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 No. 001-38959

BridgeBio Pharma, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**84-1850815**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
421 Kipling Street, Palo Alto, CA	**94301**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(650) 391-9740**

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $0.001 per share	BBIO	The Nasdaq Global Select Market

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 Section 15(d) of the Act. Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 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. 726(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 upon the closing price of the registrant's Common Stock on The Nasdaq Global Select Market on June 30, 2020 was approximately $1,694.0 million. Shares of the registrant's Common Stock held by each executive officer and director and by each other person who may be deemed an affiliate of the Registrant have been excluded from this computation. The determination of affiliate status for this purpose is not necessarily a conclusive determination for other purposes.

On February 19, 2021, there were 148,956,329 shares of the registrant's Common Stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant's definitive Proxy Statement to be issued in conjunction with the registrant's 2021 Annual Meeting of Stockholders, which is expected to be filed not later than 120 days after the registrant's fiscal year ended December 31, 2020, are incorporated by reference into Part III of this Annual Report. Except as expressly incorporated by reference, the registrant's Proxy Statement shall not be deemed to be a part of this Annual Report on Form 10-K.

BRIDGEBIO PHARMA, INC.
2020 Form 10-K Annual Report

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Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements involve substantial risks, uncertainties and assumptions. All statements in this Annual Report on Form 10-K, other than statements of historical fact, including, without limitation, statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, intentions, expectations, goals and objectives may be forward-looking statements. The words “anticipates,” “believes,” “could,” “designed,” “estimates,” “expects,” “goal,” “intends,” “may,” “objective,” “plans,” “projects,” “pursuing,” “will,” “would” and similar expressions (including the negatives thereof) are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The forward-looking statements in this report include, but are not limited to, statements about:

- the extent to which the coronavirus disease 2019, or COVID-19, pandemic and measures taken to contain its spread ultimately impact our business, including our clinical development and research activities;
- the success, cost and timing of our clinical development of our product candidates, including the progress of, and results from, our ongoing and planned Phase 3 clinical trials of acoramidis, our ongoing and planned Phase 2 and Phase 3 clinical trials of infigratinib, our planned clinical trial of BBP-631 and our ongoing Phase 2 clinical trial of encaleret, as well as the potential indications for each;
- potential adverse effects or changes to relationships with customers, employees, suppliers or other parties resulting from the completion of our acquisition of the shares of Eidos Therapeutics, Inc., or Eidos, common stock that we did not already own, or the Eidos Merger;
- pending and potential future complaints and legal proceedings relating to the Eidos Merger that have been and could be instituted against us, Eidos or our or their respective directors and officers, including the effects of any outcomes related thereto;
- possible disruptions from the Eidos Merger that could harm our or Eidos’ business, including current plans and operations;
- unexpected costs, charges or expenses resulting from the Eidos Merger;
- uncertainty of our and Eidos’ expected financial performance following completion of the Eidos Merger, including the possibility that the expected synergies and value creation from the merger will not be realized or will not be realized within the expected time period;
- our and Eidos’ ability to implement our respective business strategies following the Eidos Merger;
- our and Eidos’ ability to continue planned preclinical and clinical development of our respective development programs, and the timing, cost and success of any such continued preclinical and clinical development and planned regulatory submissions;
- our ability to initiate, recruit and enroll patients in and conduct our clinical trials at the pace that we project;
- the timing of our submissions to the U.S. Food and Drug Administration and any review or comments on data that we will need to generate to file our Investigational New Drug applications or New Drug Applications, including pending or new clinical hold notices;
- our plans to implement certain development strategies, including our ability to attract and retain potential collaborators with development, regulatory and commercialization expertise;
- our ability to obtain and maintain regulatory approval of our product candidates in any of the indications for which we plan to develop them, and any related restrictions, limitations or warnings in the label of any of our product candidates, if approved;

- our ability to compete with companies currently marketing approved treatments or engaged in the development of treatments that may become available for any of the indications that our product candidates are designed to target;
- our reliance on third parties to conduct our clinical trials and to manufacture drug substance for use in our clinical trials;
- our ability to contract with and the performance of our and our collaborators' third-party suppliers and manufacturers;
- the size and growth potential of the markets for acoramidis, low-dose infigratinib, BBP-631, encaleret and any of our current product candidates or other product candidates we may identify and pursue, and our ability to serve and our acceptance by those markets;
- our ability to identify and advance through clinical development any additional product candidates;
- the commercialization of our current product candidates and any other product candidates we may identify and pursue, if approved, including our ability to successfully build a specialty sales force and commercial infrastructure to market our current product candidates and any other product candidates we may identify and pursue;
- our ability to retain and recruit key scientific or management personnel;
- our ability to obtain and maintain adequate intellectual property rights for our product candidates and our ability to operate our business without infringing on the intellectual property rights of others;
- our expectations regarding government and third-party payor coverage and reimbursement;
- our estimates of our expenses, ongoing losses, capital requirements and our use of cash resources, and our needs for or ability to obtain additional financing to complete the clinical trials of any of our product candidates;
- the impact of laws and regulations in the United States and foreign countries;
- our financial performance; and
- developments and projections relating to our competitors or our industry.

We may not actually achieve the plans, intentions, expectations or objectives disclosed in our forward-looking statements and the assumptions underlying our forward-looking statements may prove incorrect. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Therefore, you should not place undue reliance on our forward-looking statements, and you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Actual results or events could differ materially from the plans, intentions, expectations and objectives disclosed in the forward-looking statements that we make. Important factors that we believe could cause actual results or events to differ materially from our forward-looking statements include, but are not limited to, those listed under "Risk Factors" in Item 1A of Part I, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II and elsewhere in this Annual Report on Form 10-K. Our forward-looking statements in this Annual Report on Form 10-K are based on current expectations as of the date hereof and we do not assume any obligation to update any forward-looking statements on account of new information, future events or otherwise, except as required by law.

RISK FACTOR SUMMARY

Below is a summary of the principal factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Annual Report on Form 10-K and our other filings with the U.S. Securities and Exchange Commission, or the SEC, before making investment decisions regarding our common stock.

- Our product candidates are in preclinical or clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We may not receive regulatory approval to market any of our product candidates in any jurisdictions, which would materially and adversely affect our business, prospects, operating results and financial condition.
- Our clinical trials may fail to demonstrate substantial evidence of the safety and efficacy of product candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory approval and commercialization.
- Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have not generated any revenue since inception, which, together with our limited operating history, may make it difficult for you to assess our future viability.
- We may encounter substantial delays in clinical trials for a variety of reasons, including difficulties in patient enrollment, and we may not be able to conduct or complete clinical trials on the expected timelines, if at all.
- Results of earlier studies or clinical trials may not be predictive of future clinical trial results, and initial studies or clinical trials may not establish an adequate safety or efficacy profile for our product candidates to justify proceeding to advanced clinical trials or an application for regulatory approval.
- Our product candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or halt their clinical development, prevent their regulatory approval, cause us to abandon a product candidate, limit their commercial potential, if approved, or result in other significant negative consequences to our business, prospects, operating results and financial condition.
- Certain of our product candidates under development for the treatment of patient populations with significant comorbidities that may result in deaths or serious adverse or unacceptable side effects and require us to abandon or limit our clinical development activities.
- Interim, "top-line," and preliminary data from our clinical trials that we announce or publish from time to time may change as more data become available, as additional analyses are conducted, or as audit and verification procedures are performed on such preliminary data.
- Our conduct of clinical trials for product candidates and our plans to commercialize certain product candidates outside the United States could expose us to additional risks and uncertainties, including with respect to our ability to obtain regulatory approvals or comply with applicable laws and regulations outside the United States.
- Even though we may apply for orphan drug designation for our product candidates, we may not be able to obtain orphan drug marketing exclusivity.
- Even if we obtain regulatory approval for a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant expense to maintain compliance with such obligations or as a result of any penalties to which we may become subject for any failure to comply with such obligations.
- Certain of our product candidates, including our protein therapeutic and gene therapy product candidates, are novel, complex and difficult to manufacture. We could experience manufacturing problems that delay our development or commercialization activities or otherwise harm our business.

  Certain of our product candidates are based on a novel adeno-associated virus, or AAV, gene therapy technology with which there is limited clinical or regulatory experience to date, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory approval.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

- Our future success depends on our ability to retain key employees, directors, consultants and advisors and to attract, retain and motivate qualified personnel.
- We will need substantial additional financing to develop our product candidates and implement our operating plans. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.
- We rely and will continue to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and for the manufacture of our product candidates for preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.
- Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by others, and the patent protection, prosecution and enforcement for some of our product candidates may be dependent on our licensors, the loss of which could result in the loss of intellectual property and other protection, and would harm our business.
- If we are unable to obtain and maintain sufficient intellectual property protection for our product candidates, including acoramidis, low-dose infigratinib, BBP-631 and encaleret, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize product candidates similar or identical to ours, and our ability to successfully commercialize our product candidates may be impaired.
- Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.
- Because we have multiple programs and product candidates in our development pipeline and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on development opportunities or product candidates that may be more profitable or for which there is a greater likelihood of success.
- We have incurred a significant amount of debt and may in the future incur additional indebtedness. Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.
- There is uncertainty regarding our and Eidos' expected financial performance following completion of our acquisition, including the possibility that the expected synergies and value creation from the merger following the acquisition will not be realized or will not be realized within the expected time period.
- The outbreak of the novel strain of coronavirus, SARS-CoV-2, which causes COVID-19, could adversely impact our business, including our clinical trials and preclinical studies.

PART I

ITEM 1. BUSINESS

Overview

We are a team of experienced drug discoverers, developers and innovators working to create life-altering medicines that target well-characterized genetic diseases at their source. We founded BridgeBio in 2015 to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. Our pipeline of over 30 development programs includes product candidates ranging from early discovery to late-stage development. We have filed New Drug Applications, or NDAs, with the U.S. Food and Drug Administration, or FDA, for two of our programs. Several of our programs target indications that we believe present the potential for our product candidates, if approved, to target portions of market opportunities of at least $1.0 billion in annual sales.

We focus on genetic diseases because they exist at the intersection of high unmet patient need and tractable biology. Our approach is to translate research pioneered at academic laboratories and leading medical institutions into products that we hope will ultimately reach patients. We are able to realize this opportunity through a confluence of scientific advances, including: (i) identification of the genetic underpinnings of disease as more cost-efficient genome and exome sequencing becomes available; (ii) progress in molecular biology; and (iii) the development and maturation of longitudinal data and retrospective studies that enable the linkage of genes to diseases. We believe that this early-stage innovation represents one of the greatest practical sources for new drug creation.

We believe we have developed a world-class drug engineering product platform that supports the continued growth of our company and the advancement of our pipeline. Leveraging our product platform, we have a goal of adding two to three programs to our pipeline each year going forward.

Our Platform

Our drug engineering platform is characterized by four stages: Discover, Create, Test and Deliver.

- **Discover**. We identify novel genetic disease targets and focus only on well-described diseases that can be targeted at their source. Our target identification engine is driven by three core areas of strength. We pair a systematic mapping of the 7,000 known genetic diseases with leading computational genomics and statistical genetics capabilities and partner with top academic institutions. We currently have over 15 academic partnerships. Our target identification process is overseen by an investment committee that is comprised of renowned leaders in cancer and rare disease drug development with proven track records.

- **Create.** We select the optimal therapeutic modality to target each disease at its source. We have industry-leading capabilities across four modalities: medicinal chemistry, therapeutic proteins, gene therapy and antisense oligonucleotides. We choose the treatment modality that we believe is best biologically suited to address the root cause of the disease. Our research leaders have a productive history of developing novel therapeutics. Together with the investment committee, the team has previously submitted over 100 Investigational New Drug applications, or INDs, and 20 NDAs, in aggregate.

