of compensation expense, using a fair value-based method, for costs related to all stock-based payments. The Company's determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model, and is impacted by the Company's common stock price as well as other variables including, but not limited to, expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends. Compensation expense associated with restricted stock units is based on the fair value of common stock on the date of the grant.

The fair value of a stock-based award is recognized over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period (usually the vesting period) on a straight-line basis. Stock-based compensation expense is recognized based on the fair value determined on the date of grant and is reduced for forfeitures as they occur. Non-employee stock-based compensation expense was not material for all periods presented.

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

Income Taxes

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

The Company accounts for uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainty in Income Taxes.* The Company assesses all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and the Company will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

The Company includes any penalties and interest expense related to income taxes as a component of other expense and interest income, net, as necessary.

On March 18, 2020, the Families First Coronavirus Response act (FFCR Act), and on March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) were each enacted in response to the COVID-19 pandemic. The FFCR Act and the CARES Act contain numerous tax-related provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. On June 29, 2020 California State Assembly Bill 85 (the Trailer Bill) was enacted which suspends the use of California net operating loss (NOL) deductions and limits the use of certain tax credits, including research and development tax credits, for the 2020, 2021, and 2022 tax years.

The FFCR Act, CARES Act and Trailer Bill did not have a material impact on the Company's consolidated financial statements as of December 31, 2020; however, the Company continues to examine the impacts the FFCR Act, CARES Act and Trailer Bill may have on its business, results of operations, financial condition and liquidity.

Comprehensive Loss

Comprehensive loss includes net loss and net unrealized income and losses on available-for-sale securities, which are presented in a single continuous statement. Other comprehensive income (loss) is also disclosed in the consolidated balance sheets and statements of stockholders' equity in accumulated other comprehensive income (loss), and is stated net of related tax effects, if any.

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares and potentially dilutive securities outstanding for the period. The Company excludes the weighted-average shares subject to repurchase from its calculation of weighted average of common shares outstanding. For purposes of the diluted net loss per share calculation, outstanding common stock options are considered to be potentially dilutive securities. Because the Company reported a net loss for the years ended December 31, 2020, 2019 and 2018, and the inclusion of the potentially dilutive securities would be antidilutive, diluted net loss per share is the same as basic net loss per share for all periods.

Recently Adopted Accounting Standards

In December 2019, the FASB issued *ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. ASU 2019-12 reduces costs and complexity of applying accounting standards while maintaining the usefulness of the information provided to users of financial statements. While not required to be adopted until 2021 for most calendar year public business entities, early adoption is permitted for any financial statements not yet issued. The Company early adopted this ASU as of January 1, 2020, with an immaterial impact on its financial statements.

In November 2018, the FASB issued *ASU No. 2018-18 (Topic 808), Collaborative Arrangements*. ASU 2018-18 clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue under ASC 606, *Revenue from Contracts with Customers*, *(Topic 606)* when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. The Company adopted this ASU as of January 1, 2020, with an immaterial impact on its financial statements.

In August 2018, the FASB issued *ASU No.2018-13 (Topic 820), Fair Value Measurement.* ASU 2018-13 modifies the disclosure requirements on fair value measurement in Topic 820. The Company adopted this ASU as of January 1, 2020 with an immaterial impact on its financial statements.

In August 2018, the FASB issued *ASU No.2018-15 (Subtopic 350-40), Intangibles – Goodwill and Other – Internal-Use Software.* ASU 2018-15 requires an entity in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to internal-use software. The Company adopted this ASU as of January 1, 2020 with an immaterial impact on its financial statements.

In February 2016, the FASB issued ASU *No. 2016-02 (Topic 842), Leases* (ASU 2016-02). ASU 2016-02 requires an entity to recognize assets and liabilities arising from a lease for both financing and operating leases. The ASU will also require new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. In July 2018, the FASB issued ASU *No. 2018-10*, *Codification Improvements to Topic 842, Leases* and ASU *No. 2018-11, Leases (Topic 842): Targeted Improvements*, which offers a practical expedient for transitioning at the adoption date.

The Company adopted this standard on January 1, 2020 using the modified retrospective approach and elected the package of practical expedients permitted under transition guidance, which allowed the Company to carry forward its historical assessments of: 1) whether contracts are or contain leases, 2) lease classification and 3) initial direct costs. The Company did not elect the practical expedient allowing the use-of-hindsight which would require the Company to reassess the lease term of its leases based on all facts and circumstances through the effective date and did not elect the practical expedient pertaining to land easements as this is not applicable to the current contract portfolio. The Company elected the post-transition practical expedient to not separate lease components from nonlease components for all existing lease classes. The Company also elected a policy of not recording leases on its consolidated balance sheets when the leases have a term of 12 months or less and the Company is not reasonably certain to elect an option to purchase the leased asset.

The adoption of this standard resulted in the recognition of a right-of-use (ROU) asset of $5.8 million and lease liabilities of $10.1 million, comprised of $1.2 million and $8.9 million of current and noncurrent liabilities, respectively. The adoption also resulted in the derecognition of the deferred rent balance of $4.3 million as of January 1, 2020. The adoption of the standard had no impact on the Company's consolidated statements of operations and comprehensive loss or to its cash flows from or used in operating, financing, or investing activities on its consolidated statements of cash flows. No cumulative-effect adjustment within accumulated deficit was required to be recorded as a result of adopting this standard.

In June 2016, the FASB issued ASU *No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which modifies the measurement and recognition of credit losses for most financial assets and certain other instruments. The ASU updates the guidance for measuring and recording of current expected credit losses on financial assets measured at amortized cost by replacing the "incurred loss" model with an "expected loss" model. Accordingly, these financial assets will be presented at the net amount expected to be collected. The ASU also requires that credit losses related to available-for-sale debt securities be recorded as an allowance through net income rather than reducing the carrying amount under the current, other-than-temporary-impairment model. The Company adopted this standard on January 1, 2020 using the modified retrospective

approach. The Company adopted this ASU as of January 1, 2020 with an immaterial impact on its financial statements.

Note 3. Fair Value Measurements

Financial assets and liabilities are recorded at fair value. The accounting guidance for fair value provides a framework for measuring fair value, clarifies the definition of fair value and expands disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted market prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3—Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

During the periods presented, the Company has not changed the manner in which it values assets and liabilities that are measured at fair value. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the years ended December 31, 2020 and 2019. The following tables set forth the Company's financial instruments (excluding restricted cash) that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	December 31, 2020			
	Total	Level 1	Level 2	Level 3
Money market funds	$ 146,468	$ 146,468	$ -	$ -
U.S. treasury securities	301,112	-	301,112	-
U.S. government agency obligations	25,001	-	25,001	-
Corporate securities and commercial paper	262,505	-	262,505	-
Total assets measured at fair value	$ 735,086	$ 146,468	$ 588,618	$ -

	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Money market funds	$ 45,498	$ 45,498	$ -	$ -
U.S. treasury securities	74,854	-	74,854	-
Corporate securities and commercial paper	67,918	-	67,918	-
Total assets measured at fair value	$ 188,270	$ 45,498	$ 142,772	$ -

Classified as (with contractual maturities):

	Year Ended December 31,	
	2020	2019
Cash and cash equivalents	$ 173,415	$ 57,937
Short-term investments (due within one year)	555,231	130,333
Long-term investments (due between one and two years)	6,440	-
	$ 735,086	$ 188,270

The investments are classified as available-for-sale marketable securities. At December 31, 2020 and 2019, the balance in the Company's accumulated other comprehensive loss comprised activity related to the Company's available-for-sale marketable securities. There were immaterial realized gains recognized on the sale of available-for-sale marketable securities during the year ended December 31, 2020 and none during the years ended December 31, 2019 and 2018, respectively. As a result, the Company did not reclassify any amounts out of accumulated other comprehensive loss for the periods then ended. The Company has a limited number of available-for-sale marketable securities in loss positions as of December 31, 2020, which the Company does not intend to sell and has concluded it will not be required to sell before recovery of the amortized cost for the investment at maturity. The fair value and amortized cost of investments in marketable securities by major security type as of December 31, 2020 and 2019 are presented in the tables that follow (in thousands):

	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
As of December 31, 2020:				
Money market funds	$ 146,468	$ -	$ -	$ 146,468
U.S. treasury securities	301,075	38	(1)	301,112
U.S. government agency obligations	24,997	4	-	25,001
Corporate securities and commercial paper	262,502	15	(12)	262,505
Total	$ 735,042	$ 57	$ (13)	$ 735,086

	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
As of December 31, 2019:				
Money market funds	$ 45,498	$ -	$ -	$ 45,498
U.S. treasury securities	74,801	12	(1)	74,812
Corporate securities and commercial paper	67,907	55	(2)	67,960
Total	$ 188,206	$ 67	$ (3)	$ 188,270

Note 4. Consolidated Balance Sheet Components

Property and Equipment

Property and equipment, net consisted of the following (in thousands):

	As of December 31,	
	2020	2019
Scientific equipment	$ 9,902	$ 8,168
Furniture and equipment	1,521	1,165
Capitalized software	225	146
Leasehold improvements	11,111	10,834
Construction in progress	2,336	238
Total	25,095	20,551
Less: Accumulated depreciation and amortization	(14,288)	(11,221)
Property and equipment, net	$ 10,807	$ 9,330

Other Accrued Liabilities

Other accrued liabilities consisted of the following (in thousands):

	As of December 31,	
	2020	2019
Accrued personnel expenses	8,632	$ 4,571
Professional fees	295	183
Other	616	196
Total other accrued liabilities	$ 9,543	$ 4,950

Note 5: Equity Investment in PACT Pharma

The Company owns approximately 3.6 million shares of common stock, 1.0 million shares of Series A preferred stock, and warrants to purchase additional stock of PACT Pharma, Inc. (PACT Pharma), a privately funded, early-stage biopharmaceutical company focused on adoptive cell therapy. This interest in PACT Pharma is accounted for as an equity method investment, and as a result the Company records its share of PACT Pharma's operating results in interest and other income, net, in its condensed consolidated statements of operations and comprehensive income (loss). The investment balance was zero at December 31, 2020 and December 31, 2019. Since the Company has no obligation to provide cash financing to PACT Pharma, the Company is not required to record losses beyond the carrying amount of the investment.

In January and June 2020, PACT Pharma issued shares in its Series C and Series C-1 preferred stock financings. The Company did not participate in these financings. The decrease in the Company's equity ownership percentage and an increase in PACT Pharma's estimated fair value per share resulted in gains on dilution totaling $2.0 million during the year ended December 31, 2020. After applying $1.4 million in losses accumulated in prior periods when the equity investment balance was zero, the Company recorded a gain of $0.6 million for the year ended December 31, 2020. There were no gains recorded by the Company for the year ended December 31, 2019.

The Company's share of PACT Pharma's losses for the year ended December 31, 2020 exceeded gains for the same period. The Company recorded $0.6 million and $1.2 million for its share of PACT Pharma's operating losses for the years ended December 31, 2020 and 2019, respectively. The unrecognized equity method losses in excess of the Company's investment was $1.3 million as of December 31, 2020.

For the years ended December 31, 2020 and 2019, the Company determined the fair value of the warrants to be insignificant to the consolidated financial statements.

Note 6. Leases

The Company leases its corporate headquarters, which includes approximately 136,293 square feet of executive offices and research and development and business operations, in an office park in Hayward, California under a non-cancelable operating lease with terms that expire from 2025 to 2029, subject to options by the Company to extend the lease term. The Company also leases space in Brisbane, California under a non-cancelable operating lease that is expected to commence in 2021 and extend through 2031.

In June 2020, the Company entered into a lease amendment for 36,303 square feet of additional space in Hayward, California, that is expected to commence during 2021 for an eight-year term with undiscounted minimum lease payments totaling approximately $10.1 million. The new lease is subject to an option to extend the lease term for eight years. The lease amendment includes an allowance of approximately $1.0 million for tenant improvements. The space was delivered to the Company in August 2020, as a result the Company has recognized a right-of-use asset and a lease liability for the building on its balance sheet at December 31, 2020.

In December 2020, the Company entered into a lease agreement for 109,237 square feet of space in Brisbane, California, that is expected to commence in the second half of 2021 for a term of approximately ten years with undiscounted minimum lease payments totaling approximately $90.3 million. The lease is subject to two options to extend the lease term for a period of eight years each. The lease agreement includes an allowance of approximately $12.6 million for tenant improvements with an option to increase the allowance by $5.5 million. The space was under construction at December 31, 2020 and has not been delivered to the Company.

At December 31, 2020 the Company's lease portfolio had a weighted average remaining term of 6.2 years. The leases require monthly lease payments that are subject to annual increases throughout the lease term. The optional period has not been considered in the determination of the right-of-use assets or lease liabilities associated with this lease as the Company did not consider it reasonably certain it would exercise the option.

The Company cannot determine the implicit rate in its leases, and therefore the Company uses its incremental borrowing rate as the discount rate when measuring operating lease liabilities. The incremental borrowing rate represents an estimate of the interest rate the Company would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease within a particular currency environment. The Company used an incremental borrowing rate of 10% as of the date of adoption for leases that commenced prior to January 1, 2020. The weighted average discount rate for the Company's lease portfolio at December 31, 2020 was 7.3%.

For the year ended December 31, 2020, the Company incurred $2.7 million of lease costs included in operating expenses in the consolidated statements of income and comprehensive income in relation to its operating lease, a portion of which was variable rent expense and not included within the measurement of the Company's operating ROU assets and lease liabilities. The variable rent expense consists primarily of the Company's proportionate share of operating expenses, property taxes, and insurance and is classified as lease expense due to the Company's election to not separate lease and non-lease components. Short-term lease costs were $0.2 million for the year ended December 31, 2020. At December 31, 2020, the Company's operating lease right-of-use asset totaled $12.8 million, and the operating lease liability totaled $18.1 million. The short-term portion of the operating lease liability was $2.9 million and is contained within other current liabilities on the balance sheet, with the remaining $15.2 million liability reported on the balance sheet as operating lease liability, noncurrent.

Rent expense was $1.6 million for each of the years ended December 31, 2019 and 2018.

As of December 31, 2020, the Company's future minimum lease payments were as follows (in thousands):

	Year Ended December 31,	
	2020 (1)	2019 (2)
2020	-	2,105
2021	4,041	2,195
2022	3,409	2,265
2023	3,522	2,339
2024	3,640	2,415
2025	3,340	2,072
Thereafter	4,311	-
Total undiscounted future minimum lease payments	22,263	13,391
Less: Imputed interest	(4,153)	N/A
Total operating lease liabilities	18,110	N/A
Less: Current portion of operating lease liabilities (included in other current liabilities)	(2,867)	N/A
Operating lease liabilities, noncurrent	15,243	N/A

(1) Presented in accordance with ASC 842.

(2) Presented in accordance with ASC 840. N/A items not required under ASC 840.

Total undiscounted future minimum lease payments do not include approximately $90.3 million related to the Company's Brisbane lease that has not yet commenced. This lease is expected to commence during 2021 with a lease term of approximately 10 years. Total minimum lease payments have not been reduced by minimum sublease rent income of approximately $0.1 million under a noncancelable sublease.

The Company has provided deposits for letters of credit totaling $0.2 million to secure its obligations under its lease, which have been classified as long-term assets on the Company's consolidated balance sheet as of December 31, 2020.