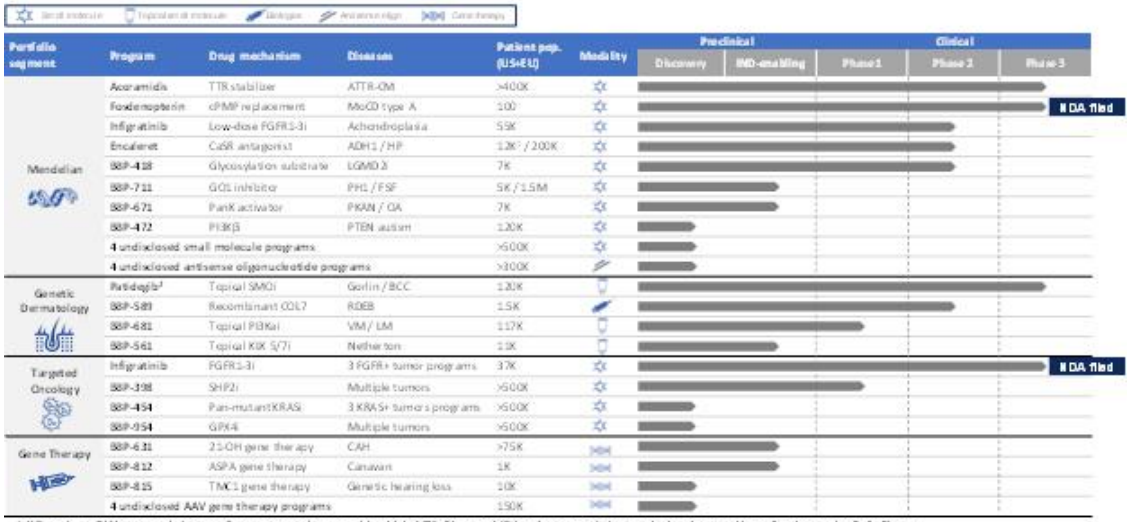
- **Test.** We have built a leading, global clinical development footprint. We have over 18 ongoing clinical trials across five different therapeutic areas, at over 400 trial sites in 26 countries. Across these trials, we have built a central information repository and operational toolkit for best practices for enrollment, protocol quality, site activation, contract research organization, or CRO, quality and regional performance. Our development is led by expert, dedicated teams in each therapeutic area who have the expertise to pursue unique and creative clinical and regulatory strategy.

- **Deliver**. We are building capabilities to deliver our potential products to patients across the globe. We intend to build global commercial infrastructure to leverage our drug and disease expertise, including diagnostic partnerships, disease awareness strategies and country-specific early access programs. We have already pursued commercial partners in strategic geographies for select programs.

We believe we have developed a world class drug engineering platform that is sustainable and scalable, and already producing results. The discovery platform has yielded over 30 programs in the pipeline. We have filed over 10 INDs since 2015 and are testing our product candidates in over 18 clinical trials across the globe.

Our Pipeline

Our pipeline includes over 30 development programs. The following table summarizes our development programs, their estimated patient populations, their therapeutic modalities and their development status:



1 US carriers; 2 We are party to an option agreement pursuant to which LEO Pharma A/S has been granted an exclusive, irrevocable option to acquire Pelle Pharma, including the BBP-009 program. If the option is exercised by LEO Pharma A/S, we will no longer have rights to develop and commercialize BBP-009.

Of our development programs, we believe the following, to which we refer as our core value drivers, have the greatest potential to drive significant near-term value for our company due to a combination of factors, including their stage of development, potential availability of expedited development pathways, degree of unmet medical need and potential market size in the applicable target indication:

- Acoramidis (also known as AG10 and BBP-265), a small molecule stabilizer of transthyretin, or TTR, that is in an ongoing Phase 3 clinical trial for the treatment of TTR amyloidosis-cardiomyopathy, or ATTR-CM.

- Low-dose infigratinib (also known as BBP-831), a small molecule selective FGFR1-3 inhibitor that is an ongoing Phase 2 clinical trial for the treatment of achondroplasia in pediatric patients.

- BBP-631, an AAV5 gene transfer product candidate for the treatment of congenital adrenal hyperplasia, or CAH, driven by 21-hydroxylase deficiency, or 21OHD, for which we anticipate initiating a first-in-human Phase 1/2 trial in the second half of 2021, with initial data anticipated in late 2021 or early 2022.

- Encaleret, a small molecule antagonist of the calcium sensing receptor, or CaSR, that is in an ongoing Phase 2 proof-of-concept clinical trial for Autosomal Dominant Hypocalcemia Type 1, or ADH1.

Acoramidis (Eidos): TTR Amyloidosis

Summary

We are developing acoramidis, also known as AG10 and BBP-265, an oral small molecule TTR, stabilizer, for the treatment of TTR amyloidosis, or ATTR. A Phase 3 clinical trial in patients with ATTR-CM, known as the ATTRibute-CM study, is currently ongoing. We anticipate reporting top-line 12-month 6-minute walking distance, or 6MWD, data from the ATTRibute-CM study in late 2021 or early 2022.

Disease Overview

ATTR is a disease caused by destabilization of TTR tetramers resulting in progressive amyloid deposition. TTR is a protein that occurs naturally in the form of a tetramer, which is a molecular structure consisting of four identical subunits, or monomers, and performs multiple physiologic roles, including the transport of essential hormones and vitamins. In ATTR, TTR tetramers become destabilized due to a mutation in the TTR gene or as part of the natural aging process. Destabilized TTR dissociates into monomers, self-aggregates and assembles into fibrils which are deposited, predominantly in the heart and nervous system, driving disease pathophysiology.

ATTR is commonly categorized by its genotypic cause and primary clinical manifestation: wild-type ATTR cardiomyopathy, or ATTRwt-CM, which results from an age-related process; variant ATTR cardiomyopathy, or ATTRv-CM; and ATTR polyneuropathy, or ATTR-PN, which is only associated with TTR variants. All three forms of the disease are progressive and fatal. ATTRwt-CM and ATTRv-CM patients generally present with symptoms later in life (older than 50) and have median life expectancies of three to five years from diagnosis if untreated. ATTR-PN presents either in a patient’s early 30s or later (older than 50), and results in a median life expectancy of five to ten years from diagnosis. Progression of all forms of the disease causes significant disability, impacts productivity and quality of life, and creates a significant economic burden due to the costs associated with patient need for supportive care. As the disease progresses, ATTRwt-CM and ATTRv-CM patients may require frequent hospitalizations and repeated interventions. ATTR-PN patients experience gradual loss of the ability to walk without assistance, and autonomic nervous system function affecting digestion and blood pressure.

The worldwide estimated prevalence of ATTRwt-CM, ATTRv-CM, and ATTR-PN is approximately 400,000, 40,000, and 10,000, respectively. However, we believe that the cardiomyopathic forms of the disease are significantly underdiagnosed. For example, recent literature has suggested that between 12% to 19% of patients diagnosed with heart failure with preserved ejection fraction may, in fact, have undiagnosed ATTR-CM. This single segment represents approximately half of the 6.0 million to 7.0 million estimated people with heart failure in the United States alone. With the increasing availability of disease-modifying therapeutics, disease awareness is heightened.

We believe the population of diagnosed ATTR-CM patients is also growing rapidly due to the shift to an accurate and reliable non-invasive diagnostic imaging technique. Historically, a heart biopsy was required to make a diagnosis of ATTR-CM. Recently, however, it has been shown that scintigraphy with technetium-labelled radiotracers is a highly accurate, non-invasive, and cost-effective method for ATTR-CM diagnosis. We believe that both increased disease awareness and availability of this non-invasive diagnostic imaging technique are allowing for earlier diagnosis of ATTR-CM patients and the identification of previously misdiagnosed patients.

Our Product Concept

Acoramidis is a clinical-stage, orally administered, small molecule TTR stabilizer being developed to treat ATTR at its source by reducing the level of amyloid formation through TTR stabilization. This has been shown in preclinical studies and clinical trials to prevent the dissociation of tetrameric TTR into monomers, and in preclinical studies, to reduce the rate of amyloid fibril formation. In addition, acoramidis has been shown to lead to increased circulating levels of tetrameric TTR. Acoramidis has been designed to bind TTR in a way that causes TTR’s conformational structure to mimic that of the well-characterized T119M variant, a naturally occurring rescue mutation that super stabilizes the TTR tetramer. The T119M variant has been observed to prevent the dissociation of

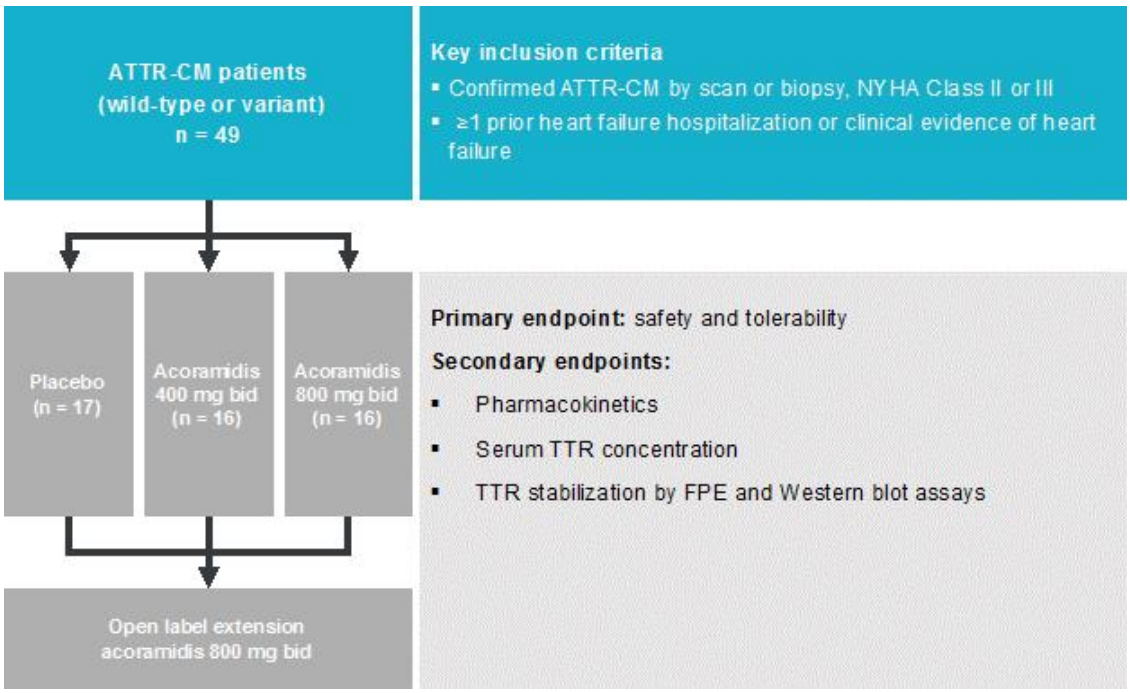
TTR tetramers into monomers; T119M tetramers dissociate 40-fold more slowly than wild-type tetramers in biochemical assays. Known as a trans-allelic trans-suppressor, individuals who coinherit the T119M rescue mutation along with a TTR-destabilizing mutation are protected against the development of ATTR.

In third-party clinical trials of tafamidis and diflunisal, interventional approaches that increased TTR stabilization led to improved outcomes in this disease and were correlated with increases in serum TTR. Further, based on genetic data, there is a correlation between the level of TTR stabilization, serum TTR levels and disease severity. As a result, we believe that serum TTR is a predictive biomarker for disease prognosis and that there may be a relationship between more effective TTR stabilization, serum TTR levels and improved clinical outcomes. Based on head-to-head preclinical data, we believe that acoramidis has the potential to stabilize TTR to a greater extent than other TTR stabilizers.

Clinical Data

Phase 2 Data

In April 2018, we initiated our Phase 2 randomized, placebo-controlled, dose-ranging clinical trial of acoramidis in 49 patients with symptomatic ATTR-CM, of which 14 had ATTRv-CM. Eligible patients were randomized in a 1:1:1 ratio to placebo or 400 mg or 800 mg of acoramidis twice daily. The primary objective of the trial was to evaluate the safety and tolerability of acoramidis administered to adult subjects with symptomatic ATTR-CM. The secondary objectives were to characterize the pharmacokinetics, or PK, of acoramidis in symptomatic ATTR-CM subjects and to describe the pharmacodynamics, or PD, properties of acoramidis, as well as the PK-PD relationship of acoramidis. The PD assessments of TTR stabilization were measured by fluorescent probe exclusion, Western blot and serum prealbumin (TTR). The trial design is depicted below:



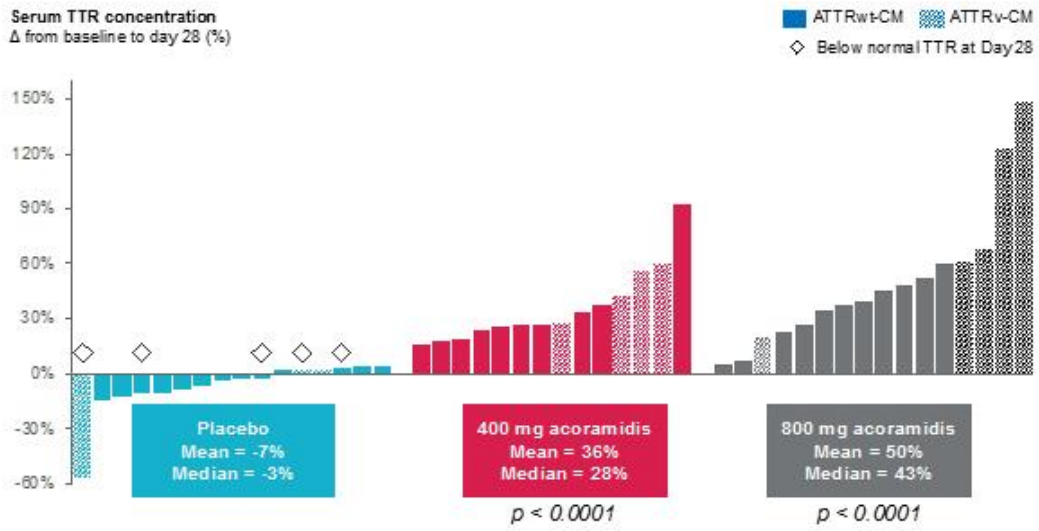
Enrolled symptomatic ATTR-CM subjects ranged in age from 60 to 86 years of age, with a mean age of 74.1, and 92% of subjects were male. In this trial, we enrolled subjects exclusively with advanced disease, with 29% of subjects presenting with New York Heart Association, or NYHA, Class III heart failure symptoms and a high baseline NT-proBNP with a mean of 3,368 pg/mL. Additionally, on average, subjects had relatively low TTR at baseline with a mean of 22.0 mg/dL. The laboratory reference range for serum TTR is 20 mg/dL to 40 mg/dL in healthy individuals. Both high NT-proBNP and low TTR are biomarkers of disease severity. The subject disposition and baseline characteristics are shown below.

Characteristic	Placebo (n = 17)	Acoramidis 400 mg (n = 16)	Acoramidis 800 mg (n = 16)	Total (n = 49)
Age, mean (range)	73.2 (60-5)	73.8 (60-83)	75.4 (67-86)	74.1 (60-86)
Male, n (%)	17 (100%)	14 (88%)	14 (88%)	45 (92%)
ATTRv-CM, n (%)	3 (18%)	6 (38%)	5 (31%)	14 (29%)
NYHA Class III, n (%)	5 (29%)	6 (38%)	3 (19%)	14 (29%)
Race, n (%)				
White	13 (76%)	10 (62%)	12 (75%)	35 (72%)
Black	3 (18%)	4 (25%)	3 (19%)	10 (20%)
Other	1 (6%)	2 (13%)	1 (6%)	4 (8%)
NT-proBNP (pg/mL)[1]	3151 ± 2705	3589 ± 3020	3377 ± 2806	3368 ± 2789
Troponin I (ng/mL)[2]	0.17 ± 0.30	0.22 ± 0.24	0.10 ± 0.06	0.16 ± 0.22
TTR (mg/dL)[3]	23.4 ± 5.5	23.2 ± 5.7	19.5 ± 4.2	22.0 ± 5.4

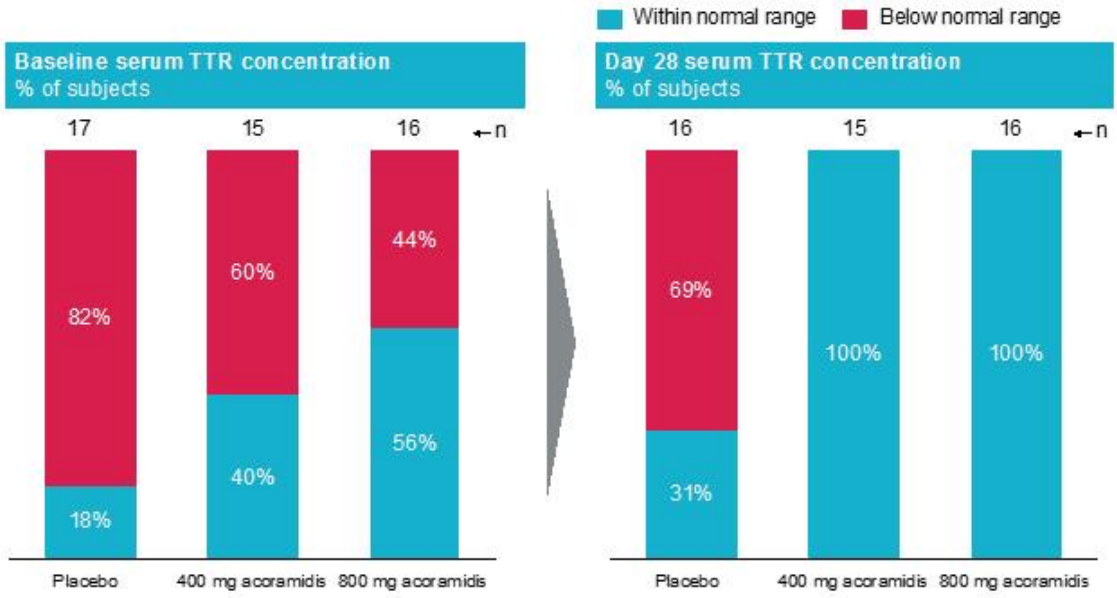
1 NT-proBNP normal range = 0 – 449 pg/mL; NT-proBNP = N-Terminal pro B-type Natriuretic Peptide
2 Troponin I normal range = 0 – 0.02 ng/mL
3 TTR normal range = 20 – 40 mg/dL

Overall, acoramidis was well-tolerated in symptomatic ATTR-CM subjects with no lab safety signals of potential clinical concern attributed to study drug. In this trial, 88% of subjects administered placebo experienced adverse events, or AEs, and 63% and 69% of subjects administered 400 mg and 800 mg acoramidis experienced AEs, respectively. In both the placebo and active treatment groups, most of the AEs were mild to moderate in severity. The most commonly observed AEs, occurring in four or more subjects across the treatment and placebo groups, were atrial fibrillation, constipation, diarrhea and muscle spasms. Three subjects reported serious adverse events, or SAEs, during this study. One placebo-treated subject experienced two SAEs, of atrial fibrillation and congestive heart failure and another placebo-treated subject experienced cellulitis in their lower extremity. One acoramidis treated subject experienced an SAE of shortness of breath on study, which was considered unlikely to be related to study drug.

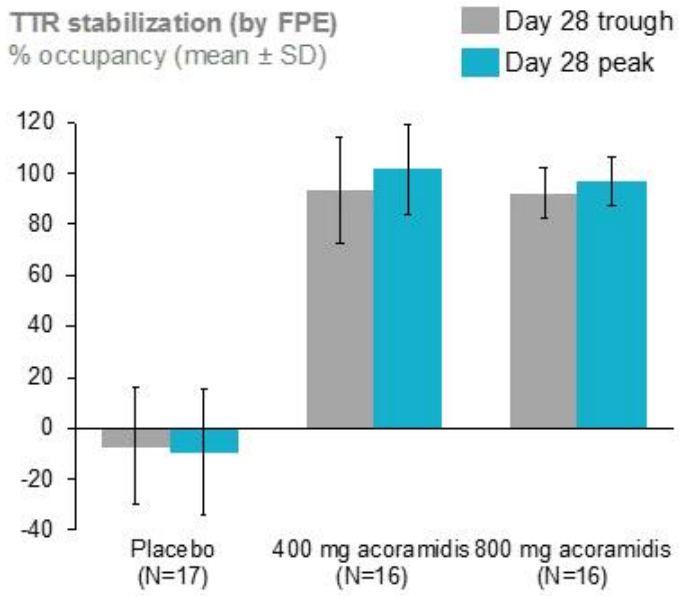
As shown in the chart below, subjects in the placebo group experienced a mean 7% reduction in the circulating tetrameric TTR concentrations compared to baseline. Conversely, subjects administered either 400 mg or 800 mg acoramidis showed a dose-dependent statistically significant mean increase in circulating TTR of 36% and 50%, respectively, compared to baseline. Compared to placebo, both the 400 mg and 800 mg acoramidis arms demonstrated statistically significant increases in mean circulating TTR ($p<0.0001$ for both arms). p-value is a statistical calculation that relates to the probability that the difference between groups happened by chance, with a p-value of less than 0.05 (*i.e.*, less than 5% probability that the difference happened by chance) generally being used as the threshold to indicate statistical significance. There was a greater observed treatment effect in subjects with variant ATTR-CM as compared to subjects with wild-type ATTR-CM, which we believe can be explained, in part, by the lower absolute serum TTR of variant ATTR-CM subjects at baseline.



The following chart shows that treatment with acoramidis restored serum TTR concentrations to within the normal range in all subjects at Day 28.



Ex vivo stabilization assays demonstrated near-complete TTR stabilization by acoramidis, with greater than 90% average tetramer stabilization across subjects treated with 400 mg and 800 mg acoramidis, as shown in the chart below. The stabilization response was consistent across variant and wild-type TTR carriers and replicates previously reported clinical and preclinical TTR stabilization data.

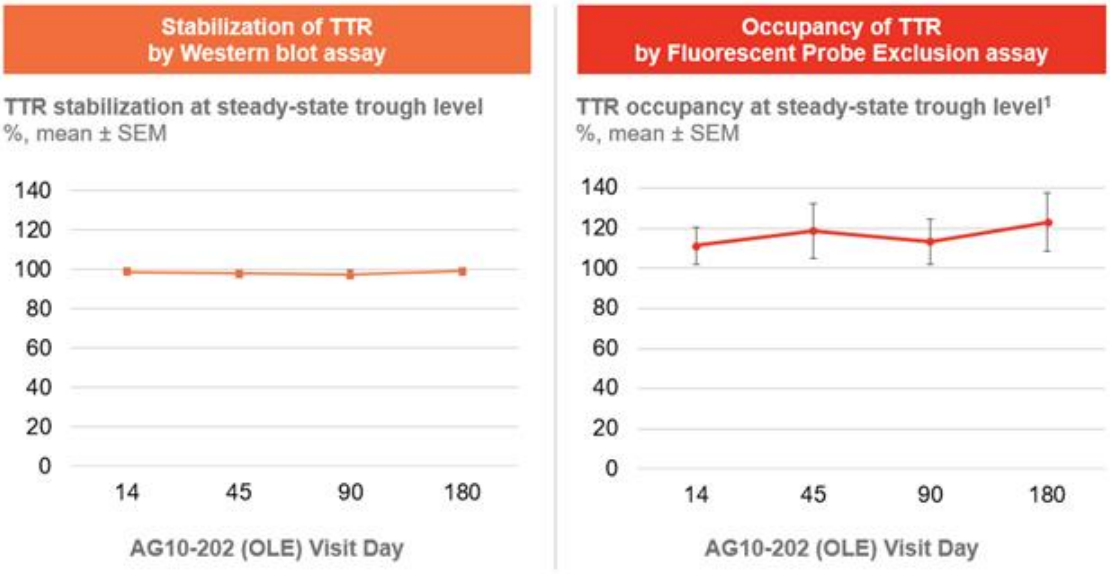


Interim analysis of the ongoing Phase 2 open-label extension, or OLE, study was completed on August 31, 2019 in conjunction with annual regulatory reporting and review, at which time 41 participants remained in the study. Three (6.4%) participants in the OLE had died, two due to disease progression and one due to cervical cancer. Three (6.4%) additional patients enrolled in the study had discontinued treatment, including one participant who underwent cardiac transplantation for their disease.