Note 7. License and Collaboration Agreements

The following table summarizes the revenues received as a result of the Company's collaboration agreements with Gilead Sciences, Inc. (Gilead) and Taiho Pharmaceutical Co., Ltd. (Taiho):

	Year Ended December 31,		
	2020	2019	2018
License revenue	$ 55,096	$ 8,000	$ 3,000
Collaboration revenue	22,421	7,000	5,353
Collaboration and license revenue	$ 77,517	$ 15,000	$ 8,353

The following table summarizes details of revenues by collaboration and by category of revenue:

Revenues recognized:	Over time	Point in time	Year Ended December 31, 2020	2019	2018
Gilead license to zimberelimab		*	$ 55,096	$ -	$ -
Gilead access rights related to the Company's research and development pipeline	*		15,421	-	-
Taiho license to zimberelimab		*	-	8,000	-
Taiho license to etrumadenant		*	-	-	3,000
Taiho collaboration agreement	*		7,000	7,000	5,353
Total collaboration and license revenue			$ 77,517	$ 15,000	$ 8,353

The Company recognized the following revenue as a result of changes in the deferred revenue balance during the period below (in thousands):

Revenue recognized in the period from:	Year Ended December 31, 2020	2019	2018
Amounts included in deferred revenue at the beginning of the period	$ 7,000	$ 7,000	$ 5,353
Performance obligations satisfied in previous period	-	-	-

The Company received $175 million in upfront payments from Gilead in connection with the Option, License and Collaboration Agreement and identified $100 million in unconstrained consideration to be received in 2022. In addition, the Company received $200 million from Gilead in connection with the Stock Purchase Agreement, of which approximately $109.4 million represented the fair value of stock purchased at the transaction closing date in July 2020 with the remaining premium of $90.6 million allocated to the transaction price.

At the transaction closing date, these payments were allocated to the performance obligations identified as follows:

	Amount
Allocation of transaction price	
Upfront cash consideration	$ 175,000
Payment for access rights related to the Company's research and development pipeline	100,000
Premium from Stock Purchase Agreement	90,600
Total transaction price allocated to revenue	$ 365,600
Allocation to performance obligations	
Zimberelimab license	$ 55,096
Etrumadenant option	126,960
Domvanalimab option	36,728
Access rights related to the Company's research and development pipeline	137,113
Development and commercialization services for zimberelimab	9,703
Total	$ 365,600

Gilead Sciences, Inc.

On May 27, 2020, the Company entered into an Option, License and Collaboration Agreement (Gilead Collaboration Agreement), Common Stock Purchase Agreement (the Stock Purchase Agreement), and Investor Rights Agreement, (collectively, the Gilead Agreements), each with Gilead Sciences, Inc. (Gilead). The transaction closed on July 13, 2020 following expiration of the antitrust waiting period. Upon closing, Gilead made an upfront payment of $175 million pursuant to the Gilead Collaboration Agreement, and made an equity investment of approximately $200 million in the Company by purchasing 5,963,029 shares of Arcus common stock at a per share price of $33.54 pursuant to the Stock Purchase Agreement, and the Company appointed Gilead's designee, Merdad Parsey, M.D., Ph.D. and Michael Quigley, Ph.D., to the Company's Board of Directors pursuant to the Investor Rights Agreement.

Pursuant to the terms of the Gilead Collaboration Agreement, Gilead has an exclusive license to develop and commercialize zimberelimab in certain markets and obtained exclusive options to acquire an exclusive license to develop and commercialize all of the Company's current and future clinical programs during the 10-year collaboration term, contingent upon Gilead's access rights payments of up to $400 million and, for those programs that enter clinical development prior to the end of the collaboration term, for up to an additional three years thereafter. Gilead may exercise its option, on a program-by-program basis, upon payment of an option fee that ranges from $200 million to $275 million per program for the Company's clinical programs in existence at the date of the agreement, and $150 million per program for all other programs that enter clinical development thereafter should Gilead elect to exercise its options.

Upon Gilead's exercise of its option to a program, the two companies will co-develop and equally share global development costs, subject to certain opt-out rights of the Company, and expense caps on the Company's spending and related subsequent adjustments. For each optioned program, provided the Company has not exercised its opt-out rights, the Company has an option to co-promote in the United States with equal sharing of related profits and losses. Gilead has the right to exclusively commercialize any optioned programs outside of the U.S., subject to the rights of the Company's existing partners to any territories, and Gilead will pay to the Company tiered royalties as a percentage of revenues ranging from the high teens to the low twenties. Gilead will further provide ongoing research and development support in the form of research and development pipeline access rights payments of up to $400 million over the collaboration term.

Pursuant to the Stock Purchase Agreement and the Investor Rights Agreement, Gilead has the right, at its option, to purchase additional shares from the Company, up to a maximum of 35% of the Company's then-outstanding voting common stock, from time to time over the next five years, at a purchase price equal to the greater of a 20% premium to market (based on a trailing five-day average closing price) at the time Gilead exercises such option, and the $33.54 initial purchase price. Based on the value of the Company's common stock at the contract closing, the right to purchase additional shares had no value. The Investor Rights Agreement also includes a three-year standstill and a two-year lockup and provides Gilead with registration rights commencing at the end of the lockup period, pro rata participation rights in certain future financings and the right to designate two individuals to be appointed to the Company's Board of Directors.

The Company's assessment of the transaction price included an analysis of amounts it expected to receive, which at contract inception consisted of the upfront cash payment of $175.0 million due upon contract closing in July 2020, the $100.0 million payment related to the research and development access rights due in 2022, and the $90.6 million premium resulting from Gilead's purchase of common stock. All payments to date have been made by Gilead as they became due and payable so given this successful collection history, the Company considers the entire $365.6 million outlined above to be the initial transaction price.

The Company evaluated the Gilead Agreements under ASC 606 and determined that the performance obligations at the contract inception consisted of the following:

Zimberelimab license

Effective on closing, Gilead obtained an exclusive license to zimberelimab. The standalone selling price of this license was determined using a discounted cash flow method. The Company recognized the full revenues associated with this performance obligation on the date the transaction closed.

Etrumadenant option

Gilead has the right to exercise an option for exclusive rights to etrumadenant, the Company's adenosine receptor program, in exchange for an option payment of $250.0 million, that expires after a proscribed period following the Company's achievement of certain development milestones. The Company calculated the standalone selling price of this program using a discounted cash flow method and concluded that it exceeded the price of the option, creating a material right and a distinct performance obligation. If the option is exercised, the performance obligations associated with the option will be identified and will determine the accounting for the option's transaction price. If the option is allowed to lapse after development milestones trigger the start of the opt-in period, the Company will recognize any deferred revenue allocated to the option at the time of the lapse.

At December 31, 2020, the Company had $127.0 million of deferred revenue on its consolidated balance sheets related to this performance obligation. The Company has evaluated the program's status as of the balance sheet date and believes that some or all of the revenue associated with the opt-in will be recognized within the minimum four-year term of the Gilead Collaboration Agreement.

Domvanalimab option

Gilead has the right to exercise an option for exclusive rights to domvanalimab, the Company's anti-TIGIT monoclonal antibody, in exchange for an option payment of $275.0 million, that expires after a proscribed period following the Company's achievement of certain development milestones. The Company calculated the standalone selling price of this program using a discounted cash flow method and concluded that it exceeded the price of the option, creating a material right and a distinct performance obligation. If the option is exercised, the performance obligations associated with the option will be identified and will determine the accounting for the option's transaction price. If the option is allowed to lapse after development milestones trigger the start of the opt-in period, the Company will recognize any deferred revenue allocated to the option at the time of the lapse.

At December 31, 2020, the Company had $36.7 million of deferred revenue on its consolidated balance sheets related to this performance obligation. The Company has evaluated the program's status and believes that revenue associated with the opt-in will be recognized within one year.

Access rights related to the Company's research and development pipeline

Gilead receives exclusive access to the Company's current programs as well as the future programs for a period of ten years, contingent upon Gilead's payment of $400 million, with the first payment of $100.0 million in 2022, and an additional $100 million payment due at Gilead's option on each of the fourth, sixth, and eighth anniversaries of the agreement. The standalone selling price of this ongoing research and development pipeline access was determined using an expected cost-plus margin approach. The Company evaluated its rights and obligations in the Gilead Collaboration Agreement and determined that Gilead is contractually obligated to make the $100.0 million payment due in 2022 resulting in a minimum term of four years for this performance obligation. As a result, the amount was included in the transaction price. The Company uses a time-elapsed input method to measure progress toward satisfying this obligation, which is the method the Company believes most faithfully depicts the Company's performance in transferring the promised services during the time period in which Gilead has access to the Company's research and development pipeline. Accordingly, the revenue allocated to the performance obligation is being recognized using this input method over the minimum four-year period. The Company further determined that Gilead is not obligated to pay the remaining $300.0 million due over the remainder of the term. Failure to pay the non-obligatory payments will result in Gilead's loss of certain rights to access and obtain licenses to the programs arising from the Company's research and development pipeline.

At December 31, 2020 the Company had $121.7 million of deferred revenue on its consolidated balance sheets related to this performance obligation, classified between current and noncurrent based on the amortization of the revenue.

Development and commercialization services for zimberelimab

In conjunction with the license, the Company determined there existed a separate obligation to perform further development and commercialization services for Gilead. The standalone selling price of this obligation was determined using an expected cost-plus margin approach. This obligation includes a 50/50 share of the costs associated with all future development and commercialization of zimberelimab. The portion of the transaction price

allocated to this performance obligation has been allocated in accordance with the total costs forecast for the development and commercialization of zimberelimab. The Company will recognize the amounts allocated to these services as the performance obligation is satisfied. Any additional payments received from or payments made to Gilead for the 50/50 cost share will be recognized as a reduction or an increase to R&D expense, respectively.

Gilead was also granted option rights to programs not yet in development. These programs were not determined to be performance obligations at contract inception, as there are no identified programs, revenues, or costs to compare against the option price.

At December 31, 2020 the Company had $9.7 million of contract liabilities on its consolidated balance sheets related to this performance obligation. The Company has evaluated the program's status and believes that revenue associated with these services will be recognized over the full term of the contract, beginning in 2021.

Prepaid expenses and contract liabilities

The Company incurred $7.3 million in expenses to obtain the contract, which consisted of consultant and legal fees that were directly connected to the successful completion of the Gilead Agreements. The Company determined that $1.9 million of these expenses were related to the Stock Purchase Agreement and recorded them as offering costs. The Company allocated the remaining expenses between the various performance obligations, to be recognized when the underlying revenue is recognized. The portion allocated to the delivery of zimberelimab was recognized immediately, and the portion allocated to the remaining performance obligations will be recognized with timing consistent with the associated performance obligation. During the year ended December 31, 2020, the Company recognized $0.2 million in expense from the amortization of these assets. As of December 31, 2020, the Company had $4.2 million in prepaid expenses from costs to obtain the Gilead Agreements, of which $1.0 million was recorded in prepaid expenses and other current assets and $3.2 million was recorded in other long-term assets. The Company also recognized $9.7 million in contract liabilities for future development and commercialization services which Gilead prepaid, recorded in other non-current liabilities on the consolidated balance sheets.

Taiho Pharmaceutical Co., Ltd

In September 2017, the Company and Taiho entered into an option and license agreement (the Taiho Agreement) to collaborate on the potential development and commercialization of certain investigational products from the Company's portfolio in Japan and certain other territories in Asia (excluding China) (the Taiho Territory). The Taiho Agreement provides Taiho with exclusive options, over a five-year period (the Option Period), to obtain an exclusive development and commercialization license to clinical stage investigational products from the Company's programs (each, an Arcus Program).

In consideration for the exclusive options and other rights contained in the Taiho Agreement, Taiho agreed to make non-refundable, non-creditable cash payments to the Company totaling $35.0 million, of which the Company received $25.0 million during 2017. An additional $5.0 million was received in 2018 and the remaining $5.0 million was received in 2019.

In the event that the Company has not initiated IND enabling studies for at least five Arcus Programs prior to the expiration of the Option Period, Taiho may elect to extend the Option Period, up to a maximum of seven years, subject to an extension fee. For each option that Taiho elects to exercise, they will be obligated to make an option exercise payment of between $3.0 million to $15.0 million, depending on the development stage of the applicable Arcus Program for which the option is exercised. In addition, the Taiho Agreement provides that the Company is eligible to receive additional clinical and regulatory milestones totaling up to $130.0 million per Arcus Program, and it will be eligible to receive contingent payments of up to $145.0 million per Arcus Program associated with the achievement of specified levels of Taiho net sales in the Taiho Territory.

In addition, the Company will receive royalties ranging from high single-digits to mid-teens on net sales of licensed products in the Taiho Territory. Royalties will be payable on a licensed product-by-licensed product and country-by-country basis during the period of time commencing on the first commercial sale of a licensed product in a country and ending upon the later of: (a) ten (10) years from the date of first commercial sale of such licensed product in such country; and (b) expiration of the last-to-expire valid claim of the Company's patents covering the manufacture, use or sale or exploitation of such licensed product in such country (the Royalty Term).

The Company evaluated the Taiho Agreement under ASC 606 and determined that the current performance obligations consist of (1) the research and development services, in which the Company will use commercially reasonable efforts to initiate IND enabling studies for at least five Arcus Programs, as well as further develop such

Arcus Programs during the term of the Agreement, and (2) the obligation to participate on the joint steering committee. These deliverables are non-contingent in nature. The Company determined that the obligation to participate in the joint steering committee does not have stand-alone value to Taiho because the committee's primary purpose is to monitor and govern the research and development activities and, hence, it is inseparable from the research and development services.

The Company's assessment of the transaction price included an analysis of amounts it expected to receive, which at contract inception consisted of the upfront cash payment of $20.0 million due upon contract execution in September 2017, a $5.0 million payment due within 30 days of contract execution, an anniversary payment of $5.0 million due in 2018, and a final anniversary payment of $5.0 million due in 2019. All payments were made by Taiho as they became due and payable so given this successful collection history, the Company considers the entire $35.0 million in non-refundable fees to be the initial transaction price.

The Company determined that the combined performance obligation of the research and development services and the obligation to participate on the joint steering committee are satisfied over time. The Company uses a time-elapsed input method to measure progress toward satisfying its performance obligation, which is the method the Company believes most faithfully depicts the Company's performance in transferring the promised services during the time period in which Taiho has access to the Company's research and development activities. Accordingly, the transaction price of $35.0 million is being recognized using this input method over the estimated performance period of five years.

The Company also concluded that, at the inception of the agreement, Taiho's exclusive options are not considered material rights as the options do not contain a significant and incremental discount. The Company therefore excludes the exclusive options from the initial transaction price and accounts for them as separate contracts. In 2018, Taiho exercised its option to the Company's adenosine receptor antagonist program, including etrumadenant, for a fee of $3.0 million, which was recognized by the Company as revenue during the year ended December 31, 2018 under Topic 605. The adoption of Topic 606 in 2019 had no effect on the revenue recognized for this fee. In 2019, Taiho exercised its option to the Company's anti-PD-1 antibody program, including zimberelimab for a fee of $8.0 million. The Company identified one performance obligation comprised of the delivery of the license, which was completed in 2019. The transaction price was determined to be the payment of $8.0 million, which was recognized by the Company as licensing revenue during the year ended December 31, 2019 under Topic 606. Upon the option exercises, Taiho gained sole responsibility for the development and commercialization of the licensed products from within the programs in the Taiho Territory.

The Company also determined that the clinical and regulatory milestone payments under the Taiho Agreement are variable consideration under Topic 606 which need to be added to the transaction price when it is probable that a significant revenue reversal will not occur. Based on the nature of the clinical and regulatory milestones, such as the regulatory approvals which are not within the Company's control, the Company will not consider achievement of such milestones to be probable until the uncertainty associated with the milestones has been resolved. When it is probable that a significant reversal of revenue will not occur, the milestone payment will be added to the transaction price, which will then be allocated to each performance obligation, on a relative standalone selling price basis, for which the Company recognizes revenue. As of December 31, 2020, no clinical or regulatory milestones had been achieved under the Taiho Agreement.

The Company also considers the contingent payments due from Taiho upon the achievement of specified sales volumes to be similar to royalty payments. The Company considers the license to be the predominant item to which the royalties relate. The Company will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). As of December 31, 2020, no sales milestone or royalty revenue has been recognized.

The Taiho Agreement shall remain in effect until expiry of all Royalty Terms for the licensed products, in each case subject to certain exceptions.

During the years ended December 31, 2020 and 2019, the Company recognized a total of $7.0 million and $15.0 million of revenue, respectively, under the Taiho Agreement in accordance with Topic 606. During the year ended December 31, 2018, the Company recognized a total of $8.3 million in revenue in accordance with Topic 605. Revenues for each of these years consisted of revenue recognized for the option exercised and the non-refundable upfront research and development fees. As of December 31, 2020, the Company recorded deferred revenue, current and deferred revenue, noncurrent of $7.0 million and $5.0 million, respectively, in its consolidated balance sheet. As

of December 31, 2019, the Company recorded deferred revenue, current and deferred revenue, noncurrent of $7.0 million and $12.0 million, respectively, in its consolidated balance sheet.

WuXi Biologics License Agreements

The Company entered into a license agreement (the WuXi PD-1 Agreement) with WuXi Biologics in August 2017, as subsequently amended in June 2019, in which it obtained an exclusive license to develop, use, manufacture, and commercialize products including an anti-PD-1 antibody worldwide except for Greater China and Thailand.

During the years ended December 31, 2020 and 2019, the Company made milestone payments of $5.0 million and $7.5 million, respectively, and incurred sub-license fees of $10.1 million and $1.2 million, respectively, under the WuXi PD-1 Agreement. These milestone payments and sub-license fees were recorded as research and development expense, as the products had not reached technological feasibility and did not have alternative future use. During the year ended December 31, 2018, the Company incurred zero expense for milestone payments and incurred zero expense for sub-license fees. The WuXi PD-1 Agreement also provides for clinical and regulatory milestone payments, commercialization milestone payments of up to $375.0 million and tiered royalty payments to be made to WuXi Biologics that range from the high single-digits to low teens of net sales by the Company of licensed products.

In December 2020, the Company entered into a separate license agreement (the WuXi CD-39 Agreement) with WuXi to develop anti-CD39 antibodies. Under the agreement, the Company was granted exclusive worldwide rights to anti-CD39 antibodies discovered under the collaboration and will be responsible for the further development and commercialization of those antibodies. Upon signing the agreement, the Company incurred and paid a $0.5 million upfront payment which was recorded in R&D expense, as the products are still in research stage. The WuXi CD-39 Agreement provides for clinical and regulatory milestone payments totaling $16.5 million, and royalty payments in the low single digits of net sales by the Company of licensed products.

Abmuno License Agreement

In December 2016, the Company entered into a license agreement (the Abmuno Agreement) with Abmuno Therapeutics LLC (Abmuno) in which it obtained a worldwide exclusive license to develop, use, manufacture, and commercialize products that include an anti-TIGIT antibody. During the years ended December 31, 2020 and 2018, the Company made milestone payments of $3.0 million and $2.8 million, respectively. No expense was incurred during the year ended December 31, 2019. Milestone payments were recorded as research and development expense, as the products have not reached technological feasibility and do not have alternative future use. The Abmuno Agreement also provides for additional clinical, regulatory and commercialization milestone remaining payments of up to $98.0 million as of December 31, 2020.

Genentech Collaboration Agreement

In December 2019, the Company and Genentech, through F. Hoffmann-La Roche Ltd (collectively, Genentech) entered into a Master Clinical Collaboration Agreement (the Genentech Agreement) pursuant to which the parties may conduct combination clinical studies involving Genentech's monoclonal antibody, atezolizumab and the Company's investigational products. Pursuant to the Genentech Agreement, the parties entered into Trial Supplements for the evaluation of etrumadenant and atezolizumab utilizing the MORPHEUS platform in two separate study indications: second and third line metastatic colorectal cancer and first line metastatic pancreatic cancer.

The Company and Genentech will each supply their respective investigational products for use in the collaboration studies and will share a portion of the development costs under specific terms as set forth in the agreement. For the years ended December 31, 2020 and 2019, the Company incurred $0.5 million and no expense, respectively, under the collaboration.

Strata Collaboration Agreement

On April 30, 2019, the Company and Strata Oncology, Inc. (Strata) entered into a Co-Development and Collaboration Agreement (the Co-Development and Collaboration Agreement) to pursue a clinical development collaboration utilizing Strata's precision drug development platform and proprietary biomarkers to evaluate zimberelimab, the Company's clinical-stage anti-PD-1 antibody, in patients in a tumor-agnostic fashion.

Under the terms of the Co-Development and Collaboration Agreement, the parties will share a portion of development costs for the clinical collaboration under specified terms. Strata is eligible to receive $2.5 million upon the achievement of a development milestone, as well as regulatory and commercial milestones of up to $125.0

million and up to double-digit royalties on U.S. net sales of zimberelimab in the biomarker-identified indication. For the years ended December 31, 2020 and 2019, the Company made milestone payments to Strata of zero and $2.5 million, respectively, which was recorded as a research and development expense. For the year ended December 31, 2020, the Company incurred expenses of $1.7 million, of which $0.3 million had been reimbursed by Strata as development cost sharing. For the year ended December 31, 2019, the Company incurred expenses of $1.0 million, of which $0.2 million had been reimbursed by Strata as development cost sharing. Net expenses related to this co-development agreement were recorded within research and development expenses. As further consideration in connection with the Co-Development and Collaboration Agreement, the Company issued to Strata 1,257,651 restricted shares of its common stock with an initial measured fair value of $15.0 million, which are subject to vesting based upon the achievement of specified regulatory milestones within certain timelines. Expense relating to the restricted shares subject to these milestones is recognized if it is considered probable that the associated shares will vest. The probability of achievement is assessed at the end of each quarterly period. As of December 31, 2020, the Company determined that none of the restricted shares were probable of vesting and, as a result, no compensation expense related to the restricted shares has been recognized to date.

AstraZeneca Agreement

On October 29, 2020 the Company announced a collaboration with AstraZeneca to evaluate domvanalimab, the Company's investigational anti-TIGIT antibody, in combination with AstraZeneca's Imfinzi (durvalumab) in a registrational Phase 3 clinical trial in patients with unresectable Stage III non-small cell lung cancer (NSCLC). Under the terms of the agreement, each company will retain existing rights to their respective molecules and any future commercial economics. AstraZeneca will conduct the trial, and each company will supply its respective anti-cancer agent to support the trial. Under the terms of the agreement and subject to the parties' approval of a final budget for the clinical trial, the Company may be obligated to reimburse AstraZeneca for a portion of the costs incurred.

Consistent with the terms of the recently completed Arcus-Gilead partnership, Gilead maintains an option to co-develop and co-commercialize domvanalimab. If Gilead exercises its option to domvanalimab, the trial from this AstraZeneca collaboration is expected to form part of the Arcus and Gilead joint development program and Arcus's portion of the trial costs would be shared with Gilead.

Note 8: Convertible Preferred Stock and Stockholders' Equity (Deficit)

The Company's Certificate of Incorporation, as amended and restated, authorizes the Company to issue 410,000,000 shares of capital stock consisting of 400,000,000 shares common stock and 10,000,000 shares of preferred stock, both par value of $0.0001.

In June 2020, pursuant to a shelf registration statement on Form S-3 that was filed in May 2020, the Company issued 12,650,000 shares of its common stock at $27.50 per share in an underwritten public offering (the May 2020 Public Offering). The total number of shares sold consisted of 11,000,000 base shares and an additional 1,650,000 shares sold pursuant to the underwriters' option exercise. Net proceeds from the May 2020 Public Offering were approximately $326.2 million after deducting underwriting discounts, commissions and other offering expenses.

In July 2020, the Company closed the Gilead Collaboration Agreement, Common Stock Purchase Agreement, and the Investor Rights Agreement, each signed with Gilead in May 2020. The transaction closed on July 13, 2020 following expiration of the antitrust waiting period. Upon closing, Gilead made an equity investment of approximately $200 million in the Company by purchasing 5,963,029 shares of Arcus common stock at a per share price of $33.54 pursuant to the Stock Purchase Agreement. Of the $200 million equity investment, approximately $90.6 million was determined to be a premium on the purchase of common stock and allocated to the performance obligations created by the Gilead Collaboration Agreement. See Note 7 and Note 13 for further discussion of the agreements with Gilead. Net proceeds from Gilead's equity investment were approximately $107.5 million after allocating the premium and deducting direct offering expenses of $1.9 million.

As of December 31, 2020 and 2019, the Company had no outstanding convertible preferred stock.

Note 9: Stock Plans and Stock-Based Compensation

Stock Plans

The Company grants awards to employees and nonemployees under a series of equity incentive plans, (collectively, the Stock Plans).

In May 2015, the Company adopted the 2015 Stock Plan, which was amended and restated in November 2015 (as amended from time to time, the 2015 Plan).

The terms of the 2015 Plan permitted option holders to exercise stock options before they vest, subject to certain limitations. Such unvested shares are subject to repurchase by the Company at the original exercise price in the event the option holder's service to the Company is terminated either voluntarily or involuntarily. As a result of early exercises under the 2015 Plan, approximately 165,133 and 455,158 shares had not vested and were subject to repurchase as of December 31, 2020 and 2019, respectively. The Company treats cash received from the exercise of unvested options as a refundable deposit and classifies such amounts as a liability in its consolidated balance sheets. As of December 31, 2020 and 2019, the Company included cash received for the early exercise of unvested options of $0.7 million and $1.7 million, respectively, allocated to other current and long-term liabilities based on the timing of their expected vesting. Amounts included in liabilities are transferred into common stock and additional paid-in capital as the shares vest, which is generally over a period of 48 months.

In March 2018, the Company adopted the 2018 Equity Incentive Plan (2018 Plan), which replaced the 2015 Plan upon completion of the IPO. 3,570,000 shares were reserved under the 2018 Plan plus 709,558 shares remaining available for issuance under the Company's 2015 Plan and outstanding awards under its 2015 Plan that subsequently expire, lapse unexercised or are forfeited to or repurchased by the Company. In addition, the number of shares reserved for issuance under our 2018 Plan will automatically increase on January 1 of each year beginning January 1, 2019 by a number equal to the smallest of (i) 3,570,000 shares, (ii) 4% of the shares of common stock outstanding on the last business day of the prior fiscal year or (iii) the number of shares determined by our board of directors. As of December 31, 2020, there were 1,106,209 shares available for grant under the 2018 plan.

In accordance with the provisions of the 2018 Plan, the number of shares available for issuance under the Plan automatically increased by 2,604,587 shares on January 1, 2021.

In January 2020, the Company's Board of Directors adopted the 2020 Inducement Plan (2020 Plan), pursuant to which it reserved and authorized 3,000,000 shares of the Company's common stock in order to award non-statutory stock options and other equity-based awards as a material inducement to eligible individuals to enter into employment with the Company. In November 2020, the Company's Board of Directors authorized an increase of 1,000,000 shares reserved for issuance under the 2020 Plan. As of December 31, 2020 there were 784,975 shares available for grant under the 2020 Plan.

The following table, which includes options granted under the Company's Stock Plans, summarizes option activity:

	Shares Subject to Outstanding Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2019	4,738,004	$ 9.00		
Options granted	5,784,550	$ 17.36		
Options exercised	(392,523)	$ 8.54		
Options forfeited or canceled	(237,334)	$ 10.38		
Outstanding at December 31, 2020	9,892,697	$ 13.88	8.81	$ 122,232
Options vested and expected to vest as of December 31, 2020	9,892,697	$ 13.88	8.81	$ 122,232
Options exercisable as of December 31, 2020	2,793,050	$ 10.28	8.12	$ 44,012

During the years ended December 31, 2020, 2019 and 2018, the intrinsic value of shares exercised was $6.8 million, $0.2 million and $0.6 million, respectively, and the fair value of shares vested during the same period was $16.8 million, $7.8 million and $3.0 million, respectively.

Restricted Stock Units and Restricted Stock Awards

In 2015, in conjunction with the incorporation of the Company, the Company issued a total of 2,777,776 shares of common stock at $0.0004 per share to its two founders, the Chief Executive Officer and the President, under restricted stock agreements. At the date of grant, the shares had an estimated fair value of $0.0004 per share. Under the terms of the restricted stock agreements, shares vested monthly over four years. There were no shares granted under restricted stock agreements during the years ended December 31, 2020, 2019, and 2018. The total grant date fair value of shares vested during the same periods was immaterial. All shares were vested as of December 31, 2020.

The Company granted restricted stock units (RSUs) to its employees and directors under the 2018 Plan. The shares subject to the RSUs vest annually or quarterly over four years for employees and annually for directors.

	Total Restricted Stock Units	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2019	-	$ -
RSUs granted	758,950	27.77
RSUs vested	(6,250)	17.00
RSUs forfeited or canceled	(14,050)	29.05
Nonvested at December 31, 2020	738,650	$ 27.84

During the year ended December 31, 2020, the total grant date fair value of shares granted under RSUs was $21.1 million. The total grant date fair value of shares vested during the same period was $0.1 million. There were no RSUs granted or vested during the years ended December 31, 2019 or 2018.

Employee Stock Purchase Plan

In March 2018, the Company adopted the 2018 Employee Stock Purchase Plan (2018 ESPP). The 2018 ESPP provides eligible employees with the opportunity to purchase shares of common stock through payroll deductions at a price equal to 85% of the lower of the fair market value per share on the first trading day of the applicable 24-month offering period or the fair market value per share on the applicable purchase date, provided that no more than 3,000 shares of common stock may be purchased by an employee on any purchase date. Also, the value of the shares purchased in any calendar year may not exceed $25,000. The 2018 ESPP is intended to constitute an “employee stock purchase plan” under Section 423(b) of the Internal Revenue Code of 1986, as amended. The 2018 ESPP may be terminated by the Company’s board of directors at any time. A total of 714,000 shares of common stock were initially reserved for issuance under the 2018 ESPP, and the number of shares reserved for issuance under the 2018 ESPP will automatically increase on January 1 of each year beginning on January 1, 2019 by a number of shares equal to the least of (i) 1% of our outstanding shares of common stock on the last day of the prior fiscal year, (ii) 1,071,000 shares or (iii) a number of shares determined by our board of directors.

As of December 31, 2020, there were 1,190,422 shares available for purchase under the 2018 ESPP. In accordance with the provisions of the 2018 ESPP, the number of shares available for purchase under the Plan automatically increased by 651,146 shares on January 1, 2021.

Non-employee stock-based compensation

As of December 31, 2020, 2019 and 2018, 31,986, 372,774 and 14,918 respectively, of vested stock options and 21,165, 308,596, and 31,388, respectively, of unvested stock options were held by non-employees. The amount of stock-based compensation expense related to non-employees recognized in the consolidated financial statements for the years ended December 31, 2020, 2019 and 2018 was $0.7 million, $0.9 million and $0.3 million, respectively.

Stock-based compensation expense

The following table summarizes employee and non-employee stock-based compensation expense for the years ended December 31, 2020, 2019 and 2018, and also the allocation within the consolidated statements of operations and comprehensive loss (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Research and development	$ 11,195	$ 4,152	$ 2,255
General and administrative	10,630	4,829	1,619
Total stock-based compensation	$ 21,825	$ 8,981	$ 3,874

As of December 31, 2020, unrecognized employee and nonemployee compensation costs related to non-vested stock option awards and RSUs totaled $88.9 million, and is expected to be recognized over a weighted average period of 2.9 years.

Valuation Assumptions

Prior to the Company's IPO, the fair value of the shares of common stock underlying stock-based awards was determined by the board of directors, with input from management. Because there was no public market for the Company's common stock, the board of directors determined the fair value of the common stock on the grant-date of the stock-based award by considering a number of objective and subjective factors, including enterprise valuations of the Company's common stock performed by an unrelated third-party specialist, valuations of comparable companies, sales of the Company's convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of the Company's capital stock, and general and industry-specific economic outlook. The board of directors intended all options granted to be exercisable at a price per share not less than the estimated per share fair value of common stock underlying those options on the date of grant.

Following the Company's IPO, the market traded price of the shares of common stock underlying the stock-based awards is the fair value of our stock as reported on the New York Stock Exchange on the grant date.