AEs reported in the OLE study were generally consistent with the underlying ATTR-CM disease state and no safety signals of potential clinical concern were associated with the administration of acoramidis in the study. Forty-six (97.9%) patients experienced a treatment-emergent AE reported during the study, with falls, congestive cardiac failure, dyspnea and acute kidney injury the most commonly reported AEs. Nineteen (40.4%) participants experienced a treatment-emergent SAE reported during the study, with congestive cardiac failure (10.6%) and acute kidney injury (8.5%) the most commonly reported SAEs.

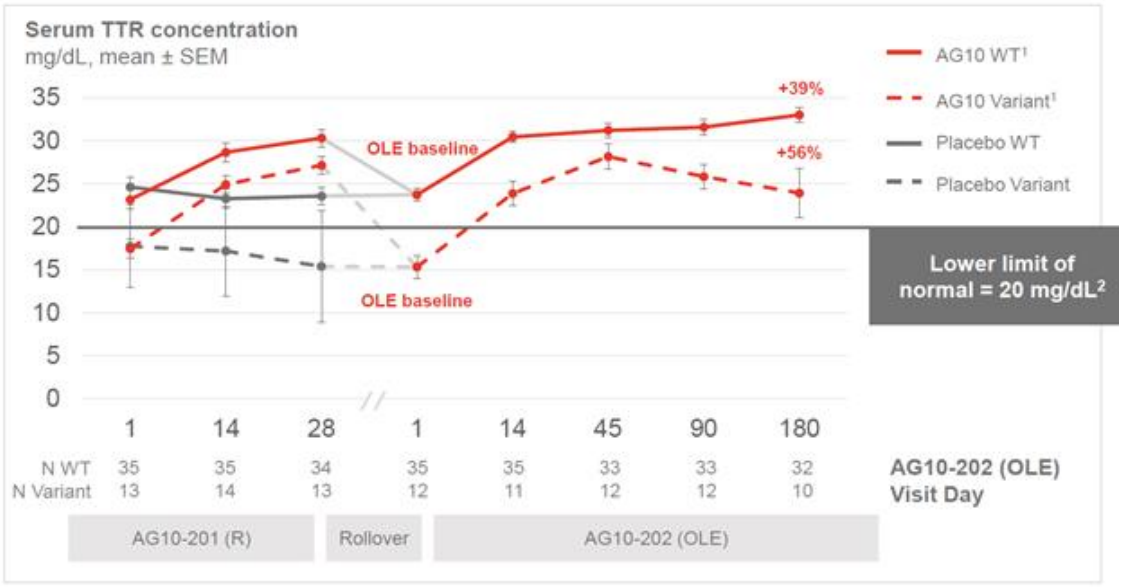
The rate of all-cause mortality (including either death or cardiac transplantation, 8.5%) and cardiovascular-related hospitalizations (25.5%) observed in an exploratory analysis of participants in this study following a median of 15 months since Phase 2 initiation were lower than those observed at 15 months in placebo-treated patients in the ATTR-ACT study (all-cause mortality including death or cardiac transplantation, 15.3%; cardiovascular-related hospitalizations, 41.8%).

Stabilization of TTR, as measured using established *ex vivo* assays, was maintained greater than 90% on average at all study visits in actively treated patients.



(1) Reported occupancy >100% caused by background protein fluorescence.

Mean serum TTR levels, a prognostic indicator of survival in a published cohort of wild-type ATTR-CM patients, were elevated upon acoramidis treatment and were maintained in the normal range throughout the study duration. Mean serum TTR levels were increased from baseline by 39% and 56% in wild-type and variant-carrying ATTR-CM patients, respectively, at OLE Visit Day 180.



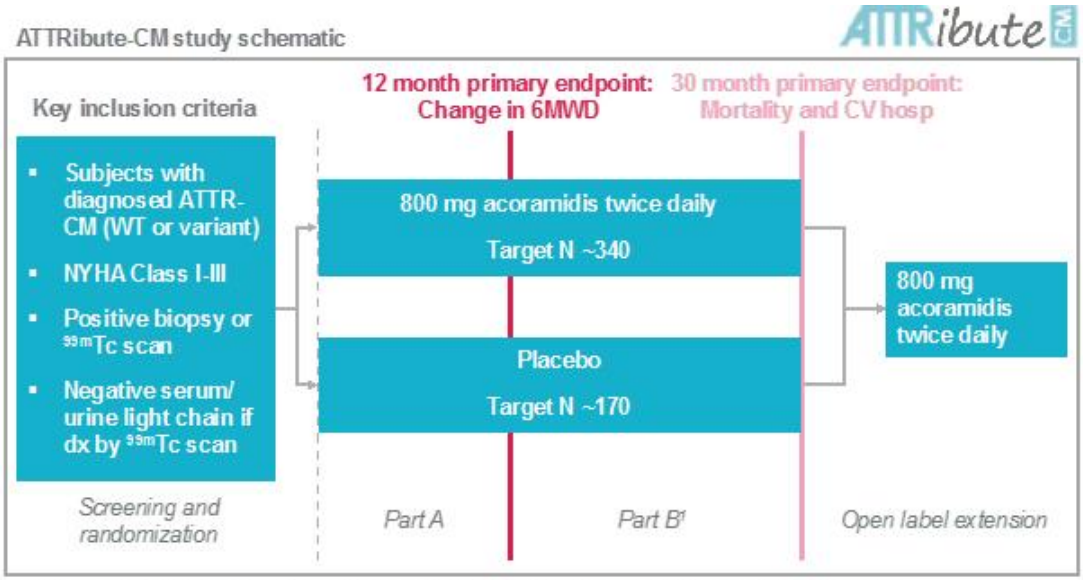
1 400mg and 800mg BID acoramidis groups pooled during randomized portion

2 Defined as the lower limit of the reference interval for the serum prealbumin (TTR) clinical laboratory assay

Cardiac biomarkers and echocardiographic parameters were stable during the OLE study. NT-proBNP and TnI were unchanged throughout the course of the study. Echocardiographic parameters, including left ventricular mass and left ventricular stroke volume index, were unchanged during the study.

Clinical Development Plan

We are conducting a randomized, global Phase 3 study of acoramidis in ATTR-CM patients, or ATTRibute-CM. ATTRibute-CM enrolled 632 subjects with symptomatic ATTR-CM, including both wild-type and variant TTR carriers with NYHA Class I-III symptoms. Subjects were randomized 2:1 between treatment (acoramidis 800 mg twice daily) and placebo. In Part A, change in 6MWD at 12 months will be compared between treatment and placebo groups as a potential registrational endpoint. We anticipate reporting 12-month 6MWD data from Part A of the Phase 3 ATTRibute-CM study in late 2021 or early 2022, and from Part B in 2023. If the change in 6MWD is highly statistically significant, we anticipate submitting an NDA for ATTR-CM in 2022. In Part B, the study will continue for a total duration of 30 months, at which point all-cause mortality and cardiovascular hospitalizations will be compared between treatment and control groups. A schematic of the trial is shown below:



Market Opportunity

We believe that the total market for ATTR therapeutic interventions will continue to grow for the foreseeable future as the population of diagnosed patients increases as a result of heightened disease awareness and the adoption of non-invasive diagnostic techniques. As such, if acoramidis is approved, we believe that there could be a significant population of newly diagnosed patients that can be treated with acoramidis who have not previously been treated with a disease-modifying therapy. If approved, we believe that acoramidis could have meaningful commercial potential. Further, we believe that acoramidis, if approved, has the potential to demonstrate benefit as a best-in-class stabilizer for the treatment of ATTR.

Competition

If acoramidis is approved as a treatment for ATTR-CM, we expect to face competition primarily from Vyndaqel / Vyndamax (tafamidis meglumine/tafamidis), which is approved in the United States, European Union and Japan as a treatment for ATTR-CM. Additionally, there are a number of RNAi, antisense oligonucleotide and gene editing product candidates that are currently in development as potential treatments for ATTR-CM.

Low-dose Infigratinib: Achondroplasia

Summary

We are developing low-dose infigratinib, an oral FGFR1-3 selective tyrosine kinase inhibitor, or TKI, for the treatment of achondroplasia. While we are also investigating infigratinib as a potential treatment for certain oncology indications, we are utilizing a significantly lower dose in children with achondroplasia than we are for our oncology programs. We are currently enrolling patients in PROPEL, a prospective observational study in children with achondroplasia and PROPEL 2, a Phase 2 dose-escalation and expansion study of infigratinib in children with achondroplasia. We anticipate that we will report initial data from PROPEL 2 in the second half of 2021.

Condition Overview

Achondroplasia is the most frequent cause of disproportionate short stature, and FGFR3 mutations have been shown to be the molecular source of the condition. Achondroplasia has a prevalence of greater than 55,000 in the United States and European Union, and an estimated worldwide incidence of one in 10,000 to 30,000 live births. The condition leads to a disproportionate short stature with anomalies in bone development and potential for foramen magnum stenosis, spinal stenosis, cardiovascular complications and obesity. The average height is approximately 4’4” for a male and 4’1” for a female with achondroplasia. Lifespan and intelligence are most often normal.

Achondroplasia is an autosomal dominant condition caused by a gain-of-function point mutation in the FGFR3 gene. Approximately 97% of cases are due to G380R substitution and 80% of cases are the result of *de novo* mutations. FGFR3 is expressed in osteoblasts and chondrocytes where it plays a critical role in regulating bone growth through the MAPK pathway, which drives hypertrophic differentiation, and through the STAT1 pathway, which drives chondrocyte proliferation. Apart from growth hormones, which are approved in Japan, we are not aware of any other medicines approved for marketing by the FDA or the European Medicines Agency, or the EMA, for the treatment of achondroplasia.

Our Product Concept

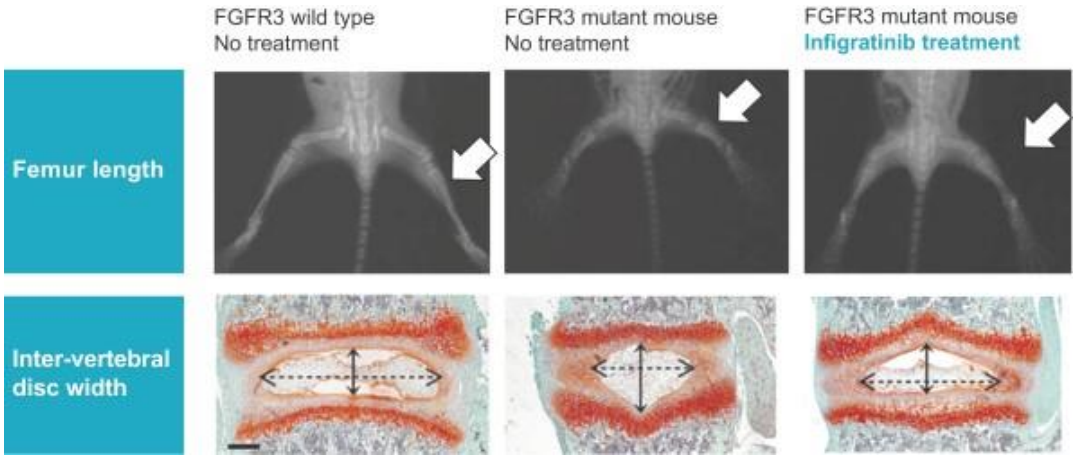
FGFR3 gain-of-function mutations are the driver behind the pathophysiology of achondroplasia. As an FGFR1-3 inhibitor, we believe that infigratinib has the potential to decrease pathologic signaling downstream of FGFR3 and treat achondroplasia at its source. Unlike potentially competitive CNP mimetic approaches, which only inhibit MAPK signaling, our approach also inhibits STAT1 signaling.

Preclinical proof-of-concept has been demonstrated in an achondroplasia mouse model at dose levels as low as 2% of those used in our oncology trials. In our Phase 1 dose escalation clinical trials of infigratinib, we saw acceptable tolerability, including no instances of hyperphosphatemia, at three to six times the expected dose level in our achondroplasia trials. Based on these results, we do not expect significant tolerability issues at the proposed dose level in the clinic.