Company estimates the fair value of options and ESPP shares utilizing the Black-Scholes option pricing model, which is dependent upon several variables, such as expected term, volatility, risk-free interest rate, and expected dividends. Each of these inputs is subjective and generally requires significant judgment to determine. The following assumptions were used to calculate the fair value of stock-based compensation for the years ended December 31, 2020, 2019, and 2018:

	Stock Options		
	Year Ended December 31,		
	2020	2019	2018
Risk-free interest rate	0.4% - 0.5%	1.6% - 2.3%	1.2% - 3.1%
Expected term (in years)	6.02	6.02	5.16-9.95
Volatility	76.5% - 78.5%	71.8% - 74.6%	58.7%-75.5%
Dividend yield	0%	0%	0%

	ESPP		
	Year Ended December 31,		
	2020	2019	2018
Risk-free interest rate	0.1% - 0.2%	1.6% - 2.3%	2.1% - 2.6%
Expected term (in years)	0.5-2.0	0.5-2.0	0.5-2.0
Volatility	66.6% - 136.0%	64.8% - 77.1%	54.3% - 65.5%
Dividend yield	0%	0%	0%

Expected Term — The Company has opted to use the "simplified method" for estimating the expected term of options, whereby the expected term equals the arithmetic average of the vesting term and the original contractual term of the option (generally 10 years).

Expected Volatility — Due to the Company's limited operating history and a lack of company specific historical and implied volatility data, the Company has based its estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility data was computed using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of the stock-based awards.

Risk-Free Interest Rate — The risk-free rate assumption is based on the U.S. treasury yield in effect at the time of grant for instruments with maturities similar to the expected term of the Company's stock options.

Expected Dividend — The Company has not issued any dividends in its history and does not expect to issue dividends over the life of the options and therefore has estimated the dividend yield to be zero.

Note 10. Net Loss per Share

The following table sets forth the computation of basic and diluted net loss per share (in thousands, except share and per share data):

	Year Ended December 31,		
	2020	2019	2018
Numerator:			
Net loss	$ (122,858)	$ (84,710)	$ (49,594)
Denominator:			
Weighted-average common shares outstanding	56,354,059	45,385,489	36,357,336
Less: weighted-average common shares subject to repurchase	(1,566,941)	(1,559,498)	(1,739,099)
Weighted-average common shares used to compute basic and diluted net loss per share	54,787,118	43,825,991	34,618,237
Net loss per share, basic and diluted	$ (2.24)	$ (1.93)	$ (1.43)

The following outstanding potentially dilutive securities were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive:

	At December 31,		
	2020	2019	2018
Common stock options issued and outstanding	9,892,697	4,738,004	1,458,079
Unvested restricted stock issued as part of collaboration agreement	1,257,651	1,257,651	-
Unvested early exercised common stock options	165,133	455,158	927,123
Unvested restricted stock units	738,650	-	-
Employee Stock Purchase Plan shares	18,219	-	-
Unvested restricted common stock	-	-	289,352
Total	12,072,350	6,450,813	2,674,554

Note 11: Provision for Income Taxes

The provision for income taxes differs from the amount expected by applying the federal statutory rate to the loss before taxes as follows:

	Year Ended December 31,		
	2020	2019	2018
Federal statutory income tax rate	21.00%	21.00%	21.00%
Equity investment	4.15%	0.00%	0.00%
Research and development credits	3.10%	0.00%	0.00%
Change in valuation allowance	(27.35)%	(19.65)%	(19.46)%
Non-deductible expenses and other	(0.90)%	(1.35)%	(1.54)%
Total	0.00%	0.00%	0.00%

As of December 31, 2020 and 2019, the components of the Company's deferred tax assets are as follows (in thousands):

	Year Ended December 31,	
	2020	2019
Deferred tax assets:		
Federal and state net operating loss carryforwards	$ 54,526	$ 30,049
Research and development credits carryforwards	11,209	8,077
Depreciation	9,068	6,052
Deferred Revenue	2,407	3,277
Lease liability	3,831	-
Other	5,890	2,965
Total deferred tax assets	86,931	50,420
Deferred tax liabilities:		
Right-of-use assets	(2,704)	-
Total deferred tax liabilities	(2,704)	-
Less valuation allowance	(84,227)	(50,420)
Net deferred tax assets	$ -	$ -

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The Company's accounting for deferred taxes involves the evaluation of a number of factors concerning the realizability of its net deferred tax assets. The Company considered factors such as its history of operating losses, the nature of the Company's deferred tax assets, and the timing, likelihood and amount, if any, of future taxable income during the periods in which those temporary differences and carryforwards become deductible, including amounts that may arise under the collaboration agreement with Gilead entered into in 2020. As a result of the Company's evaluation of these factors, including the uncertainty that exists with respect to the option fees and milestone payments, the Company does not believe that it is more likely than not that the deferred tax assets will be realized. Accordingly, a full valuation allowance has been established and no deferred tax asset is shown in the accompanying consolidated balance sheets. The valuation allowance increased by approximately $33.8 million, $19.7 million and $12.2 million, respectively, for the years ended December 31, 2020, 2019 and 2018.

At December 31, 2020, the Company has total net operating loss carryforwards (NOLs) of $253.3 million for federal income tax purposes, of which approximately $47.4 million begin to expire in 2035 and approximately $205.9 million that have no expiration date and federal research tax credits of approximately $9.9 million that begin to expire in 2035. The Company also has state NOLs of approximately $15.9 million that begin to expire in 2035, and state research tax credits of approximately $5.1 million that have no expiration date. Use of the NOLs and credit carryforwards may be subject to a substantial annual limitation due to the ownership change provisions of U.S. tax law, as defined in Section 382 and 383 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of NOLs and credits before use. The Company

determined that an ownership change, as defined under IRC Section 382, occurred in the current and previous years. While the Company does not expect these ownership changes to result in the expiration of net operating loss and credit carryforwards prior to utilization, the Company is subject to an annual limitation on the use of its tax attributes. The limitation on the Company's use of net operating loss and credit carryforwards could reduce the Company's ability to use a portion of the tax attributes to offset future taxable income.

The Company has not been audited by the Internal Revenue Service, any state or foreign tax authority. The Company is subject to taxation in the United States and also beginning in 2017, in Australia. Because of the net operating loss and research credit carryforwards, all of the Company's tax years, from 2015 to 2019, remain open to U.S. federal and California state tax examinations. In addition, the Company's tax years from 2017 to 2019 are open to examination in Australia. There were no interest or penalties accrued at December 31, 2020, 2019 or 2018.

Uncertain Tax Positions

The Company follows the provisions of FASB Accounting Standards Codification (ASC 740-10), *Accounting for Uncertainty in Income Taxes*. ASC 740-10 prescribes a comprehensive model for the recognition, measurement, presentation and disclosure in financial statements of uncertain tax positions that have been taken or expected to be taken on a tax return. No liability related to uncertain tax positions is recorded in the consolidated financial statements. The Company's reserve for unrecognized tax benefits is approximately $3.2 million, $2.2 million and $1.1 million at December 31, 2020, 2019 and 2018, respectively.

Due to the full valuation allowance at December 31, 2020 and 2019, current adjustments to the unrecognized tax benefit will have no impact on the Company's effective income tax rate; any adjustments made after the valuation allowance is released will have an impact on the tax rate.

The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Beginning balance	$ 2,165	$ 1,084	$ 622
Additions (decreases) for tax positions taken in a prior year	(258)	(7)	8
Additions for tax positions taken in current year	1,246	1,088	454
Ending balance	$ 3,153	$ 2,165	$ 1,084

The Company does not anticipate material changes to its uncertain tax positions through the next 12 months.

Note 12: Commitments

Purchase Commitments

The Company has contractual arrangements with research and development organizations and suppliers; however, these contracts are generally cancelable on 30 days' notice and the obligations under these contracts are largely based on services performed.

Indemnification

As permitted under Delaware law and in accordance with the Company's bylaws, the Company is required to indemnify its officers and directors for certain events or occurrences while the officer or director is or was serving in such capacity. The Company is also party to indemnification agreements with its directors and officers. The Company believes the fair value of the indemnification rights and agreements is minimal. Accordingly, the Company has not recorded any liabilities for these indemnification rights and agreements as of December 31, 2020 and 2019.

Note 13. Related parties

Relationship and transactions with Gilead Sciences, Inc. (Gilead)

As of December 31, 2020, Gilead held approximately 13% of the Company's outstanding common stock. These holdings resulted from Gilead's investment in the Company of approximately $56.7 million, net of offering costs, by purchasing 2,200,000 shares of common stock at a per share price of $27.50 in the May 2020 Public Offering as well as Gilead's acquisition of 5,963,029 shares under the Stock Purchase Agreement. Gilead has the right, at its option, to purchase up to a maximum of 35% of the Company's then-outstanding voting common stock, from time to time over the next five years. Gilead also has the right under the Investor Rights Agreement to designate two individuals to be appointed to the Company's board of directors. The Company appointed the first Gilead designee, Merdad Parsey, M.D., Ph.D. and Michael Quigley, Ph.D., to its board of directors pursuant to the Investor Rights Agreement. See Note 7 for further discussion of the agreements with Gilead.

At December 31, 2020, the Company had a $0.9 million cost sharing receivable recorded on the consolidated balance sheets under receivable from collaboration partners, to be invoiced the following quarter. The Company also had $185.4 million in deferred revenue at December 31, 2020, of which $117.8 million represented the long-term portion of deferred revenue allocated to performance obligations not expected to be completed within one year of the balance sheet date, which was recorded in deferred revenue, noncurrent on the consolidated balance sheets. The Company also recognized $9.7 million in contract liabilities for future development and commercialization services which Gilead prepaid, all of which was recorded in other long-term liabilities on the consolidated balance sheets.

For the year ended December 31, 2020, the Company recognized $70.5 million in revenue under the Gilead Collaboration Agreement. The Company also recognized a $3.4 million reduction in research and development expense related to its cost-sharing provisions of the agreement.

The Company received $175 million in upfront payments from Gilead in connection with the Option, License and Collaboration Agreement and identified $100 million in unconstrained consideration to be received in 2022. In addition, the Company received $200 million from Gilead in connection with the Stock Purchase Agreement, of which approximately $109.4 million represented the fair value of stock purchased at the transaction closing date in July 2020 with the remaining premium of $90.6 million allocated to the transaction price.

Note 14: Employee Benefit Plan

The Company sponsors a 401(k) defined contribution plan for its employees. This plan provides for tax-deferred salary deductions for all employees. Employee contributions are voluntary. Employees may contribute up to 100% of their annual compensation to this plan, as limited by an annual maximum amount as determined by the Internal Revenue Service. The Company may match employee contributions in amounts to be determined at the Company's sole discretion. The Company made no contributions to the plan for the years ended December 31, 2020, 2019 and 2018.

Note 15: Selected Unaudited Quarterly Financial Data

The following table summarizes the Company's unaudited quarterly financial data for the last two years (in thousands, except share and per share data):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2020				
Total revenues	$ 1,750	$ 1,750	$ 64,530	$ 9,487
Total operating expenses	$ 30,150	$ 47,125	$ 62,978	$ 61,499
Net income (loss)	$ (27,753)	$ (45,074)	$ 1,822	$ (51,853)
Net income (loss) per share — basic	$ (0.63)	$ (0.93)	$ 0.03	$ (0.82)
Net income (loss) per share — diluted	$ (0.63)	$ (0.93)	$ 0.03	$ (0.82)
Weighted average number of shares, basic	44,282,607	48,556,843	62,599,193	63,527,932
Weighted average number of shares, diluted	44,282,607	48,556,843	65,145,707	63,527,932
2019				
Total revenues	$ 1,750	$ 1,750	$ 1,750	$ 9,750
Total operating expenses	$ 20,523	$ 30,910	$ 24,999	$ 27,277
Net loss	$ (17,670)	$ (28,090)	$ (22,352)	$ (16,598)
Net loss per share — basic and diluted	$ (0.41)	$ (0.64)	$ (0.51)	$ (0.38)
Weighted average number of shares, basic and diluted	43,508,592	43,797,718	43,939,281	44,056,407

Note 16: Subsequent Event

In February 2021, Gilead increased its ownership in the Company by purchasing 5,650,000 additional shares of the Company's common stock at a purchase price of $39.00 per share for total proceeds to the Company of $220.4 million. After the transaction, Gilead owned approximately $19.5% of the Company's outstanding shares of common stock.

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

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Securities Exchange Act of 1934 (Exchange Act) reports is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within an organization have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met.

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15. Based upon, and as of the date of, this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f). Our management, with the participation of our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2020. Our assessment was based on criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control Integrated − Framework (2013).

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

1. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
2. provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and board of directors; and
3. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our 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.

Based on our evaluation under the framework in Internal Control − Integrated Framework, management concluded that our internal control over financial reporting was effective as of December 31, 2020.

Our independent registered public accounting firm, Ernst & Young LLP, has audited our Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K and have issued a report on our internal control over financial reporting as of December 31, 2020. Their report on the audit of internal control over financial reporting appears below.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Accounting Firm

To the Stockholders and the Board of Directors of Arcus Biosciences, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Arcus Biosciences, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Arcus Biosciences, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2020 consolidated financial statements of the Company and our report dated February 24, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ Ernst & Young LLP

Redwood City, California
February 24, 2021

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item will be set forth in our proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year ended December 31, 2020 (our "Proxy Statement") and is incorporated into this Annual Report on Form 10-K by reference, specifically:

- Information regarding our directors and any persons nominated to become a director, as well as with respect to some other required board matters, is set forth under Proposal 1 entitled "Election of Directors" and under "Corporate Governance."
- Information regarding our audit committee and our designated "audit committee financial expert" is set forth under the caption "Corporate Governance."
- Information regarding Section 16(a) beneficial ownership reporting compliance, if any, will be set forth under the caption "Delinquent Section 16(a) Reports."
- Information regarding procedures by which stockholders may recommend nominees to our board of directors is set forth under the caption "Nominating and Corporate Governance Committee" under "Corporate Governance."
- Information regarding our executive officers is set forth under "Executive Officers."

We have adopted a Code of Conduct and Ethics that applies to all directors, officers and employees of the Company, which is available on our website at www.arcusbio.com. If we make any substantive amendments to our Code of Conduct and Ethics or grant any waivers to our directors or executive officers, we will disclose it on our website or in a Current Report on Form 8-K.

Item 11. Executive Compensation

The information required by this Item will be set forth in our Proxy Statement under the captions "Executive Compensation," "Compensation of Directors" and "Compensation Committee Interlocks and Insider Participation" and is incorporated into this Annual Report on Form 10-K by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item will be set forth in our Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" and is incorporated into this Annual Report on Form 10-K by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item will be set forth in our Proxy Statement under the captions "Related Person Transactions" and "Corporate Governance" and is incorporated into this Annual Report on Form 10-K by reference.

Item 14. Principal Accounting Fees and Services

The information required by this Item will be set forth in our Proxy Statement under the Proposal with the caption "Ratification of Appointment of Independent Registered Public Accounting Firm" and is incorporated into this Annual Report on Form 10-K by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements

See Index to Consolidated Financial Statements at Item 8 herein.

(2) Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

(3) Exhibits.

See Exhibit Index following Item 16 below.

Item 16. Form 10-K Summary

None.