Preclinical Data

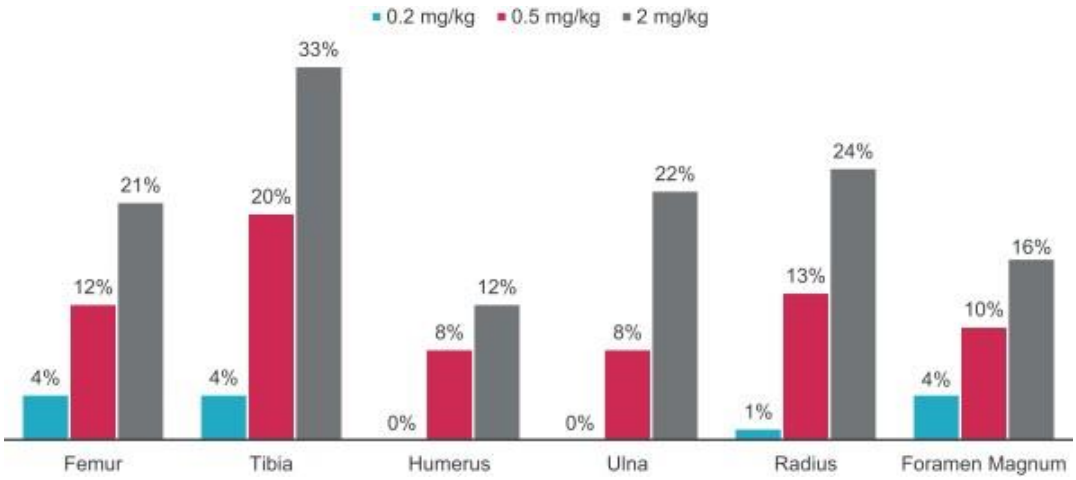
Infigratinib has been studied preclinically in a mouse model of achondroplasia that recapitulates anomalies of the growth plates, vertebrae, and intervertebral discs. Investigators observed that infigratinib rescued *ex vivo* bone growth of mutant mouse embryo femurs after six days of treatment. Further, 15 days of treatment showed *in vivo* bone growth, which mimics human achondroplasia in many respects. Effects on both appendicular and axial skeletal parameters were observed in this study.

Below are figures demonstrating the extent of femur growth and intervertebral disc width rescue in wild-type, untreated model, and infigratinib treated (2 mg/kg) model mice:



In vivo bone growth was further demonstrated at lower doses (0.2 mg/kg and 0.5 mg/kg) by the same laboratory. Together, preclinical studies at all doses have demonstrated meaningful increases in skeletal growth parameters between treated and untreated mutant mice, as follows:

lncrease in length compared to non-treated mouse (%)



Notably, treatment with infigratinib did not modify the expression of FGFR1 in the hypertrophic zone of the growth plate. The effects seen were mainly due to FGFR3 inhibition, with no other gross side effects being observed in these preclinical studies. Furthermore, survival was improved after 15 days in infigratinib treated mice, regardless of dose, as compared to untreated mice.

Clinical Development Plan

We are currently enrolling patients in PROPEL, a prospective observational study in children with achondroplasia. The study will establish annualized growth velocity, or AGV, for each child for a minimum period of six months. PROPEL is designed to provide baseline measurements for children that we anticipate enrolling in PROPEL 2, an ongoing Phase 2 study of low-dose infigratinib.

PROPEL 2 is designed as an open-label, dose-escalation and expansion trial in children with achondroplasia prior to growth plate closure. The primary objective of this study is to assess safety and tolerability in children with achondroplasia. Secondary objectives will include PK analyses, change in growth velocity, and assessment of quality of life. We anticipate that we will report initial data from PROPEL 2 in the second half of 2021.

Key Competitors

Infigratinib is the only oral direct FGFR1-3 inhibitor that has been publicly disclosed in development for the treatment of achondroplasia. There are four other identified companies developing compounds for the treatment of achondroplasia using alternative mechanistic approaches: BioMarin Pharmaceutical Inc. (vosoritide), Ascendis Pharma A/S (TransCon CNP), Pfizer Inc. (recifercept) and Sanofi S.A. (SAR442501).

BBP-631: Congenital Adrenal Hyperplasia

Summary

We are developing BBP-631, a preclinical AAV gene transfer product candidate, for the treatment of CAH, caused by 21OHD. BBP-631 was granted orphan drug designation from both the FDA for the treatment of congenital adrenal hyperplasia 21-hydroxylase deficiency and the EMA for the treatment of congenital adrenal hyperplasia in 2018. We anticipate initiating a Phase 1/2 first-in-human clinical trial of BBP-631 in the second half of 2021, with initial data from this study anticipated in late 2021 or early 2022.

Disease Overview

CAH is a debilitating and life-threatening disease with no available cure, despite newborn screening for the disease being conducted in every U.S. state. The disease is defined by an inability to produce cortisol and aldosterone, and an excess production of testosterone. Lack of cortisol disrupts glucose metabolism and the body’s normal response to stress, leading to potentially fatal adrenal crises, while lack of aldosterone disrupts sodium retention, resulting in low blood pressure, arrhythmia and dehydration. Additionally, excess testosterone causes virilization in females, often leading to ambiguous genitalia and masculinizing features at birth. Hormonal changes during puberty compound the CAH deficiencies. Females often suffer from limited fertility and require intensive treatment before, during and after pregnancy, and up to 40% of adult males will have adrenal rest tumors that can lead to gonadal dysfunction and infertility, occasionally requiring surgery.

Over 90% of CAH cases are caused by 21OHD, a genetic defect in the CYP21A2 gene coding for the enzyme 21OH. Mutations resulting in loss of enzymatic activity of 21OH prevent conversion of progesterone into 11-deoxycorticosterone and 17-hydroxyprogesterone (17OHP) into 11-deoxycortisol, which are the precursors to aldosterone and cortisol, respectively.

CAH patients with 21OHD can be divided into two categories depending on the type of genetic mutation: classic and non-classic. We are primarily focused on treating classic patients, who have the more severe phenotype and that can be categorized into simple virilizing (approximately 25% of patients) and salt-wasting (approximately 75%) by the severity of aldosterone deficiency and level of residual 21OH enzyme activity. Patients with the salt-wasting form of disease have residual enzyme activity of 0% to 1% of normal and patients with the simple virilizing phenotype have 1% to 10% enzyme activity. All patients with the classic form require treatment at birth, as cortisol deficiency can lead to adrenal crisis as early as one to four weeks of life and can quickly lead to death. The salt-wasting form has an incidence of one in 20,000 births, while the simple virilizing form has an incidence of one in 60,000 births. Together, these translate to an estimated 600 classic patients born in the United States and Europe per year. We estimate there are more than 75,000 patients in the United States and Europe in the total addressable patient population.

Current standard of care treatments do not cure patients, but replace missing glucocorticoids, such as cortisol, and mineralocorticoids, such as aldosterone, as well as reduce excessive androgen secretion. Although glucocorticoids are the mainstay of CAH therapy, individuals respond in varying ways, and chronic use of glucocorticoids in children and adults requires careful management because of the well-known side effects of these drugs, such as Cushingoid features, metabolic disease, obesity, hypertension, growth retardation, glucose intolerance, electrolyte disturbance, bone demineralization/increased risk of fracture and delayed puberty. Clinical management of classic CAH is often a very difficult balance between hyperandrogenism and hypercortisolism.

Our Product Concept

BBP-631 is a preclinical intravenously administered AAV5 gene transfer product candidate designed for the treatment of CAH due to 21OHD by replacing the 21OH enzyme in the adrenal cortex. Replacement of enzyme function has the potential to normalize flux through the pathway, simultaneously addressing the lack of cortisol and aldosterone, as well as the excess of testosterone and other androgens. Genotype-phenotype correlation studies in CAH suggest that non-classic patients, who are often asymptomatic and do not require treatment, have enzyme activity that is a little as 10% to 20% of normal individuals. We believe that an AAV gene therapy may be able to restore this level of enzymatic activity in CAH patients with both simple virilizing and salt-wasting forms of disease, providing substantial clinical impact and potentially eliminating the need for treatment with exogenous steroids. BBP-631 was granted both FDA and EMA orphan drug designation in 2018 for the treatment of CAH caused by 21OHD.

Preclinical Data

Initial preclinical activity was explored in a Cyp21 knockout mouse model using AAVrh10. An intravenous, or IV, injection of vector genomes was observed to improve multiple disease-related factors over a 15-week duration window, including an increase in body weight, a decrease in urinary progesterone (the main substrate of 21OH), and an increase in renin expression (signaling an increased capacity for salt retention).

A study in non-human primates, or NHP, comparing evaluated AAV serotypes 1, 5 and 6 identified AAV5 as the optimum serotype. We observed significant transfection in the adrenals where 21OH is synthesized. Additionally, AAV5 has relatively low seroprevalence in the human population, which may limit potential immunogenicity issues.

We have completed two sets of NHP studies designed to evaluate durability of expression, dosing/transgene expression relationships and preliminary safety. In the first set of experiments, which evaluated a lower dose of 3x10 12 vector genomes per kilogram, we observed sustained increases in Cyp21 mRNA levels up to six months out. We did not observe rapid decreases in vector genome counts and mRNA levels due to adrenal cell turnover between 1.5 and six months, providing preliminary support for sustained transgene expression.

In a second set of experiments, a total of 20 NHPs were treated with BBP-631 at one of three IV doses. Vector copy number and transgene mRNA expression in the adrenal glands were analyzed at four and 12 weeks post-dosing in the low- and medium-dose arms, and at 12 and 24 weeks post-dosing in the high-dose arm. No dose-related AEs were observed at any of the doses tested at any time point.

Overall, treatment with BBP-631 resulted in high vector copy number, or VCN, and mRNA expression in the adrenal gland, suggesting strong tropism and uptake of BBP-631 for the adrenal gland. In the high-dose arm, VCNs were maintained between 12 and 24 weeks. Furthermore, mRNA levels increased between 4 and 12 weeks for the medium dose arm and were consistent between 12 and 24 weeks for the high dose arm. Researchers also saw dose-dependent increases in both VCNs and mRNA levels across the three doses tested.

Key Competitors

There are two alternative therapeutic classes being investigated for treatment of CAH. The first are corticotropin-releasing factor type 1, or CRF1, receptor antagonists. CRF1 receptor antagonists regulate the release of adrenocorticotropic hormone, or ACTH, from the pituitary gland, which stimulates androgen and cortisol synthesis in the adrenal gland. In healthy individuals, endogenous cortisol provides negative feedback to the release of ACTH, which keeps androgen synthesis well regulated. Because this negative feedback is severely impaired in CAH patients, supraphysiologic doses of exogenous steroids are required to normalize androgen synthesis in these patients. While CRF1 receptor antagonists may regulate androgen synthesis, they do not address the lack of cortisol or aldosterone production in these patients. Therefore, steroid supplementation is still required with CRF1 receptor antagonists. Two CRF receptor antagonists, Crinecerfont (under development by Neurocrine Biosciences, Inc.) and Tildacerfont (under development by Spruce Biosciences, Inc.), are currently in Phase 3 and Phase 2b clinical trials, respectively.

The second alternative therapeutic class is ACTH receptor antagonists. Inhibition of this pathway, which is downstream of the CRF1 pathway, also results in inhibition of androgen and cortisol synthesis in the adrenal gland. However, like CRF1 receptor antagonists, ACTH inhibitors do not address the lack of cortisol or aldosterone production in these patients. CRN04904, an oral ACTH antagonist, is currently in Phase 1 clinical development by Crinetics Pharmaceuticals, Inc.

While these alternative therapeutic mechanisms attempt to address meaningful aspects of the disease by potentially reducing the need for exogenous steroids, neither is able to address the disease at its source by targeting the complete set of features that define the disease. In particular, these mechanisms cannot obviate the need to administer steroids because they do not address the body's inability to synthesize cortisol and aldosterone. In contrast, we believe enzymatic replacement by gene therapy has the potential to simultaneously address all facets of the disease by restoring proper flux through the hormonal pathways, reducing androgen production by providing alternative pathways for the precursor molecules to be converted into cortisol or aldosterone.

Encaleret: Autosomal Dominant Hypocalcemia Type 1 and Hypoparathyroidism

Encaleret is an oral small molecule antagonist of the calcium sensing receptor, or CaSR, that we are developing for the treatment of Autosomal Dominant Hypocalcemia Type 1, or ADH1. We are currently studying encaleret in an ongoing Phase 2b clinical trial as a potential treatment for patients with ADH1, and anticipate reporting early results from this study in the first half of 2021. Encaleret has been granted orphan drug designation as a treatment for autosomal dominant hypocalcemia, including ADH Type 1 and ADH Type 2.

Hypoparathyroidism, or HP, is a disease in which the parathyroid gland secretes no or abnormally low levels of parathyroid hormone, or PTH, which results in hypocalcemia. Common presenting symptoms of hypoparathyroidism, related to hypocalcemia, including muscle cramps, carpopedal spasms, tingling and seizures. ADH1 is a rare, genetic form of HP caused by gain-of-function mutations of the CaSR, and which is characterized by increased sensitivity of the CaSR to calcium level. Symptoms due to hypocalcemia can be more severe than in other forms of HP, and include severe muscle cramping, seizures and kidney damage resulting from hypercalcuria. ADH1 has a prevalence of approximately 12,000 variant carriers in the United States. Chronic hypoparathyroidism has a larger estimated prevalence of approximately 200,000 in the United States and the European Union. No FDA or EMA approved therapies for ADH1 currently exist, although hypocalcemia is typically managed with calcium and activated vitamin D supplementation. Natpara (parathyroid hormone) was approved by the FDA in 2015 as an adjunct to calcium and vitamin D to control hypocalcemia in patients with hypoparathyroidism, and has a labeled limitation of its use in patients with ADH1.

Our Product Concept

Encaleret is an investigational small molecule antagonist of the CaSR. It has been studied in more than 1,200 human subjects and was observed to increase serum calcium in a dose-dependent manner. The rationale for developing encaleret as a potential treatment for patients with ADH1 is based on both non-clinical and clinical evidence. Antagonists of the CaSR have been shown, in both *in vitro* and *in vivo* models, to shift the aberrant CaSR "set-point" back towards a normal IC_{50} for calcium, resulting in increased PTH secretion, elevation of blood calcium concentrations, and reduction of urinary calcium excretion in cellular and animal models of ADH1. By selectively antagonizing the CaSR, encaleret may restore normal CaSR function in individuals with ADH1 and may address symptoms associated with hypocalcemia and hypercalciuria.

Clinical Development Plan

We have initiated a single-center Phase 2b study investigating encaleret in ADH1 at the National Institutes of Health. We anticipate reporting early results from this study in the first half of 2021.

Competitors

Encaleret is the only molecule that has been publicly disclosed in development for the treatment of ADH1. There are other identified companies developing compounds for the treatment of hypoparathyroidism using

recombinant parathyroid hormone analogs or PTH receptor agonists: Takeda Pharmaceutical Company (Natpara), Ascendis Pharma A/S (TransCon PTH), Amolyt Pharma (AZP-3601), Chugai Pharmaceutical Company (PCO371), and Extend Biosciences Inc. (EXT607).

OTHER DEVELOPMENT PROGRAMS

MENDELIAN PORTFOLIO

Fosdenopterin: MoCD Type A

We are developing fosdenopterin, an IV formulation of synthetic cyclic pyranopterin monophosphate, or cPMP, for the treatment of molybdenum cofactor deficiency, or MoCD, Type A. Fosdenopterin received breakthrough therapy designation from the FDA in 2013 for MoCD, orphan drug designation from the FDA in 2009 and EMA in 2010 for the treatment of MoCD Type A, and rare pediatric disease designation for the treatment of MoCD Type A in June 2017. We filed an NDA for fosdenopterin with the FDA in 2020, which has been granted Priority Review designation.

MoCD Type A is an ultra-rare autosomal recessive inborn error of metabolism caused by disruption in molybdenum cofactor, or MoCo, biosynthesis which results in deficiencies in multiple enzyme activities, including sulfite oxidase, or SOX, and leads to uncontrolled sulfite toxicity in the brain. The disease typically presents very early in life, with median presentation at first day of life. The disease is characterized by severe and rapidly progressive acute sulfite-related neurological damage and associated heterogeneous neurological sequelae including seizures, feeding difficulties and in most cases death, with the median survival estimated to be approximately three years. Incidence is estimated to be one in 100,000 to 200,000 live births worldwide, with MoCD Type A accounting for approximately two-thirds of all cases. There are no available treatments approved for any form of MoCD. Supportive care and anti-convulsant therapy may be used to manage symptoms.

BBP-671: PKAN and Organic Acidemias

BBP-671 is an oral, small molecule, allosteric activator of pantothenate kinases that we are developing for the treatment of Pantothenate Kinase Associated Neurodegeneration, or PKAN, and Organic Acidemias, or OAs. BBP-671 is currently in preclinical development. BBP-671 has received orphan drug designation as a treatment of proprionic acidemia, or PA, and as a treatment of PKAN. BBP-671 was also designated as a drug for a rare pediatric disease for treatment of both PKAN and PA.

PKAN is a rare genetic disorder with progressive neurodegeneration. Early onset patients typically demonstrate motor deficits with possible visual problems from retinal degeneration within six years of age. Later onset disease is heterogeneous, with psychiatric symptoms and progressive parkinsonism developing in late childhood to adulthood. The prevalence of PKAN is approximately one in 1,000,000, with between 800 to 850 patients in the United States and the European Union. There are currently no approved treatments for PKAN.

OAs are caused by mutations in enzymes that disrupt amino acid metabolism leading to acute decompensations requiring hospitalization, as well as long-term complications involving multiple organ systems, such as the heart, pancreas, kidney, liver and brain. The incidence of OAs is approximately five in 100,000 births. The standard of care includes dietary restriction and supplementation, but unmet need remains high due to metabolic decompensations and long-term complications.

BBP-711: Primary Hyperoxaluria and Frequent Stone Formers

BBP-711 is an oral, small molecule inhibitor of glycolate oxidase, or GO, that we are developing for the treatment of primary hyperoxaluria and patients who experience frequent kidney stone formation. BBP-711 is currently in preclinical development. BBP-711 has received orphan drug designation from the FDA as a treatment of primary hyperoxaluria type 1, or PH1. BBP-711 has also been designated as a drug for a rare pediatric disease for treatment of PH1.

PH1 is a rare, autosomal-recessive inborn error of metabolism driven by a defect in the AGXT gene, which codes for the enzyme alanine-glyoxylate aminotransferase, or AGXT. Deficiencies in the AGXT enzyme translate into the incapacity of PH1 patients to detoxify glyoxylate into glycine. As a result, glyoxylate is oxidized into oxalate, which cannot be metabolized by humans. Elevated oxalate levels form calcium oxalate crystals, and

subsequently kidney stones, which damage the kidneys, culminating in renal dysfunction.Prevalence for PH1 is estimated to be 5,000 patients in the United States and the European Union. Due to heterogeneous symptom presentation and similarity with other diseases, we believe that the disease is underdiagnosed. Prevalence for frequent stone formers is estimated to be 1.5 million in the United States and the European Union. Standard of care involves symptomatic management through supplementation with vitamin B6, increased fluid intake, and citrate, to intensive dialysis and lithotripsy. Ultimately, the only curative treatment is a combined liver and kidney transplant.

BBP-418: Limb Girdle Muscular Dystrophy Type 2i

BBP-418 is an orally administered ribitol replacement therapy we are developing for the treatment of Limb Girdle Muscular Dystrophy type 2i, or LGDM2i. We are currently studying BBP-418 in an ongoing Phase 1 clinical trial. Subject to successful completion of the Phase 1 clinical trial, we anticipate initiating a Phase 2 clinical trial in 2021 and generating top-line data from this clinical trial in 2022.

LGMD2i is an inherited rare progressive genetic disorder characterized by lower-limb weakness and loss of ambulation, in addition to potential pulmonary and cardiac dysfunction. LGMD2i has an estimated prevalence of around 4.5 per 1,000,000. There is no disease-modifying treatment available. Standard of care for fukutin-related protein gene dystroglycanopathies is supportive care to alleviate end organ dysfunction.

BBP-472: PI3KB Inhibitor for Autism-Spectrum Disorder Characterized by Loss of PTEN Protein

BBP-472 is a series of small molecule PI3KB inhibitors being designed to balance kinase signaling in the brain for the treatment of children with autism-spectrum disorders characterized by loss of the PTEN protein. BBP-472 is currently in preclinical development.

GENETIC DERMATOLOGY

BBP-009/Patidegib (PellePharm): Gorlin Syndrome and High Frequency Basal Cell Carcinoma

BBP-009 is a topical gel formulation of patidegib, a hedgehog inhibitor, that we are developing for the treatment of Gorlin Syndrome and High-Frequency Basal Cell Carcinoma, or HF-BCC. We are currently conducting a Phase 3 clinical trial of BBP-009 in Gorlin Syndrome and a Phase 2b clinical trial of BBP-009 in HF-BCC. We have received breakthrough therapy designation from the FDA, as well as orphan drug designation from both the FDA and EMA, for BBP-009 for the treatment of Gorlin Syndrome.

In November 2018, through our investment in PellePharm, Inc., or PellePharm, we entered into a partnership with LEO Pharma A/S, or LEO, pursuant to which LEO has acquired a minority stake in PellePharm and has agreed to provide additional non-dilutive capital to fund the development of topical patidegib, including our planned Phase 3 clinical trial. LEO also acquired an option to purchase all shares in PellePharm at a later date. See “—Our Material Agreements—BBP-009 (Patidegib): Option Agreement with LEO Pharma A/S.”

BBP-589/PTR-01: Recessive Dystrophic Epidermolysis Bullosa

We are developing BBP-589, an IV-administered recombinant collagen type VII, or rC7, protein replacement therapy, for the treatment of recessive dystrophic epidermolysis bullosa, or RDEB. BBP-589 received orphan drug designation from the FDA and EMA in 2014 for the treatment of dystrophic epidermolysis bullosa, or DEB, and we received fast track designation from the FDA in 2019 for the treatment of DEB.

We have completed enrollment in both a Phase 1/2 clinical trial and a Phase 2 clinical trial in patients with RDEB. We anticipate that we will provide data from the ongoing Phase 2 study in late 2021 or early 2022.

BBP-681: Venous and Lymphatic Malformations

BBP-681 is a transdermal PI3K inhibitor that we are developing for the treatment of cutaneous venous and lymphatic malformations. We are currently studying BBP-681 in an ongoing Phase 1/2 clinical trial and anticipate providing initial data from this study in 2022.

Venous malformations, or VMs, are large, disorganized veins that can cause significant morbidity due to functional impairment, pain, bleeding and disfigurement. Lymphatic malformations, or LMs, involve the lymphatic vessels and cause functional impairment and pain similar to VM, lymphatic leakage and disfigurement. The prevalence of VMs and LMs is greater than 75,000 and 42,000, respectively, in the United States and the European Union in the skin. Standard of care is generally non-disease-modifying and invasive and ranges from compression bandages and aspirin, to laser ablation, surgical resection and sclerotherapy.

BBP-561: Netherton Syndrome

BBP-561 is a topical KLK5/7 inhibitor that we are developing for the treatment of Netherton Syndrome. BBP-561 is currently in preclinical development.

Netherton Syndrome is a devastating genetic disease characterized by skin breakdown complicated by risk of sepsis, severe malnutrition, and dehydration in affected neonates. It can additionally lead to chronic problems including allergy, infection and inflammation. The prevalence is approximately 4,000 to 17,000 patients in the United States and the European Union. No disease-modifying therapy exists. Palliative and preventative treatments are used to manage symptoms.

TARGETED ONCOLOGY

Infigratinib: FGFR-Driven Cancers

We are developing infigratinib, an oral FGFR1-3 selective TKI for the treatment of FGFR-driven cancers. Specifically, we are developing infigratinib in three oncologic indications: (i) cholangiocarcinoma, or CCA, or bile duct cancer, with FGFR2 fusions or translocations, (ii) urothelial carcinoma, or UC, with FGFR genomic alterations, and (iii) other cancers with FGFR fusions or translocations.