Exhibit Index

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation.	10-Q	001-38419	3.1	May 9, 2018
3.2	Amended and Restated Bylaws.	8-K	001-38419	3.1	May 26, 2020
4.1	Reference is made to Exhibits 3.1 and 3.2				
4.2	Investor Rights Agreement.	S-1	333-223086	4.1	February 16, 2018
4.3*	Description of Common Stock.				
10.1[A]	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	333-223086	10.1	February 16, 2018
10.2[A]	Arcus Biosciences, Inc. 2015 Stock Plan and forms of agreements thereunder.	S-1/A	333-223086	10.2	March 5, 2018
10.3[A]	Arcus Biosciences, Inc. 2018 Equity Incentive Plan (including form agreements for use before January 1, 2021).	S-1/A	333-223086	10.3	March 5, 2018
10.4[A]	Arcus Biosciences, Inc. 2018 Employee Stock Purchase Plan.	S-1/A	001-38419	10.4	March 5, 2018
10.5[A]	Amended and Restated Letter Agreement, dated February 14, 2018, between the Registrant and Terry Rosen, Ph.D.	S-1	333-223086	10.5	February 16, 2018
10.6[A]	Amended and Restated Letter Agreement, dated February 14, 2018, between the Registrant and Juan Carlos Jaen, Ph.D.	S-1	333-223086	10.6	February 16, 2018
10.8	Lease, dated September 30, 2015, between the Registrant and Hayward Point Eden I Limited Partnership, as amended on July 22, 2016 and October 12, 2017.	S-1	333-223086	10.8	February 16, 2018
10.9[B]	License Agreement, dated December 8, 2016, between the Registrant and Abmuno Therapeutics LLC.	S-1	333-223086	10.10	February 16, 2018
10.10[B]	License Agreement, dated August 16, 2017, between the Registrant and WuXi Biologics (Cayman) Inc.	S-1	333-223086	10.11	February 16, 2018
10.11[B]	Option and License Agreement, dated September 19, 2017, between the Registrant and Taiho Pharmaceutical Co., Ltd.	S-1	333-223086	10.12	February 16, 2018
10.12[A]	Arcus Biosciences, Inc. Management Cash Incentive Plan.	S-1	333-223086	10.13	February 16, 2018
10.13[A]	Form of Severance and Change in Control Agreement (for use before September 24, 2018).	S-1	333-223086	10.14	February 16, 2018
10.14[B]	Amendment No. 1 to Option and License Agreement, dated September 19, 2017, between Arcus Biosciences, Inc. and Taiho Pharmaceutical Co, Ltd.	10-Q	001-38419	10.1	November 8, 2018
10.15[A]	Form of Severance and Change in Control Agreement (for use from September 24, 2018)	10-Q	001-38419	10.2	November 8, 2018
10.16[A]	Separation and Consulting Agreement by and between the Company and Jennifer Jarrett dated January 3, 2019	10-K	001-38419	10.17	March 5, 2019

10.17[A]	Offer Letter, dated March 16, 2019, between the Company and William Grossman	10-Q	001-38419	10.1	August 6, 2019
10.18[C]	Amendment No. 1 dated June 27, 2019 to the License Agreement dated August 16, 2017 between Arcus Biosciences, Inc. and WuXi Biologics (Cayman) Inc.	10-Q	001-38419	10.2	August 6, 2019
10.19[A]	Offer Letter, dated May 20, 2019, between the Company and Jason Barker	10-Q	001-38419	10.1	November 5, 2019
10.20[A]	Compensation Program for Non-Employee Directors (for use from March 21, 2019 until June 3, 2020).	10-K	001-38419	10.9	March 5, 2020
10.21[A]	Amendment to Separation and Consulting Agreement dated December 4, 2019 by and between the Company and Jennifer Jarrett.	10-K	001-38419	10.24	March 5, 2020
10.22*[A]	Arcus Biosciences, Inc. Amended and Restated 2020 Inducement Plan.				
10.23[A]	Arcus Biosciences, Inc. Stock Option Grant Notice (2020 Inducement Plan).	10-K	001-38419	10.26	March 5, 2020
10.24[A]	Arcus Biosciences, Inc. Restricted Stock Unit Grant Notice (2020 Inducement Plan).	10-K	001-38419	10.27	March 5, 2020
10.25[C]	Amendment No. 2 dated March 2, 2020 to the License Agreement dated August 16, 2017 between Arcus Biosciences, Inc. and WuXi Biologics (Cayman) Inc.	10-K	001-38419	10.28	March 5, 2020
10.26[A]	Compensation Program for Non-Employee Directors (for use from June 4, 2020).	8-K	001-38419	10.1	June 5, 2020
10.27[C]	Common Stock Purchase Agreement dated May 27, 2020 between Arcus Biosciences, Inc. and Gilead Sciences, Inc.	8-K	001-38419	99.1	July 13, 2020
10.28[C]	Amended and Restated Common Stock Purchase Agreement dated January 31, 2021 between Arcus Biosciences, Inc. and Gilead Sciences, Inc.	SC 13D/A	005-90423	99.1	February 2, 2021
10.29[C]	Investor Rights Agreement dated May 27, 2020 between Arcus Biosciences, Inc. and Gilead Sciences, Inc.	8-K	001-38419	99.2	July 13, 2020
10.30[C]	Option, License and Collaboration Agreement dated May 27, 2020 between Arcus Biosciences, Inc. and Gilead Sciences, Inc.	10-Q	001-38419	10.1	August 6, 2020
10.31	Third Amendment dated June 26, 2020 to the Lease agreement dated September 30, 2015 between Arcus Biosciences, Inc. and Hayward Point Eden I Limited Partnership.	10-Q	001-38419	10.4	August 6, 2020
10.32[A]	Offer letter by and between Arcus Biosciences, Inc. and Robert C. Goeltz II dated June 30, 2020.	10-Q	001-38419	10.1	November 5, 2020
10.33[A]	Offer letter by and between Arcus Biosciences, Inc. and Jennifer Jarrett dated September 10, 2020.	10-Q	001-38419	10.2	November 5, 2020
10.34	Fourth Amendment dated October 16, 2020 to the Lease agreement dated September 30, 2015 between Arcus Biosciences, Inc. and Hayward Point Eden I Limited Partnership.	10-Q	001-38419	10.3	November 5, 2020
10.35*	Assignment Agreement dated November 10, 2020 by and among Arcus Biosciences, Inc., WuXi Biologics (Cayman) Inc. and WuXi Biologics Ireland Limited to the License Agreement dated August 16, 2017.				

10.36*	Form of Stock Option Notice and Agreement (2018 Equity Incentive Plan) for use from January 1, 2021.
10.37*	Form of RSU Notice and Agreement (2018 Equity Incentive Plan) for use from January 1, 2021.
21.1*	List of subsidiaries of the registrant.
23.1*	Consent of independent registered public accounting firm
24.1*	Power of Attorney (included on signature page to this Annual Report)
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1†	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2†	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document – The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension 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)

* Filed herewith.

A Indicates management contract or compensatory plan or arrangement.

B The Company has been granted confidential treatment for certain portions of this exhibit. The omitted portions have been filed separately with the Securities and Exchange Commission.

C This exhibit omits information subject to confidential treatment.

† This certification is deemed not filed for purposes of section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

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**.**

ARCUS BIOSCIENCES, INC.

Date: February 24, 2021

By: /s/ Terry Rosen

Terry Rosen, Ph.D.
Chief Executive Officer
(Principal Executive Officer and Duly Authorized Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below constitutes and appoints Terry Rosen, Ph.D. and Juan Carlos Jaen, Ph.D., and each of them, his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Terry Rosen **Terry Rosen, Ph.D.**	Chief Executive Officer and Director (Principal Executive Officer)	February 24, 2021
/s/ Juan Carlos Jaen **Juan Carlos Jaen, Ph.D.**	President and Director	February 24, 2021
/s/ Robert C. Goeltz II **Robert C. Goeltz II**	Chief Financial Officer (Principal Financial and Accounting Officer)	February 24, 2021
/s/ Kathryn Falberg **Kathryn Falberg**	Director	February 24, 2021
/s/ Jennifer Jarrett **Jennifer Jarrett**	Director	February 24, 2021
/s/ Yasunori Kaneko **Yasunori Kaneko, M.D.**	Director	February 24, 2021
/s/ Patrick Machado **Patrick Machado, J.D.**	Director	February 24, 2021
/s/ Antoni Ribas **Antoni Ribas, M.D., Ph.D.**	Director	February 24, 2021
/s/ David Lacey **David Lacey, M.D.**	Director	February 24, 2021
/s/ Merdad Parsey **Merdad Parsey, M.D., Ph.D.**	Director	February 24, 2021
/s/ Andrew Perlman **Andrew Perlman, M.D., Ph.D.**	Director	February 24, 2021
/s/ Michael Quigley **Michael Quigley, Ph.D.**	Director	February 24, 2021

ARCUS BIOSCIENCES, INC.
DESCRIPTION OF COMMON STOCK

Our authorized capital stock consists of 400,000,000 shares of common stock, $0.0001 par value per share, and 10,000,000 shares of preferred stock, $0.0001 par value per share. A description of material terms and provisions of our certificate of incorporation and bylaws affecting the rights of holders of our common stock is set forth below. The description is intended as a summary, and is qualified in its entirety by reference to our certificate of incorporation and the bylaws.

Common Stock

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and only then at the times and in the amounts that our board of directors may determine.

Voting Rights

The holders of our common stock are entitled to one vote per share. Stockholders do not have the ability to cumulate votes for the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Anti-Takeover Provisions

Delaware Law

We are governed by the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. This section prevents some Delaware corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or amended and restated bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Certificate of Incorporation and Bylaw Provisions

Our amended and restated certificate of incorporation and our amended and restated bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our management team, including the following:

- *Board of Directors Vacancies.* Our amended and restated certificate of incorporation and amended and restated bylaws authorize our board of directors to fill vacant directorships, including newly-created seats. In addition, the number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.
- *Classified Board.* Our amended and restated certificate of incorporation and amended and restated bylaws provide that our board of directors is classified into three classes of directors, each of which hold office for a three-year term. In addition, directors may only be removed from the board of directors for cause and only by the approval of 66 2/3% of our then-outstanding shares of our common stock. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.
- *Stockholder Action; Special Meeting of Stockholders.* Our amended and restated certificate of incorporation provide that stockholders are not able to take action by written consent, and are only able to take action at annual or special meetings of our stockholders. Stockholders are not be permitted to cumulate their votes for the election of directors. Our amended and restated bylaws further provide that special meetings of our stockholders may be called only by a majority vote of our entire board of directors, the chairman of our board of directors or our chief executive officer.

- *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our amended and restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.

- *Issuance of Undesignated Preferred Stock.* Our board of directors have the authority, without further action by the holders of common stock, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the board of directors. The existence of authorized but unissued shares of preferred stock enable our board of directors to render more difficult or discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Choice of Forum

Our amended and restated certificate of incorporation and bylaws provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware is the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation and bylaws has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. This provision does not apply to actions arising under the Securities Act or the Exchange Act, or any claim for which the federal courts have exclusive jurisdiction.

In addition, our bylaws provide that unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended; and that any person or entity holding, owning or otherwise acquiring any interest in any security of Arcus shall be deemed to have notice of and consented to these provisions.

ARCUS BIOSCIENCES, INC.

2020 INDUCEMENT PLAN

ADOPTED BY THE BOARD OF DIRECTORS: JANUARY 22, 2020
AMENDED: NOVEMBER 24, 2020
AMENDED: FEBRUARY 18, 2021

1. GENERAL.

(a) Eligible Award Recipients. The only persons eligible to receive grants of Awards under this Plan are individuals who satisfy the standards for inducement grants under Rule 303A.08 of the NYSE Listed Company Manual Rules. A person who previously served as an Employee or Director will not be eligible to receive Awards under the Plan, other than following a *bona fide* period of non-employment. Persons eligible to receive grants of Awards under this Plan are referred to in this Plan as "***Eligible Employees***." These Awards must be approved by either a majority of the Company's "***Independent Directors***" (as determined under NYSE Listed Company Manual Rule 303A.02) or the Company's compensation committee, provided such committee comprises solely Independent Directors (the "***Independent Compensation Committee***") in order to comply with the exemption from the stockholder approval requirement for "inducement grants" provided under Rule 303A.08 of the NYSE Listed Company Manual Rules (together with any analogous rules or guidance effective after the date hereof, the "***Inducement Award Rules***").

(b) Available Awards. The Plan provides for the grant of the following types of Awards: (i) Options, (ii) Stock Appreciation Rights, (iii) Restricted Share Awards and (iv) Restricted Stock Unit Awards. All Options shall be Nonstatutory Stock Options.

(c) Purpose. This Plan, through the granting of Awards, is intended to provide (i) an inducement material for certain individuals to enter into employment with the Company within the meaning of Rule 303A.08 of the NYSE Listed Company Manual Rules, (ii) incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and (iii) a means by which Eligible Employees may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

2. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan; provided, however, that Awards may only be granted by either (i) a majority of the Company's Independent Directors or (ii) the Independent Compensation Committee. Subject to those constraints and the other constraints of the Inducement Award Rules, the Board may delegate some of its powers of administration of the Plan to a Committee, as provided in Section 2(c).

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan and the Inducement Award Rules:

(i) To determine: (A) who will be granted Awards; (B) when and how each Award will be granted; (C) what type of Award will be granted; (D) the provisions of each Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Award; (E) the number of shares of Common Stock subject to, or the cash value of, an Award; and (F) the Fair Market Value applicable to an Award; provided, however, that Awards may only be granted by either (i) a majority of the Company's Independent Directors or (ii) the Independent Compensation Committee.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which an Award may be exercised or vest (or at which cash or shares of Common Stock may be issued).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or an Award Agreement, suspension or termination of the Plan will not materially impair a Participant's rights under his or her then-outstanding Award without his or her written consent.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to nonqualified deferred compensation under Section 409A of the Code and/or to bring the Plan or Awards granted under the Plan into compliance therewith, subject to the limitations, if any, of applicable law. Except as provided in Section 9(a) relating to Capitalization Adjustments, if required by applicable law or listing requirements, the Company shall seek stockholder approval for any amendment of the Plan. Except as provided above, rights under any Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Rule 16b-3 of Exchange Act or any successor rule.

(viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more outstanding Awards. Except as otherwise provided in the Plan or an Award Agreement, no amendment of an outstanding Award will materially impair that Participant's rights under his or her outstanding Award without his or her written consent. To be clear, unless prohibited by applicable law, the Board may amend the terms of an Award without the affected Participant's consent if necessary (A) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code, or (C) to comply with other applicable laws or listing requirements.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by individuals who are foreign nationals or employed outside the United States.

(c) Delegation to Committee. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Repricing; Cancellation and Re-Grant of Awards. Neither the Board nor any Committee will have the authority to reduce the exercise, purchase or strike price of any outstanding Option or SAR, unless the stockholders of the Company have approved such an action within twelve (12) months prior to such an event.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards from and after the Effective Date shall not exceed 7,000,000 shares. Shares may be issued under the terms of this Plan in connection with a merger or acquisition as permitted by Rule 303A.08 of the NYSE Listed Company Manual Rules or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(b) Reversion of Shares to the Share Reserve. If an Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to an Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired or retained by the Company in satisfaction of tax

withholding obligations on an Award or as consideration for the exercise or purchase price of an Award will again become available for issuance under the Plan.

(c) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. ELIGIBILITY.

(a) Eligibility for Awards. Awards may only be granted to persons who are Eligible Employees described in Section 1(a) of the Plan, where the Award is an inducement material to the individual's entering into employment with the Company or an Affiliate within the meaning of Rule 303A.08 of the NYSE Listed Company Manual Rules, *provided however*, that Awards may not be granted to Eligible Employees who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405 of the Securities Act, unless (i) the stock underlying such Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Awards are granted pursuant to a corporate transaction such as a spin off transaction), or (ii) the Company, in consultation with its legal counsel, has determined that such Awards are otherwise exempt from or comply with the distribution requirements of Section 409A of the Code.

(b) Approval Requirements. All Awards must be granted either by a majority of the Company's independent directors or the Independent Compensation Committee.

5. PROVISIONS RELATING TO OPTIONS AND SARS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be Nonstatutory Stock Options. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Award Agreement (whether an Option Agreement or a Stock Appreciation Right Agreement) will conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. No Option or SAR will be exercisable after the expiration of 10 years from the date of its grant or such shorter period specified in the Award Agreement.

(b) Exercise Price. The exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Option or SAR is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise price lower than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR if such Option or SAR is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the

following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are reduced to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or

(v) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Award Agreement.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Award Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Award Agreement evidencing such SAR. If, on the date when a SAR expires, the exercise price is less than the Fair Market Value on such date but any portion of such SAR has not been exercised or surrendered, then such SAR shall automatically be deemed to be exercised as of such date with respect to such portion. The Award Agreement may also provide for an automatic exercise of the SAR on an earlier date.

(e) Transferability of Options and SARs. The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine.