We filed an NDA with the FDA in late 2020 for infigratinib as a second-line or later therapy in patients with advanced and/or metastatic CCA with FGFR2 fusions or translocations. The FDA has granted our NDA for infigratinib in cholangiocarcinoma Priority Review designation and it is being reviewed under the Real-Time Oncology Review, or RTOR, pilot program, which is an initiative of the FDA's Oncology Center of Excellence designed to expedite the delivery of safe and effective cancer treatments to patients. We are studying infigratinib as a potential treatment for FGFR-driven cancers in multiple ongoing clinical trials:

- a Phase 3 randomized, open-label clinical trial of infigratinib as a first-line therapy for CCA compared to gemcitabine and cisplatin in advanced and/or metastatic CCA with FGFR2 fusions or translocations;
- a Phase 2 single-arm clinical trial in patients with advanced or metastatic cholangiocarcinoma with FGFR alterations;
- a Phase 3 randomized, double-blind, placebo-controlled clinical trial in cisplatin-ineligible adjuvant UC with FGFR3 genomic alterations; and
- a Phase 2 single-arm clinical trial in patients with advanced or metastatic solid tumors harboring FGFR1-3 gene fusions or genetic alterations.

We received Fast Track Designation in adults with first-line advanced or metastatic cholangiocarcinoma and the FDA and EMA have granted orphan drug designation for infigratinib as a treatment of cholangiocarcinoma.

BBP-398: Targeting Multiple Oncology Indications

BBP-398 is a small molecule inhibitor of SHP2 that we are developing as a potential treatment of cancers driven by hyperactive receptor tyrosine kinase, or RTK, or MAPK signaling. We are currently enrolling patients in a Phase 1 dose escalation and expansion clinical trial in patients with RAS and RTK mutations.

SHP2 is a phosphatase that acts downstream of receptor tyrosine kinases in the MAPK signaling pathway. SHP2 is critical in signaling in these pathways. Increased MAPK signaling is a hallmark of a number of cancer types, including cancers driven by RTK genetic alterations, cancers with RTK fusion mutations, and cancers with constitutively active MAPK signaling. Additionally, SHP2 is implicated as a downstream mediator of PD-1 signaling, a key target of immuno-oncology treatment.

BBP-954: Multiple Oncology Indications

BBP-954 is a preclinical discovery program for irreversible inhibitors of glutathione peroxidase 4, or GPX4, for the treatment of solid and hematological cancers.

Ferroptosis is a form of oxidative programmed cell death that cancer cells must avoid in order to survive and form tumors. GPX4 is an enzyme that protects cancer cells from ferroptosis by neutralizing toxic lipid free radicals. By inhibiting GPX4, we aim to trigger ferroptosis in cancer cells. Preclinical data generated by us and third parties suggest many of the most common cancers are sensitive to GPX4 inhibition, both in monotherapy and combination with standard anti-cancer agents such as kinase inhibitors and chemotherapy. We believe that GPX4 may be potentially applicable to a number of common solid and hematologic cancers, including non-small cell lung cancer, breast cancer, melanoma, pancreatic adenocarcinoma, renal cell carcinoma and Non-Hodgkin's lymphoma, among others.

BBP-454: KRAS-Driven Cancers

BBP-454 is a preclinical development program focused on approaches to inhibit KRAS through novel selective mechanisms, for the treatment of KRAS-driven cancers.

KRAS is a member of the RAS family of oncogenes, which also includes HRAS and NRAS, and together comprises some of the most well-known monogenic drivers of cancer. Mutations in NRAS are frequently found in leukemia and melanoma, while HRAS is frequently mutated in bladder, thyroid, and head and neck squamous cell carcinoma. KRAS mutations are a frequent driver of a number of the largest cancer indications with high unmet medical need, including 30% of non-small cell lung cancers, 98% of pancreatic adenocarcinomas and 45% of colorectal adenocarcinomas. The most common KRAS mutations involve a change from glycine at position 12 in the protein to aspartic acid (G12D, 36% of all KRAS mutations), valine (G12V, 24%), and cysteine (G12C, 15%), but also include mutations at glycine 13 and glutamine 61. In aggregate, over 500,000 patients in the United States and Europe are diagnosed with KRAS-driven cancers, annually.

KRAS-mutant cancers are driven by active, GTP-bound KRAS located at the cell membrane. We are developing multiple strategies that target KRAS through novel, mutation-agnostic mechanisms. We anticipate nominating our first development candidate from this discovery program in 2022.

GENE THERAPY

BBP-812: Canavan Disease

BBP-812 is an AAV gene therapy product candidate that we are developing for the treatment of Canavan Disease that is designed to deliver the ASPA gene, which is defective in patients with Canavan disease. BBP-812 is currently in preclinical development.

Canavan Disease is a fatal, progressive neurodegenerative disorder that begins in infancy. The disease is a leukodystrophy, caused by degradation of white matter in the brain. Patients typically miss developmental milestones, have a rapidly increasing head circumference, progressive lack of motor control, and often do not live past their mid-teens. The incidence of Canavan Disease is approximately one in 100,000 births worldwide. No treatments are approved for Canavan Disease; care is focused on symptom management.

BBP-815: TMC1-related Hearing Loss

BBP-815 is an AAV gene therapy product candidate that we are developing for the treatment for nonsyndromic hearing loss caused by recessive mutations in the TMC1 gene. Mutations in the TMC1 gene prevent sound from eliciting the appropriate electrical response in the hair cells, resulting in moderate to severe hearing loss, often present early in life. BBP-815 is currently in preclinical development.

Additional Program-Related Information

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently depend on third-party contract manufacturing organizations, or CMOs, for all of our requirements of raw materials, drug substance and drug product for our preclinical research and our ongoing clinical trials of our product candidates. Aside from a manufacturing agreement that we entered into in December 2019 through our subsidiary, BridgeBio Gene Therapy, LLC, we have not entered into long-term agreements with our current CMOs. We intend to continue to rely on CMOs for later-stage development and commercialization of our product candidates, including any additional product candidates that we may identify. Although we rely on CMOs, we have personnel and third-party consultants with extensive manufacturing experience to oversee the relationships with our contract manufacturers. Several of our development candidates have or are in the near term expected to have redundant and overlapping drug substance and drug product supply chains.

Sales and Marketing

We intend to begin building a commercial infrastructure in the United States and selected other territories to support the commercialization of each of our product candidates when we believe a regulatory approval in a particular territory is likely. Because most of our target indications are rare diseases with a concentrated prescribing audience and a small number of key opinion leaders who influence the treatments prescribed for the relevant patient population, we currently believe that we can effectively address each market using our own targeted, specialty sales and marketing organization supported by internal sales personnel, an internal marketing group and distribution support.

We intend to evaluate our commercialization strategy as we advance each product candidate through clinical development. In any core markets outside of the United States that we may identify, where appropriate, we may utilize strategic partners, distributors or contract sales forces to expand the commercial availability of our product candidates. We currently do not expect that we will require large pharmaceutical partners for the commercialization of any of our product candidates, although we may consider partnering in certain territories or indications or for other strategic purposes.

Intellectual Property

Overview

We strive to protect the proprietary technology that we believe is important to our business through a variety of methods, including seeking and maintaining patents and patent applications intended to cover our product candidates and compositions, their methods of use and processes for their manufacture, our platform technologies and any other aspects of inventions that are commercially important to the development of our business. We seek to obtain domestic and international patent protection and, in addition to filing and prosecuting patent applications in the United States, we may file counterpart patent applications in additional countries where we believe such foreign filing is likely to be beneficial, including Australia, Canada, Europe, China, Japan, and Mexico. We have entered into various license agreements to obtain the rights to use certain patents for the development and commercialization of our product candidates. See "—Our Material Agreements." We 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.

Our success will depend on our ability to obtain and maintain patent and other proprietary rights protecting our commercially important technology, inventions and know-how related to our business, defend and enforce our current and future issued patents, if any, preserve the confidentiality of our trade secrets and operate without

infringing the valid and enforceable patents and proprietary rights of third parties. We continually assess and refine our intellectual property strategy in order to best fortify our position, and file additional patent applications when our intellectual property strategy warrants such filings. We also rely on know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our intellectual property portfolio. We seek to obtain domestic and international patent protection, and endeavor to promptly file patent applications for new commercially valuable inventions.

The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and patent scope can be reinterpreted by the courts after issuance. Moreover, many jurisdictions permit third parties to challenge issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any patents, if issued, will provide sufficient protection from competitors.

Because patent applications in the United States and certain other jurisdictions are maintained in secrecy for 18 months or potentially even longer, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, or USPTO, to determine priority of invention.

As of February 15, 2021, our intellectual property portfolio is composed of 65 issued patents and 135 patent applications that we license from academic and research institutions and other third parties, and 25 issued patents and 220 pending patent applications that we own, including through our subsidiaries. These patents and patent applications generally provide us with the rights to develop our product candidates in the United States and worldwide. Our intellectual property portfolios for each of the programs that we consider to be our core value drivers are further described below.

QED Therapeutics, Inc.

For our subsidiary, QED Therapeutics, Inc., we license rights from Novartis to two issued U.S. patents, and related pending and issued foreign patents and patent applications in Australia, Canada, China, Europe, Japan and Mexico, as well as in other countries in Asia and in South America, that are directed to compositions of matter of BBP-831. The issued U.S. patents are expected to expire between 2026 and 2029, which takes into account patent term adjustments granted by the USPTO. The foreign patents and patent applications, if issued, are expected to expire between 2025 and 2030.

We also license rights from Novartis to one issued U.S. patent, one pending U.S. patent application, and related pending and issued foreign patents and patent applications in Australia, Canada, China, Europe, Japan and Mexico, as well as in other countries in Asia and in South America, that are directed to pharmaceutical formulations containing BBP-831. The issued patents and patent applications, if issued, are expected to expire in 2034.

We also license rights from Inserm Transfert ESA and Assistance Publique-Hôpitaux de Paris to one issued U.S. patent and one pending U.S. patent application, and one granted patent in Europe, that are directed to methods of treating achondroplasia using BBP-831. The issued U.S. patent, granted patent in Europe, and the pending patent application, if issued, are expected to expire in 2032.

In addition, QED Therapeutics, Inc. owns one pending U.S. provisional patent application and two pending PCT patent applications that are directed to methods of treating various cancers using BBP-831. If any patents issue from these patent applications, such patents would be expected to expire in 2040 or 2041.

Eidos Therapeutics, Inc.

For our subsidiary Eidos Therapeutics, Inc., we license rights from the Board of Trustees of the Leland Stanford Junior University, or Stanford, to nine issued U.S. patents with claims directed to composition of matter and methods of use relating to acoramidis. These patents are expected to expire in 2031 or 2033. We also license rights from Stanford to two pending U.S. patent applications, one issued European patent, one pending European patent application, and one issued Japanese patent with claims directed to composition of matter and methods of use relating to acoramidis. These patents and patent applications, if issued, are expected to expire in 2031 or 2033.

In addition, we own one issued U.S. patent, three pending U.S. patent applications, and 50 related foreign patent applications pending in various jurisdictions, including Australia, Canada, Europe, China, Japan, and Mexico with claims directed to salt and solid forms, methods of manufacturing, dosing methods, and formulations relating to acoramidis. The issued U.S. patent is expected to expire in 2038. The pending U.S. and foreign patent applications, if issued, are expected to expire in 2038 or 2039.

Adrenas Therapeutics, Inc.

For our subsidiary Adrenas Therapeutics, Inc., we own one pending U.S. patent application and six related foreign patent applications pending in various jurisdictions including Canada, China, Europe, Japan, and Korea with claims directed to recombinant AAV vectors relating to BBP-631. These patent applications, if issued, are expected to expire in 2039.

Phoenix Tissue Repair, Inc.

For our subsidiary Phoenix Tissue Repair, Inc., we license rights from the University of Southern California, or USC, to one issued U.S. patent with claims directed to polypeptides comprising functional fragments of collagen 7, and three pending U.S. patent applications with claims directed to methods of use, including treating epidermolysis bullosa with collagen 7. The issued U.S. patent is expected to expire in 2035 and the pending U.S. patent applications, if issued, are expected to expire between 2027 and 2035. We also license rights from USC to five related foreign patents issued in various jurisdictions including Australia, Europe and Japan, and three related foreign patent applications pending in various jurisdictions including Australia. The foreign patents and patent applications, if issued, are expected to expire between 2027 and 2035.