In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) Restrictions on Transfer. An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided herein, an Option or SAR may not be transferred for consideration.

(ii) Domestic Relations Orders. An Option or SAR may be transferred pursuant to the terms of a domestic relations order or official marital settlement agreement or other divorce or separation instrument.

(iii) Beneficiary Designation. A Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, on the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options and SARs may vary. The provisions of this Section are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the close of business at Company headquarters on the date that is three months following the termination of the Participant's Continuous Service and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR will terminate.

(h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon

the Participant's death or Disability) would be prohibited at any time solely because the issuance of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of three months (that need not be consecutive) after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the sale of any Common Stock received on exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of a period of months (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the close of business at Company headquarters on the date six months following such termination of Continuous Service and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's death, then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the close of business at Company headquarters on the date 12 months following the date of death and (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Award Agreement, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate on your termination date.

(l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six (6) months following the date of grant of the Option or SAR (although the Award may vest prior to

such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, or (iii) upon the Participant's retirement (as such term may be defined in the Participant's Award Agreement in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options or SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Award will be exempt from the employee's regular rate of pay, the provisions of this Section will apply to all Awards and are hereby incorporated by reference into such Award Agreements.

6. PROVISIONS OF AWARDS OTHER THAN OPTIONS AND SARS.

(a) Restricted Share Awards. Each Restricted Share Award Agreement will be in such form and will contain such terms and conditions as the Board deems appropriate. To the extent consistent with the Company's articles of association, at the Board's election, shares of Common Stock underlying a Restricted Share Award may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Share Award lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Share Award Agreements may change from time to time, and the terms and conditions of separate Restricted Share Award Agreements need not be identical. Each Restricted Share Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Share Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company or (B) any other form of legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Shares of Common Stock awarded under the Restricted Share Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant as of the date of termination of Continuous Service under the terms of the Restricted Share Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Share Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Share Award Agreement, as the Board will determine in its sole discretion, so long as shares of Common Stock awarded under the

Restricted Share Award Agreement remains subject to the terms of the Restricted Share Award Agreement. Transfers will be subject to any approvals required by applicable law.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board deems appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate. To the extent permitted under applicable stock exchange listing standards, any dividend equivalents paid or credited under the Plan with respect to Restricted Stock Unit Awards shall not be applied against the number of shares of Common Stock that may be issued under the Plan.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the

Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

7. Covenants of the Company.

(a) Availability of Shares. The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Awards.

(b) Securities Law Compliance. The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise of the Awards; *provided, however*, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of an Award or the subsequent issuance of cash or Common Stock pursuant to the Award if such grant or issuance would be in violation of any applicable securities law.

(c) No Obligation to Notify or Minimize Taxes. The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award.

8. Miscellaneous.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement as a result of a clerical error in the papering of the Award Agreement, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement.

(c) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the

issuance of shares under, the Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee) after the date of grant of any Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced.

(f) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(g) Withholding Obligations. Unless prohibited by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means or by a combination

of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award Agreement.

(h) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(i) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(j) Compliance with Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six (6) months following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six (6) month period elapses, with the balance paid thereafter on the original schedule.

(k) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the

Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause.

9. Adjustments upon Changes in Common Stock; Other Corporate Events.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a); and (ii) the class(es) and number of securities and price per share of stock subject to outstanding Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service; *provided, however*, that the Board may, in its sole discretion, cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Certain Corporate Transactions. In the event that the Company is a party to a merger, consolidation, or a Change in Control (other than one described in Section 13(g)(iv)) (a "***Corporate Transaction***"), all shares of Common Stock acquired under the Plan and all Awards outstanding on the effective date of the transaction shall be treated in the manner described in the definitive transaction agreement (or, in the event the transaction does not entail a definitive agreement to which the Company is party, in the manner determined by the Board, with such determination having final and binding effect on all parties), which agreement or determination need not treat all Awards (or portions thereof) in an identical manner. Unless an Award Agreement provides otherwise, the treatment specified in the transaction agreement or by the Board may include (without limitation) one or more of the following with respect to each outstanding Award:

(i) The continuation of such outstanding Award by the Company (if the Company is the surviving entity);

(ii) The assumption of such outstanding Award by the surviving entity or its parent, provided that the assumption of an Option or SAR shall comply with applicable tax requirements;

(iii) The substitution by the surviving entity or its parent of an equivalent award for such outstanding Award (including, but not limited to, an award to acquire the same consideration paid to the holders of Common Stock in the transaction), provided that the substitution of an Option or SAR shall comply with applicable tax requirements;

(iv) In the case of an Option or SAR, the cancellation of such Award without payment of any consideration. A Participant shall be able to exercise his or her outstanding Option or SAR, to the extent such Option or SAR is then vested or becomes vested as of the effective time of the transaction, during a period of not less than five full business days preceding the closing date of the transaction, unless (i) a shorter period is required to permit a timely closing of the transaction and (ii) such shorter period still offers the Participant a reasonable opportunity to exercise such Option or SAR. Any exercise of such Option or SAR during such period may be contingent on the closing of the transaction;

(v) The cancellation of such Award and a payment to the Participant with respect to each share subject to the portion of the Award that is vested or becomes vested as of the effective time of the transaction equal to the excess of (A) the value, as determined by the Board in its absolute discretion, of the property (including cash) received by the holder of a share of Common Stock as a result of the transaction, over (if applicable) (B) the per-share Exercise Price of such Award (such excess, if any, the "***Spread***"). Such payment shall be made in the form of cash, cash equivalents, or securities of the surviving entity or its parent having a value equal to the Spread. In addition, any escrow, holdback, earn-out or similar provisions in the transaction agreement may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of Common Stock, but only to the extent the application of such provisions does not adversely affect the status of the Award as exempt from Code Section 409A. If the Spread applicable to an Award (whether or not vested) is zero or a negative number, then the Award may be cancelled without making a payment to the Participant. In the event that an Award is subject to Code Section 409A, the payment described in this clause (v) shall be made on the settlement date specified in the applicable Award Agreement, provided that settlement may be accelerated in accordance with Treasury Regulation Section 1.409A-3(j)(4); or

(vi) The assignment of any reacquisition or repurchase rights held by the Company in respect of a Restricted Share Award to the surviving entity or its parent, with corresponding proportionate adjustments made to the price per share to be paid upon exercise of any such reacquisition or repurchase rights.

Unless an Award Agreement provides otherwise, each outstanding Award held by a Participant who remains an Employee, Consultant or Director as of the effective time of a Corporate Transaction (a "***Current Participant***") shall become fully vested (in the case of an Award subject to one or more Performance Goals at deemed attainment at 100% of target levels) and, if applicable, exercisable immediately prior to the effective time of the transaction. However the prior sentence shall not apply, and an outstanding Award shall not become vested and, if applicable, exercisable, if and to the extent the Award is continued, assumed or substituted as provided for in clauses (i), (ii) or (iii) above. In addition, the prior two sentences will not apply to an Award held by a Participant who is not a Current Participant, unless an Award Agreement

provides otherwise or unless the Company and the acquirer, purchaser or successor entity (as applicable) agree otherwise.

For avoidance of doubt, the Board shall have the discretion, exercisable either at the time an Award is granted or at any time while the Award remains outstanding, to provide for the acceleration of vesting upon the occurrence of a Corporate Transaction, whether or not the Award is to be assumed or replaced in the transaction, or in connection with a termination of the Participant's Continuous Service following a transaction. Furthermore, no modification or substitution of an Award shall, without the consent of the Participant, impair the Participant's rights or increase the Participant's obligations under such Award.

Any action taken under this Section 9(c) shall either preserve an Award's status as exempt from Code Section 409A or comply with Code Section 409A.

10. Termination or Suspension of the Plan.

The Board may suspend or terminate the Plan at any time. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

11. Effective Date of the Plan.

The Plan will come into existence on the Effective Date. No Award may be granted prior to the Effective Date.

12. Choice of Law.

The law of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. Definitions. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "***Affiliate***" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(b) "***Award***" means an Option, a Stock Appreciation Right, a Restricted Share Award or a Restricted Stock Unit Award.

(c) "***Award Agreement***" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.

(d) "***Board***" means the Board of Directors of the Company.

(e) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after

the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company shall not be treated as a Capitalization Adjustment.

(f) "***Cause***" shall have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term (and if there are multiple such agreements, the most recent) and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (a) unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company, (b) material breach of any agreement with the Company, (c) material failure to comply with the Company's written policies or rules, (d) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State, (e) gross negligence or willful misconduct, (f) continuing failure to perform assigned duties after receiving written notification of the failure from the Company or its Board or (g) failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested such cooperation. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause shall be made by the Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(g) "***Change in Control***" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company's then-outstanding voting securities;

(ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets;

(iii) The consummation of a merger or consolidation of the Company with or into any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation; or

(iv) Individuals who are members of the Board (the "**Incumbent Board**") cease for any reason to constitute at least a majority of the members of the Board over a period of 12 months; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

A transaction shall not constitute a Change in Control or a Corporate Transaction if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction. In addition, if a Change in Control or a Corporate Transaction constitutes a payment event with respect to any Award which provides for a deferral of compensation and is subject to Code Section 409A, then notwithstanding anything to the contrary in the Plan or applicable Award Agreement the transaction with respect to such Award must also constitute a "change in control event" as defined in Treasury Regulation Section 1.409A-3(i)(5) to the extent required by Code Section 409A.

(h) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(i) "***Committee***" means a committee of one or more Independent Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(j) "***Common Stock***" means the common stock of the Company, par value $0. 0001 per share.

(k) "***Company***" means Arcus Biosciences, Inc., a Delaware corporation.

(l) "***Consultant***" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

(m) "***Continuous Service***" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, in its sole discretion, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. Continuous Service does not terminate when a Participant goes on a

military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by the Company in writing. However, the Participant's Continuous Service terminates when the approved leave ends, unless the Participant immediately returns to active work. If a Participant goes on an unpaid leave of absence that lasts more than 90 days, then, to the extent permitted by applicable law, the vesting schedule specified in the grant notice will be suspended on the ninety-first day of such unpaid leave, and the Participant's Awards will not vest or become exercisable with respect to any additional shares of Common Stock during the remainder of such leave. Vesting will resume when the Participant returns to active Continuous Service. If a Participant goes on a paid leave of absence, the vesting schedule specified in the notice of grant with respect to such award may be adjusted and/or suspended by the Company. If a Participant commences working on a part-time basis, the Company may adjust the vesting schedule of such Participant's Awards so that the rate of vesting is commensurate with the Participant's reduced work schedule.

(n) "***Corporate Transaction***" shall have the meaning set forth in Section 9.

(o) "***Director***" means a member of the Board. Directors are not eligible to receive Awards under the Plan with respect to their service in such capacity.

(p) "***Disability***" means that a Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted, or can be expected to last, for a continuous period of not less than one year.

(q) "***Effective Date***" means January 22, 2020.

(r) "***Employee***" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(s) "***Entity***" means a corporation, partnership, limited liability company or other entity.

(t) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(u) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(v) "***Non-Employee Director***" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("***Regulation S-K***")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(w) "***Nonstatutory Stock Option***" means any option granted pursuant to Section 5 of the Plan that does not qualify as an "incentive stock option" within the meaning of Section 422 of the Code.

(x) "***Officer***" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act or an "executive officer," as defined under Rule 3b-7 of the Exchange Act.

(y) "***Option***" means a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan which is granted pursuant to the terms and conditions of Section 5.

(z) "***Option Agreement***" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.

(aa) "***Optionholder***" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(bb) "***Own,***" "***Owned,***" "***Owner,***" "***Ownership***" A person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(cc) "***Participant***" means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(dd) "***Performance Goal***" means a goal established by the Board for the applicable Performance Period. Depending on the performance criteria used, a Performance Goal may be expressed in terms of overall Company performance or the performance of a business unit, division, product line, Subsidiary, Affiliate or an individual. A Performance Goal may be measured either in absolute terms or relative to the performance of one or more comparable companies or one or more relevant indices or other external measures of the selected

performance criteria. In addition, a Performance Goal may be measured on an absolute or per-share basis, a GAAP or non-GAAP basis, in terms of growth or percentage change, or on a pre-tax or post-tax basis (if applicable). The Board may adjust the results under any performance criterion to exclude any of the following events that occurs during a Performance Period: (a) asset write-downs, (b) litigation, claims, judgments or settlements, (c) the effect of changes in tax laws, accounting principles or other laws or provisions affecting reported results, (d) accruals for reorganization and restructuring programs, (e) extraordinary, unusual or non-recurring items, (f) exchange rate effects for non-U.S. dollar denominated net sales and operating earnings, or (g) statutory adjustments to corporate tax rates.

(ee) "***Performance Period***" means a period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to an Award that vests based on the achievement of Performance Goals. Performance Periods may be of varying and overlapping duration, at the discretion of the Administrator.

(ff) "***Plan***" means this Arcus Biosciences, Inc. 2020 Inducement Plan, as it may be amended.

(gg) "***Restricted Share Award***" means an award of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(hh) "***Restricted Share Award Agreement***" means a written agreement between the Company and a holder of a Restricted Share Award evidencing the terms and conditions of a Restricted Share Award grant. Each Restricted Share Award Agreement will be subject to the terms and conditions of the Plan.

(ii) "***Restricted Stock Unit Award***" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(jj) "***Restricted Stock Unit Award Agreement***" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.

(kk) "***Rule 16b-3***" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(ll) "***Securities Act***" means the Securities Act of 1933, as amended.

(mm) "***Stock Appreciation Right***" or "***SAR***" means a right to receive the appreciation on Common Stock which is granted pursuant to the terms and conditions of Section 5.

(nn) "***Stock Appreciation Right Agreement***" means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

(oo) "***Subsidiary***" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

Exhibit 10.35

Dated November 10, 2020

Arcus Biosciences, Inc.

WuXi Biologics (Cayman) Inc.

and

WuXi Biologics Ireland Limited

ASSIGNMENT AGREEMENT

THIS ASSIGNMENT AGREEMENT ("**Agreement**") is made on November 10, 2020 (the "**Assignment Date**") by and among:

(1) **WuXi Biologics (Cayman) Inc.**, with an address at Ugland House, Grand Cayman, KY1-1104 Cayman Islands (the "**Licensor**"); and

(2) **WuXi Biologics Ireland Limited**, with an address at One Spencer Dock, North Wall Quay, Dublin 1, Ireland (the "**WuXi Ireland**")

(3) **Arcus Biosciences, Inc.**, with an address at 3928 Point Eden Way, Hayward, CA 94545, U.S.A. (the "**Licensee**" or "**Arcus**");

The Licensor, WuXi Ireland and the Licensee are hereinafter individually referred to as a "Party" and collectively as the "Parties".

WHEREAS:

(A) The Licensor and the Licensee entered into a License Agreement dated as of August 16, 2017, as amended from time to time (the "**License Agreement**"), pursuant to which Licensee obtained an exclusive, royalty bearing license under the Licensed IP (as defined therein) to Develop, Commercialize and conduct certain other activities for Licensed Products in the Field (as defined therein) in the Territory (as defined therein);

(B) The Licensor wishes to assign all the rights and obligations of the Licensor under the License Agreement to WuXi Ireland with effect from the Assignment Date of this Agreement;

(C) WuXi Ireland, being an Affiliate of the Licensor, has agreed to assume all the rights and obligations of the Licensor under the License Agreement with effect from the Assignment Date;

(D) The Licensee consents to the Licensor assignment of all of its rights and obligations under the License Agreement to WuXi Ireland with effect from the Assignment Date.

NOW, in consideration of the foregoing recitals, the promises hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Assignment of the License Agreement.

(a) Licensor hereby assigns and transfers to WuXi Ireland, as of the Assignment Date, all of Licensor's right, title and interest in and to the License Agreement (the "**Assignment**").

(b) WuXi Ireland accepts such assignment and agrees to assume, from and after the Assignment Date, all of the Licensor's rights, liabilities and obligations in, to and under the License Agreement. Without limiting the foregoing, from and after the Assignment Date, WuXi Ireland assumes all the rights and agrees to perform all of the obligations and liabilities of the Licensor under the License Agreement, and be bound by its terms and conditions in every way as if WuXi Ireland were the original party to it in place of the Licensor.

(c) The Licensor shall be released from the rights and obligations under the License Agreement to the extent such obligations and liabilities are fully performed and discharged by WuXi Ireland; *provided that* Licensor shall remain obligated, as a guarantor, to Licensee with respect to Licensor's rights, liabilities and obligations under the License Agreement, including liable for any errors or failure of WuXi Ireland to perform under the License Agreement.

(d) The Licensee agrees to direct its performance under the License Agreements in the first instance to WuXi Ireland as if WuXi Ireland were the original party to it in place of the Licensor.

Each Party hereby undertakes to each of the other Parties that it shall do all such things and execute all such documents as may be reasonably necessary to carry into effect or to give legal effect to the provisions of this Agreement and the Assignment hereby contemplated. For the avoidance of doubt, nothing in this Agreement is intended to, nor shall be deemed to, release Licensor's liability (including without limitation, any breach of this Agreement) incurred prior to the Assignment Date.

2. Assignment of the rights to receive payments under the License Agreement

(a) In connection with the Assignment, the parties hereby acknowledge and agree that, on and from the Assignment Date, WuXi Ireland assumes the right to receive all payments from the Licensee under the License Agreement, and the Licensee shall pay to WuXi Ireland all amounts properly due under the License Agreement as if WuXi Ireland were the original party to it in place of the Licensor.

(b) The Licensee and Licensor hereby acknowledge and agree that the WuXiSublicense Income payable in connection with the sublicense to zimberelimab granted by Licensee to Gilead Sciences, Inc. is due by Licensee after the Assignment Date and therefore will be paid by Licensee to WuXi Ireland.

3. Confidentiality.

(a) In connection with the Assignment, WuXi Ireland acknowledges and agrees that it shall be bound by the confidentiality obligations set forth in Article 6 of the License Agreement, including with respect to any Confidential Information of Licensee that is learned by WuXi Ireland directly or indirectly from Licensor. For the avoidance of doubt, Licensor acknowledges and agrees that it remains bound by the confidentiality obligations set forth in Article 6 with respect to all Confidential Information disclosed by or on behalf of Arcus to Licensor prior to the Assignment Date or thereafter learned by Licensor as an Affiliate of WuXi Ireland.

4. Notices

From and after the Assignment Date, all notices to Licensor under the License Agreement shall be made to WuXi Ireland at the following address:

To WuXi Ireland at: [No.288 FuTeZhong Road, Free Trade Zone, Pudong District, Shanghai, China, 200131, WuXi Biologics Legal Department]

5. Miscellaneous

(a) Unless otherwise specified, capitalized terms used in this Agreement shall have the same meanings as defined in the License Agreement.

(b) The invalidity of any provision of this Agreement shall not affect the validity of any other provisions of this Agreement.

(c) This Agreement shall be construed according to the substantive law of New York, USA without regard to the provisions governing conflict of laws.

(d) A Party's failure to or failure to timely exercise any right, power or privilege under this Agreement shall not be deemed as a waiver of such right, power or privilege, and any single or partial exercise of any right, power or privilege shall not preclude exercise of any other right, power or privilege.

(e) This Agreement is executed in [three (3)] originals, and each original shall have the same effect, with each Party holding one (1) original copy. Each original copy of this Agreement shall have equal force and effect.

(f) Each Party shall bear its own costs and expenses in connection with the negotiation and performance of this Agreement.

[The remainder of this page is intentionally left blank.]

(Signature Page)

IN WITNESS whereof, this Agreement has been duly executed to be effective as of the Assignment Date.

WuXi Biologics (Cayman) Inc.

/s/ Zhisheng Chen

Name: Zhisheng Chen

Title: CEO

WuXi Biologics Ireland Limited

/s/ Zhisheng Chen

Name: Zhisheng Chen

Title: Director

Arcus Biosciences, Inc.

/s/ Jennifer Jarrett

Name: Jennifer Jarrett

Title: COO

ARCUS BIOSCIENCES, INC.
2018 EQUITY INCENTIVE PLAN
NOTICE OF STOCK OPTION GRANT

You have been granted the following option to purchase shares of the common stock of Arcus Biosciences, Inc. (the "Company"):

Name of Optionee:	«Name»
Total Number of Shares:	«TotalShares»
Type of Option:	«ISO» Stock Option (ISO)
	«NSO» Nonstatutory Stock Option (NSO)
Exercise Price per Share:	«PricePerShare»
Date of Grant:	«DateGrant»
Vesting Commencement Date:	«VestDay»
Vesting Schedule:	This option vests and becomes exercisable with respect to 1/48th of the shares subject to this option when you complete each month of continuous service as an Employee or Consultant ("Service") after the Vesting Commencement Date. In addition, this option may become vested and exercisable on an accelerated basis, as provided in the Stock Option Agreement.
Expiration Date:	«ExpDate». This option expires earlier if your Service terminates earlier, as described in the Stock Option Agreement, and may terminate earlier in connection with certain corporate transactions as described in Article 9 of the Plan.

You and the Company agree that this option is granted under and governed by the terms and conditions of the Company's 2018 Equity Incentive Plan (the "Plan") and the Stock Option Agreement, both of which are attached to, and made a part of, this document. Capitalized terms not otherwise defined herein shall have the meanings assigned to such terms in the Plan and the Stock Option Agreement.

The Company may, in its sole discretion, decide to deliver any documents related to options awarded under the Plan, future options that may be awarded under the Plan and all other documents that the Company is required to deliver to security holders (including annual reports and proxy statements) by email or other electronic means (including by posting them on a website maintained by the Company or a third party under contract with the Company). You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

ARCUS BIOSCIENCES, INC.
2018 EQUITY INCENTIVE PLAN
STOCK OPTION AGREEMENT

Grant of Option

Subject to all of the terms and conditions set forth in the Notice of Stock Option Grant (the "Grant Notice"), this Stock Option Agreement (the "Agreement") and the Plan, the Company has granted you an option to purchase up to the total number of shares specified in the Grant Notice at the exercise price indicated in the Grant Notice.

All capitalized terms used in this Agreement shall have the meanings assigned to them in this Agreement, the Grant Notice or the Plan.

Tax Treatment

This option is intended to be an incentive stock option under Section 422 of the Code or a nonstatutory stock option, as provided in the Grant Notice. However, even if this option is designated as an incentive stock option in the Grant Notice, it shall be deemed to be a nonstatutory stock option to the extent it does not qualify as an incentive stock option under federal tax law, including under the $100,000 annual limitation under Section 422(d) of the Code.

Vesting

This option vests and becomes exercisable in accordance with the vesting schedule set forth in the Grant Notice. In addition, this option shall vest and become exercisable in full if the Company is subject to certain corporate transactions before your Service terminates and this option is not continued, assumed or substituted with a new award as set forth in Article 9.3 of the Plan.

Further, this option shall vest and become exercisable in full if the Company is subject to a Change in Control (as defined below) before your Service terminates, and you are subject to an Involuntary Termination (as defined below) within 12 months following such Change in Control, subject to your execution and nonrevocation of a general release of claims against the Company and certain related parties, in the form provided by the Company. You must execute and return the release on or before the date specified by the Company, which will in no event be later than 50 days after your Service terminates. If you fail to return the release by the deadline or if you revoke the release, you will not be entitled to the vesting acceleration described in this paragraph.

Notwithstanding the foregoing, if you are, or become, eligible for more favorable vesting acceleration provisions pursuant to a written agreement with the Company (an "**Outside Agreement**"), the more favorable terms in such Outside Agreement shall apply instead of the acceleration terms in this Agreement.

No additional shares will vest or become exercisable after your Service has terminated for any reason, except as set forth in this Agreement or such Outside Agreement, to the extent you are eligible for benefits thereunder

Term of Option	This option expires in any event at the close of business at Company headquarters on the day before the 10th anniversary of the Date of Grant, as shown in the Grant Notice. (This option will expire earlier if your Service terminates earlier, as described below, and this option may be terminated earlier as provided in Article 9 of the Plan.)
Termination of Service	If your Service terminates for any reason, this option will expire to the extent it is unvested as of your termination date and does not vest as a result of your termination of Service. The Company determines when your Service terminates for all purposes of this option. If your Service terminates, except for Cause or due to your death or Disability, then this option, to the extent vested as of your termination date, will expire at the close of business at Company headquarters on the date three months after your termination date.
Termination of Service Due to Cause	If your Service terminates due to Cause, then this option, to the extent vested as of your termination date, will terminate immediately and be of no further force and effect.
Death	If you die before your Service terminates, then this option, to the extent vested as of your termination date, will expire at the close of business at Company headquarters on the date twelve months after the date of death.
Disability	If your Service terminates because of your Disability, then this option, to the extent vested as of your termination date, will expire at the close of business at Company headquarters on the date 6 months after your termination date. For all purposes under this Agreement, "Disability" means that you are unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted, or can be expected to last, for a continuous period of not less than one year.
Leaves of Absence and Part-Time Work	For purposes of this option, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by the Company in writing. However, your Service terminates when the approved leave ends, unless you immediately return to active work. If you go on an unpaid leave of absence that lasts more than 90 days, then, to the extent permitted by applicable law, the vesting schedule specified in the Grant Notice will be suspended on the ninety-first day of such unpaid leave, and this option will not vest or become exercisable with respect to any additional shares during the remainder of such leave. Vesting will resume when you return to active Service. If you go on a paid leave of absence, the vesting schedule specified in the Notice of Stock Option Grant may be adjusted and/or suspended by the Company. If you commence working on a part-time basis, the Company may adjust the vesting schedule so that the rate of vesting is commensurate with your reduced work schedule.

Restrictions on Exercise The Company will not permit you to exercise this option if the issuance of shares at that time would violate any law or regulation.

Notice of Exercise When you wish to exercise this option, you must notify the Company by filing the proper "Notice of Exercise" form at the address given on the form or, if the Company has designated a third party to administer the Plan, you must notify such third party in the manner such third party requires. Your notice must specify how many shares you wish to purchase. The notice will be effective when the Company receives it.

However, if you wish to exercise this option by executing a same-day sale (as described below), you must follow the instructions of the Company and the broker who will execute the sale.

If someone else wants to exercise this option after your death, that person must prove to the Company's satisfaction that he or she is entitled to do so.

You may only exercise your option for whole shares.

Form of Payment When you submit your notice of exercise, you must make arrangements for the payment of the option exercise price for the shares that you are purchasing. To the extent permitted by applicable law, payment may be made in one (or a combination of two or more) of the following forms:

- By delivering to the Company your personal check, a cashier's check or a money order, or arranging for a wire transfer.
- By giving to a securities broker approved by the Company irrevocable directions to sell all or part of your option shares and to deliver to the Company, from the sale proceeds, an amount sufficient to pay the option exercise price and any withholding taxes. (The balance of the sale proceeds, if any, will be delivered to you.) The directions must be given in accordance with the instructions of the Company and the broker. This exercise method is sometimes called a "same-day sale."

Withholding Taxes Regardless of any action the Company (or, if applicable, the Parent, Subsidiary or Affiliate employing or retaining you (the "Employer")) takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the participation in the Plan and legally applicable to you ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company and/or the Employer. You further acknowledge that the Company and the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the options, including, but not limited to, the grant, vesting or exercise of the option, the issuance of shares upon exercise of the option, the subsequent sale of shares acquired pursuant to such exercise and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the option or any aspect of the option to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you are subject to tax in more than one jurisdiction, you acknowledge that the Company and/or the Employer may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

You will not be allowed to exercise this option unless you make arrangements acceptable to the Company and/or the Employer to pay any Tax-Related Items that the Company and/or the Employer determine must be withheld. These arrangements include payment in cash or via the same-day sale procedure described above. With the Company's consent, these arrangements may also include (a) withholding shares of Company stock that otherwise would be issued to you when you exercise this option with a value equal to withholding taxes, (b) surrendering shares that you previously acquired with a value equal to the withholding taxes, or (c) withholding cash from other compensation. The value of withheld or surrendered shares, determined as of the date when taxes otherwise would have been withheld in cash, will be applied to the Tax-Related Items.

Restrictions on Resale

You agree not to sell any option shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify. You further agree to comply with the Company's *Insider Trading Policy* when selling shares of the Company's common stock.

Transfer of Option

Prior to your death, only you may exercise this option. You cannot transfer or assign this option. For instance, you may not sell this option or use it as security for a loan. If you attempt to do any of these things, this option will immediately become invalid. You may, however, dispose of this option in your will or by means of a written beneficiary designation which must be filed with the Company on the proper form; provided, however, that your beneficiary or a representative of your estate acknowledges and agrees in writing in a form reasonably acceptable to the Company, to be bound by the provisions of this Agreement and the Plan as if such beneficiary or representative of the estate were you.

Regardless of any marital property settlement agreement, the Company is not obligated to honor a notice of exercise from your former spouse, nor is the Company obligated to recognize your former spouse's interest in your option in any other way.

No Retention Rights You understand that neither this option nor this Agreement alters the at-will nature of your relationship with the Company. Your option or this Agreement does not give you the right to be retained by the Company, a Parent, Subsidiary, or an Affiliate in any capacity. The Company and its Parents, Subsidiaries, and Affiliates reserve the right to terminate your Service at any time, with or without cause.

Stockholder Rights You, or your estate or heirs, have no rights as a stockholder of the Company until you have exercised this option by giving the required notice to the Company, paying the exercise price, and satisfying any applicable withholding taxes. No adjustments are made for dividends or other rights if the applicable record date occurs before you exercise this option, except as described in the Plan.

Recoupment Policy This option, and the shares acquired upon exercise of this option, shall be subject to any Company recoupment or clawback policy in effect from time to time.

Adjustments In the event of a stock split, a stock dividend or a similar change in Company stock, the number of shares covered by this option and the exercise price per share will be adjusted pursuant to the Plan.

Effect of Significant Corporate Transactions If the Company is a party to a merger, consolidation, or certain change in control transactions, then this option will be subject to the applicable provisions of Article 9 of the Plan; *provided that* no modification or substitution of this option shall, without your consent, impair your rights or increase your obligations under such option.

Applicable Law This Agreement will be interpreted and enforced under the laws of the State of Delaware (without regard to its choice-of-law provisions).

The Plan and Other Agreements The text of the Plan is incorporated in this Agreement by reference.

The Plan, this Agreement and the Grant Notice constitute the entire understanding between you and the Company regarding this option. Any prior agreements, commitments or negotiations concerning this option are superseded. This Agreement may be amended only by another written agreement between the parties.

Definitions For purposes of this Agreement, "**Cause**" shall mean your (a) unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company, (b) material breach of any agreement with the Company, (c) material failure to comply with the Company's written policies or rules, (d) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State, (e) gross negligence or willful misconduct, (f) continuing failure to perform assigned duties after receiving written notification of the failure from the Company or its Board of Directors or (g) failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested such cooperation.

For purposes of this Agreement, "**Change in Control**" shall mean (a) a sale, conveyance or other disposition of all or substantially all of the assets, property or business of the Company, except where such sale, conveyance or other disposition is to a wholly owned subsidiary of the Company, (b) a merger or consolidation of the Company with or into another corporation, entity or person, other than any such transaction in which the holders of voting capital stock of the Company outstanding immediately prior to the transaction continue to hold a majority of the voting capital stock of the Company (or the surviving or acquiring entity) outstanding immediately after the transaction (taking into account only stock of the Company held by such stockholders immediately prior to the transaction and stock issued on account of such stock in the transaction), or (c) 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 stock of the Company; provided, however, that a Change in Control shall not include any transaction or series of related transactions (1) principally for bona fide equity financing purposes or (2) effected exclusively for the purpose of changing the domicile of the Company. A series of related transactions shall be deemed to constitute a single transaction for purposes of determining whether a Change in Control has occurred. In addition, if a Change in Control constitutes a payment event with respect to any amount that is subject to Code Section 409A, then the transaction must also constitute a "change in control event" as defined in Treasury Regulation Section 1.409A-3(i)(5) to the extent required by Code Section 409A.

For purposes of this Agreement, "**Involuntary Termination**" shall mean either your (a) Termination Without Cause or (b) Resignation for Good Reason.

For purposes of this Agreement, "**Resignation for Good Reason**" shall mean a Separation (as defined below) as a result of your resignation within 12 months after one of the following conditions has come into existence without your consent: (a) a reduction in your base salary by more than 10%, other than a general reduction in base salary that is part of a cost-reduction program that affects all similarly situated employees in substantially the same proportions, (b) a relocation of your principal

workplace by more than 25 miles from its location prior to the Change in Control and, with respect only to employees at the vice-president level or above, (c) a material reduction of responsibilities, authority, or duties, provided that neither a mere change in title alone nor reassignment following a Change in Control to a position that is similar to the position held prior to the Change in Control shall constitute a material reduction in job responsibilities. A Resignation for Good Reason will not be deemed to have occurred unless you give the Company written notice of the condition within 90 days after the condition comes into existence and the Company fails to remedy the condition within 30 days after receiving such written notice.

For purposes of this Agreement, "**Termination Without Cause**" shall mean a Separation as a result of the termination of Service by the Company without Cause, provided you are willing and able to continue performing services within the meaning of Treasury Regulation 1.409A-1(n)(1).

For purposes of this Agreement, "**Separation**" shall mean a "separation from service," as defined in the regulations under Section 409A of the Code.

BY ACCEPTING THIS OPTION GRANT, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

Exhibit 10.37

ARCUS BIOSCIENCES, INC.
2018 EQUITY INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK UNIT AWARD

You have been granted Restricted Stock Units ("RSUs"), each representing the right to receive one share of common stock of Arcus Biosciences, Inc. (the "Company") on the following terms:

Name of Recipient:	«Name»
Total Number of RSUs Granted:	«TotalRSUs»
Date of Grant:	«DateGrant»
Vesting Schedule:	«Vesting Schedule», provided that you remain in continuous service as an Employee or Consultant ("Service") through each such date. In addition, the RSUs may become vested on an accelerated basis, as provided in the Restricted Stock Unit Agreement.

You and the Company agree that these RSUs are granted under and governed by the terms and conditions of the Company's 2018 Equity Incentive Plan (the "Plan") and the Restricted Stock Unit Agreement, both of which are attached to, and made a part of, this document. Capitalized terms not otherwise defined herein shall have the meanings assigned to such terms in the Plan and the Restricted Stock Unit Agreement.

The Company may, in its sole discretion, decide to deliver any documents related to RSUs awarded under the Plan, future RSUs that may be awarded under the Plan and all other documents that the Company is required to deliver to security holders (including annual reports and proxy statements) by email or other electronic means (including posting them on a website maintained by the Company or a third party under contract with the Company). You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

ARCUS BIOSCIENCES, INC.
2018 EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNIT AGREEMENT

Grant of RSUs	Subject to all of the terms and conditions set forth in the Notice of Restricted Stock Unit Award (the "Grant Notice"), this Restricted Stock Unit Agreement (the "Agreement") and the Plan, the Company has granted to you the number of RSUs set forth in the Grant Notice. All capitalized terms used in this Agreement shall have the meanings assigned to them in this Agreement, the Grant Notice or the Plan.
Nature of RSUs	Your RSUs are bookkeeping entries. They represent only the Company's unfunded and unsecured promise to issue shares of common stock on a future date. As a holder of RSUs, you have no rights other than the rights of a general creditor of the Company.
Payment for RSUs	No payment is required for the RSUs that you are receiving.
Vesting	The RSUs vest in accordance with the vesting schedule set forth in the Grant Notice. In addition, the RSUs shall vest in full if the Company is subject to certain corporate transactions before your Service terminates and the RSUs are not continued, assumed or substituted with a new award as set forth in Article 9.3 of the Plan. In addition, these RSUs shall vest in full if the Company is subject to a Change in Control (as defined below) before your Service terminates, and you are subject to an Involuntary Termination (as defined below) within 12 months following such Change in Control, subject to your execution and nonrevocation of a general release of claims against the Company and certain related parties, in the form provided by the Company. You must execute and return the release on or before the date specified by the Company, which will in no event be later than 50 days after your Service terminates. If you fail to return the release by the deadline or if you revoke the release, you will not be entitled to the vesting acceleration described in this paragraph. Notwithstanding the foregoing, if you are, or become, eligible for more favorable vesting acceleration provisions pursuant to a written agreement with the Company (an "**Outside Agreement**"), the more favorable terms in such Outside Agreement shall apply instead of the acceleration terms in this Agreement. No additional RSUs will vest after your Service has terminated for any reason, except as set forth in this Agreement or an Outside Agreement, to the extent you are eligible for benefits thereunder.

Forfeiture If your Service terminates for any reason, then your RSUs will be forfeited to the extent that they have not vested before the termination date and do not vest as a result of the termination of your Service. This means that any RSUs that have not vested under this Agreement will be cancelled immediately. You receive no payment for RSUs that are forfeited. The Company determines when your Service terminates for all purposes of your RSUs.

Leaves of Absence and Part-Time Work For purposes of these RSUs, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by the Company in writing. However, your Service terminates when the approved leave ends, unless you immediately return to active work.

If you go on an unpaid leave of absence that lasts more than 90 days, then, to the extent permitted by applicable law, the vesting schedule specified in the Grant Notice will be suspended on the ninety-first day of such unpaid leave, and this award will not vest with respect to any additional RSUs during the remainder of such leave. Vesting will resume when you return to active Service. If you go on a paid leave of absence, the vesting schedule specified in the Grant Notice may be adjusted and/or suspended by the Company.

If you commence working on a part-time basis, the Company may adjust the vesting schedule so that the rate of vesting is commensurate with your reduced work schedule.

Settlement of RSUs Each RSU will be settled when it vests (unless you and the Company have agreed in writing to a later settlement date pursuant to procedures the Company may prescribe at its discretion).

At the time of settlement, you will receive one share of the Company's common stock for each vested RSU.

No fractional shares will be issued upon settlement.

Section 409A Unless you and the Company have agreed to a deferred settlement date (pursuant to procedures that the Company may prescribe at its discretion), settlement of these restricted stock units is intended to be exempt from the application of Code Section 409A pursuant to Treasury Regulation 1.409A-1(b)(4) and shall be administered and interpreted in a manner that complies with such exception.

Notwithstanding the foregoing, if it is determined that settlement of these RSUs is not exempt from Code Section 409A and the Company determines that you are a "specified employee," as defined in the regulations under Code Section 409A at the time of your "separation from service," as defined in Treasury Regulation Section 1.409A-1(h), then this paragraph will apply. If this paragraph applies, and the event triggering settlement is your "separation from service," then any RSUs that otherwise would have been settled during the first six months following your "separation from service" will instead be settled on the first business day following the earlier of (i) the six-month anniversary of your separation from service or (ii) your death.

Each installment of RSUs that vests is hereby designated as a separate payment for purposes of Code Section 409A.

No Voting Rights or Dividends

Your RSUs carry neither voting rights nor rights to cash dividends. You have no rights as a stockholder of the Company unless and until your RSUs are settled by issuing shares of the Company's common stock.

RSUs Nontransferable

You may not sell, transfer, assign, pledge or otherwise dispose of any RSUs. For instance, you may not use your RSUs as security for a loan. In addition, regardless of any marital property settlement agreement, the Company is not obligated to recognize your former spouse's interest in your RSUs in any way.

Beneficiary Designation

You may dispose of your RSUs in a written beneficiary designation. A beneficiary designation must be filed with the Company on the proper form. It will be recognized only if it has been received at the Company's headquarters before your death. If you file no beneficiary designation or if none of your designated beneficiaries survives you, then your estate will receive any vested RSUs that you hold at the time of your death.

Withholding Taxes

Regardless of any action the Company (or, if applicable, the Parent, Subsidiary or Affiliate employing or retaining you (the "Employer")) takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the participation in the Plan and legally applicable to you ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company and/or the Employer. You further acknowledge that the Company and the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant or vesting of the RSUs, the issuance of shares upon vesting of the RSUs, the subsequent sale of shares acquired pursuant to such vesting and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the RSUs or any aspect of the RSUs to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you are subject to tax in more than one jurisdiction, you acknowledge that the Company and/or the Employer may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

No shares will be distributed to you unless you have made arrangements satisfactory to the Company and/or the Employer for the payment of any Tax-Related Items that the Company and/or the Employer determine must be withheld. In this regard, you authorize the Company, at its sole discretion, to satisfy your Tax-Related Items by one or a combination of the following:

- Withholding the amount of any Tax-Related Items from your wages or other cash compensation paid to you by the Company and/or the Employer.

- Instructing a brokerage firm selected by the Company for this purpose to sell on your behalf a number of whole shares of Company stock to be issued to you when the RSUs are settled that the Company determines are appropriate to generate cash proceeds sufficient to satisfy the Tax-Related Items. You acknowledge that the Company or its designee is under no obligation to arrange for such sale at any particular price. Regardless of whether the Company arranges for such sale, you will be responsible for all fees and other costs of sale, and you agree to indemnify and hold the Company harmless from any losses, costs, damages or expenses relating to any such sale.

- Withholding shares of Company stock that would otherwise be issued to you when the RSUs are settled equal in value to the Tax-Related Items. The fair market value of the withheld shares, determined as of the date when taxes otherwise would have been withheld in cash, will be applied to the Tax-Related Items.

- Any other means approved by the Company.

You agree to pay to the Company in cash any amount of Tax-Related Items that the Company does not elect to satisfy by the means described above. To the extent you fail to make satisfactory arrangements for the payment of any required withholding taxes, you will permanently forfeit the applicable RSUs.

Restrictions on Issuance The Company will not issue any shares to you if the issuance of shares at that time would violate any law or regulation.

Restrictions on Resale	You agree not to sell any shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify. You further agree to comply with the Company's Insider Trading Policy when selling shares of the Company's common stock.
No Retention Rights	You understand that neither this award nor this Agreement alters the at-will nature of your relationship with the Company. Your award or this Agreement does not give you the right to be retained by the Company, a Parent, Subsidiary, or an Affiliate in any capacity. The Company and its Parents, Subsidiaries, and Affiliates reserve the right to terminate your Service at any time, with or without cause.
Adjustments	In the event of a stock split, a stock dividend or a similar change in Company stock, the number of your RSUs will be adjusted pursuant to the Plan.
Effect of Significant Corporate Transactions	If the Company is a party to a merger, consolidation, or certain change in control transactions, then your RSUs will be subject to the applicable provisions of Article 9 of the Plan, provided that any action taken must either (a) preserve the exemption of your RSUs from Code Section 409A or (b) comply with Code Section 409A.
Recoupment Policy	This award, and the shares acquired upon settlement of this award, shall be subject to any Company recoupment or clawback policy in effect from time to time.
Applicable Law	This Agreement will be interpreted and enforced under the laws of the State of Delaware (without regard to its choice-of-law provisions).
The Plan and Other Agreements	The text of the Plan is incorporated in this Agreement by reference. The Plan, this Agreement and the Grant Notice constitute the entire understanding between you and the Company regarding this award. Any prior agreements, commitments or negotiations concerning this award are superseded. This Agreement may be amended only by another written agreement between the parties.

Definitions

For purposes of this Agreement, "**Cause**" shall mean your (a) unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company, (b) material breach of any agreement with the Company, (c) material failure to comply with the Company's written policies or rules, (d) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State, (e) gross negligence or willful misconduct, (f) continuing failure to perform assigned duties after receiving written notification of the failure from the Company or its Board of Directors or (g) failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested such cooperation.

For purposes of this Agreement, "**Change in Control**" shall mean (a) a sale, conveyance or other disposition of all or substantially all of the assets, property or business of the Company, except where such sale, conveyance or other disposition is to a wholly owned subsidiary of the Company, (b) a merger or consolidation of the Company with or into another corporation, entity or person, other than any such transaction in which the holders of voting capital stock of the Company outstanding immediately prior to the transaction continue to hold a majority of the voting capital stock of the Company (or the surviving or acquiring entity) outstanding immediately after the transaction (taking into account only stock of the Company held by such stockholders immediately prior to the transaction and stock issued on account of such stock in the transaction), or (c) 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 stock of the Company; provided, however, that a Change in Control shall not include any transaction or series of related transactions (1) principally for bona fide equity financing purposes or (2) effected exclusively for the purpose of changing the domicile of the Company. A series of related transactions shall be deemed to constitute a single transaction for purposes of determining whether a Change in Control has occurred. In addition, if a Change in Control constitutes a payment event with respect to any amount that is subject to Code Section 409A, then the transaction must also constitute a "change in control event" as defined in Treasury Regulation Section 1.409A-3(i)(5) to the extent required by Code Section 409A.

For purposes of this Agreement, "**Involuntary Termination**" shall mean either your (a) Termination Without Cause or (b) Resignation for Good Reason.

For purposes of this Agreement, "**Resignation for Good Reason**" shall mean a Separation (as defined below) as a result of your resignation within 12 months after one of the following conditions has come into existence without your consent: (a) a reduction in your base salary by more than 10%, other than a general reduction in base salary that is part of a cost-reduction program that affects all similarly situated employees in substantially the same proportions, (b) a relocation of your principal workplace by more than 25 miles from its location prior to the Change in Control and, with respect only to employees at the vice-president level or above, (c) a material reduction of responsibilities, authority, or duties, provided that neither a mere change in title alone nor reassignment following a Change in Control to a position that is similar to the position held prior to the Change in Control shall constitute a material reduction in job responsibilities. A Resignation for Good Reason will not be deemed to have occurred unless you give the Company written notice of the condition within 90 days after the condition comes into existence and the Company fails to remedy the condition within 30 days after receiving such written notice.

For purposes of this Agreement, "**Termination Without Cause**" shall mean a Separation as a result of the termination of Service by the Company without Cause, provided you are willing and able to continue performing services within the meaning of Treasury Regulation 1.409A-1(n)(1).

For purposes of this Agreement, "**Separation**" shall mean a "separation from service," as defined in the regulations under Section 409A of the Code.

BY ACCEPTING THIS RSU AWARD, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

Exhibit 21.1

List of Subsidiaries

Name of Subsidiary	State or Jurisdiction in Which Incorporated or Organized
Arcus Biosciences Australia PTY LTD	Australia

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statements (Form S-3 Nos. 333-230676, and 333-238730) of Arcus Biosciences, Inc., and

(2) Registration Statements (Form S-8 Nos. 333-223746, 333-230074, and 333-236915) pertaining to the Arcus Biosciences, Inc. 2018 Equity Incentive Plan, the Arcus Biosciences, Inc. Amended and Restated 2015 Stock Plan, the Arcus Biosciences, Inc. 2018 Employee Stock Purchase Plan, and the Arcus Biosciences, Inc. 2020 Inducement Plan;

of our reports dated February 24, 2021, with respect to the consolidated financial statements of Arcus Biosciences, Inc. and the effectiveness of internal control over financial reporting of Arcus Biosciences, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2020.

/s/ Ernst & Young LLP

Redwood City, California
February 24, 2021

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Terry Rosen, certify that:

1. I have reviewed this Form 10-K of Arcus Biosciences, Inc.;

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 24, 2021

By: /s/ Terry Rosen

Terry Rosen, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert C. Goeltz II, certify that:

1. I have reviewed this Form 10-K of Arcus Biosciences, Inc.;

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 24, 2021

By: /s/ Robert C. Goeltz II

Robert C. Goeltz II
Chief Financial Officer
(Principal Financial & Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Arcus Biosciences, Inc. (the "Company") on Form 10-K for the period ending December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I 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 Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: February 24, 2021

By: /s/ Terry Rosen

Terry Rosen, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Arcus Biosciences, Inc. (the "Company") on Form 10-K for the period ending December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I 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 Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: February 24, 2021

By: /s/ Robert C. Goeltz II

Robert C. Goeltz II
Chief Financial Officer
(Principal Financial & Accounting Officer)