We also own six issued U.S. patents, four pending U.S. patent applications, one pending PCT patent application, seven foreign patents, and over 20 foreign patent applications pending in various jurisdictions with claims relating to collagen 7 materials and methods relating to the same. These include issued U.S. patents in the United Kingdom, France and Germany with claims directed to collagen 7 modification for enhancing the degradability of collagen that are expected to expire in 2022. This portfolio also includes pending and/or issued claims relating to collagen 7 detection assays, methods of making and purifying collagen 7, methods of treating subjects having age-related disorders with collagen 7, collagen 7 compositions, and methods of treating epidermolysis bullosa with collagen 7.

This portfolio also includes pending and/or issued claims relating to collagen 7 detection assays, methods of making and purifying collagen 7, methods of treating subjects having age-related disorders with collagen 7, collagen 7 compositions, and methods of treating epidermolysis bullosa with collagen 7. These patents and patent applications, if issued, are expected to expire between 2025-2040.

TheRas, Inc.

For our subsidiary TheRas, Inc., we license rights from The Regents of the University of California, or the University of California, and Leidos Biomedical Research, Inc., or Leidos, to an issued U.S. patent and two pending U.S. patent applications with claims directed to modulators of K-RAS, which include claims to the modulators as composition of matter and their use in therapy, including the treatment of cancer, and over twenty related foreign patent applications pending in various jurisdictions, including Australia, Canada, China, Europe, Japan, and Mexico. The U.S. patent and the U.S. and foreign patent applications, if issued, are expected to expire in 2036 and 2038. We also co-own with, and license rights from, the University of California and Leidos, three pending Taiwanese patent

applications. If issued, any patent applications claiming the benefit of these applications are expected to expire in 2039.

In addition, TheRas co-owns with Leidos and Lawrence Livermore National Security, LLC, or Livermore, one pending U.S. patent application with claims directed to modulators of K-RAS, which include claims to the modulators as composition of matter and their use in therapy, including the treatment of cancer. Any patents issuing from this application are expected to expire in 2042.

Our Material Agreements

Acoramidis

License Agreement with Alexion

In September 2019, through our subsidiary Eidos Therapeutics, Inc., or Eidos, we entered into a license agreement, or the "Alexion License Agreement, with Alexion Pharma International Operations Unlimited Company, a subsidiary of Alexion Pharmaceuticals, Inc. , or together, Alexion, to develop and commercialize acoramidis in Japan. Additionally, in September 2019, Eidos entered into a stock purchase agreement with Alexion, pursuant to which Eidos sold to Alexion 556,173 shares of its common stock for aggregate cash proceeds of $25.0 million. Under the terms of the Alexion License Agreement, Eidos granted Alexion an exclusive license to certain of our intellectual property rights to develop, manufacture and commercialize acoramidis in Japan. In consideration for the license grant, Eidos received an upfront payment of $25.0 million, with the potential for an additional one-time payment of $30.0 million subject to the achievement of a regulatory milestone. In addition, Eidos is entitled to receive royalties in the low double-digits on net sales by Alexion of acoramidis in Japan. The royalty rate is subject to reduction if Alexion is required to obtain intellectual property rights from third parties to develop, manufacture or commercialize acoramidis in Japan, or upon the introduction of generic competition into the market.

License Agreement with the Board of Trustees of the Leland Stanford Junior University

In April 2016, through Eidos, we entered into an exclusive license agreement with Stanford for rights relating to novel transthyretin aggregation inhibitors. Under our agreement, Stanford has granted us an exclusive worldwide license to make, use and sell products that are covered by the licensed patent rights. This license grant expires when the last licensed patent expires. The patent rights exclusively licensed to us under the license are described in more detail above under the heading "—Intellectual property— Eidos Therapeutics, Inc."

Stanford retains the right, on behalf of itself and all other non-profit academic research institutions, to practice under the patent rights for any non-profit purpose, including sponsored research and collaborations. We may grant sublicenses to third parties so long as we are actively pursuing the development or commercialization of products covered by the patent rights. We may also be required to sublicense our rights under the agreement at Stanford's request under certain conditions, including if we are unwilling or unable to serve a potential market or territory and there is a third party willing to be a sublicensee in such market or territory.

We are obligated to pay to Stanford a yearly license maintenance fee during the term of the agreement, but we may offset the maintenance fee against earned royalty payments due on net sales occurring in that year. Stanford is entitled to receive a royalty as a percentage of net sales of licensed products, in the low single digits. We have agreed to pay Stanford a percentage of non-royalty revenue we receive from our sublicensees, with the amount owed decreasing annually for three years based on when we enter into the applicable sublicense agreement. In addition, we are obligated to pay Stanford up to approximately $1.0 million upon the achievement of specific intellectual property, clinical and regulatory milestone events. In the event of a change of control transaction with respect to Eidos, we are obligated to pay Stanford a change of control fee of $250,000 in connection with the assignment of the license agreement to the acquirer of Eidos.

Under the license agreement with Stanford, we are obligated to use commercially reasonable efforts to develop, manufacture, and commercialize at least one licensed product; to develop markets for such licensed products; and to meet certain development milestones as agreed upon between us and Stanford.

Subject to the expiration of the license grant described above, the agreement does not have a specified term. We may terminate the agreement by providing prior written notice to Stanford, and Stanford has the right to terminate the agreement if we fail to achieve certain milestones or make payments under the agreement, or are not actively pursuing development of a licensed product, or if we otherwise materially breach the agreement and fail to cure such breach within a specified grace period.

BBP-831: License Agreement with Novartis International Pharmaceutical Ltd.

In January 2018, through our subsidiary QED Therapeutics, Inc., or QED, we entered into a license agreement with Novartis International Pharmaceutical Ltd., or Novartis, for certain intellectual property rights, including patents and know-how, related to BBP-831 for the treatment of patients with FGFR-driven diseases, including CCA, UC and achondroplasia. We refer to this agreement as the Novartis License.

Pursuant to the Novartis License, we obtained a license to research, develop, make, have made, use, import, offer for sale, sell, have sold and otherwise commercialize BBP-831, as well as therapeutic products incorporating BBP-831 that would, but for the license grant, infringe Novartis' license patent rights, or that were developed using or that incorporate or embody Novartis' licensed know-how, in all fields of use worldwide. The license grant to us includes the right to sublicense through multiple tiers. We also have certain rights to intellectual property licensed to Novartis' affiliate under a materials transfer agreement with a third party.

The Novartis License is subject to Novartis' existing obligations to supply a third party with BBP-831 to support the third party's clinical trials, and we have an ongoing obligation to inform Novartis of our or our sublicensees' intent to seek regulatory approval for and commercialize BBP-831 for various indications, with potential reversionary rights to Novartis in the event of a subsequent decision not to seek regulatory approval and commercialization, or a determination by Novartis that we have failed to sufficiently pursue regulatory approval and commercialization, for Novartis to grant such third party limited rights to develop and commercialize BBP-831.

Under the terms of the Novartis License, we made a one-time payment of $15.0 million to Novartis and agreed to issue shares of Series A preferred stock of QED valued at approximately $1.7 million in the aggregate to Novartis. In addition, we are obligated to make contingent milestone payments totaling $60.0 million upon achievement of certain regulatory milestones. We are also obligated to make contingent milestone payments totaling $35.0 million upon achievement of certain sales milestones for therapeutic products incorporating BBP-831. QED also agreed to pay Novartis tiered low double-digit royalties on net sales of therapeutic products incorporating BBP-831.

Under the Novartis License, we are required to use commercially reasonable efforts to develop BBP-831, and to obtain regulatory approval for and commercialize BBP-831 in the United States and the European Union.

We may terminate the Novartis License in its entirety or on a product-by-product or country-by-country basis at any time with 60 days' prior written notice to Novartis. Novartis may terminate if QED ceases to function as a going concern, is the subject of certain bankruptcy or similar proceedings, or otherwise winds down or discontinues its business. Either party may terminate for material breach that is not cured by the other party within a specified time period of receiving notice of such material breach. Otherwise, the Novartis License terminates on a product-by-product and country-by-country basis on the latest of the expiration of licensed patent rights, the expiration of regulatory exclusivity, or the tenth anniversary of the first commercial sale in such country.

BBP-870: Asset Purchase Agreement with Alexion Pharma Holding Unlimited Company

In June 2018, through our subsidiary Origin Biosciences, Inc., we entered into an asset purchase agreement with Alexion Pharma Holding Unlimited Company, or Alexion Pharma, pursuant to which we acquired Alexion's right, title and interest in certain assets relating to fosdenopterin, including patents and other intellectual property rights.

In the event that a Priority Review Voucher, or PRV, is granted to us by the FDA, we have agreed to pay Alexion Pharma a percentage in the mid-teens of any proceeds received by us from our sale of the PRV to a third

party. If we do not sell the PRV to a third party within 180 days after our receipt of the PRV, we are obligated to pay Alexion Pharma $18.8 million, which amount is creditable against any amounts otherwise due to Alexion Pharma in accordance with the preceding sentence upon any future sale by us of the PRV. We are obligated to make contingent milestone payments totaling $3.0 million upon achievement of certain development milestones and $17.0 million upon achievement of certain sales milestones for products containing the fosdenopterin molecule. We also agreed to pay Alexion Pharma tiered royalties ranging from the low-to mid-teens on net sales of products containing the fosdenopterin molecule.

We are obligated to use commercially reasonable efforts to obtain a PRV, achieve specified milestone events and commercialize at least one product containing the fosdenopterin molecule after receipt of regulatory approval.

BBP-009 (Patidegib): Option Agreement with LEO Pharma A/S

In November 2018, through PellePharm, we entered into an option agreement with LEO Pharma, or LEO Pharma, and LEO Spiny Merger Sub, Inc., pursuant to which LEO Pharma was granted an exclusive, irrevocable option to acquire PellePharm. The option is exercisable by LEO Pharma on or before the occurrence of certain events relating to PellePharm's clinical development programs, and in no event later than July 30, 2021. As consideration for the option, LEO Pharma paid to PellePharm exclusivity payments totaling approximately $27.9 million in the aggregate and purchased a minority equity interest in PellePharm for approximately $5.1 million. In addition, LEO Pharma has agreed to pay additional exclusivity payments to PellePharm in an amount not to exceed $37.0 million in the aggregate under certain circumstances.

Pursuant to the option agreement, we have agreed to conduct the business of PellePharm in the ordinary course and in accordance with applicable laws, comply with the terms of our organizational documents, and use commercially reasonable efforts to operate the business of PellePharm in accordance with a mutually agreed budget and to complete a Phase 2 clinical trial of patidegib for HF-BCC and a Phase 3 clinical trial of patidegib for Gorlin Syndrome. In addition, we and LEO Pharma have formed a joint development committee to oversee the development of, and to make decisions regarding the commercialization of, patidegib.

BBP-589: Asset Purchase Agreement with Shire Human Genetic Therapies, Inc. and Lotus Tissue Repair

In July 2017, through our subsidiary, Phoenix Tissue Repair, Inc. or Phoenix, we entered into an asset purchase agreement with Shire Human Genetic Therapies, Inc., or Shire, and Lotus Tissue Repair, Inc. or Lotus, pursuant to which we acquired from Shire and Lotus the right, title and interest in certain assets relating to recombinant human collagen type VII, including patents and other intellectual property rights, as well as data and regulatory filings, relating to the treatment of DEB, and assumed certain liabilities with respect thereto. In connection with the acquisition of such assets, (i) Shire and Lotus granted to us a non-exclusive, worldwide, irrevocable, perpetual, royalty-free, sublicensable license under certain intellectual property related to the acquired assets but retained by Shire and Lotus, for the exploitation of certain recombinant human collagen type VII products in all fields, and (ii) we granted to Shire and Lotus a non-exclusive, worldwide, irrevocable, perpetual, royalty-free, sublicensable license under certain of the acquired intellectual property assets to exploit products other than recombinant human collagen type VII products and other than for the treatment of DEB in humans.

As partial consideration for our acquisition of the assets, we agreed to pay a purchase price of $1.5 million and issued shares of common stock in Phoenix at a nominal value to Lotus. We are obligated to make contingent milestone payments totaling $27.0 million upon achievement of certain regulatory milestones. In addition, we are obligated to make contingent milestone payments totaling $60.0 million upon achievement of certain sales milestones. We also agreed to pay to Shire and Lotus tiered single-digit royalties on annual net sales for products containing the recombinant human collagen type VII.

We are obligated to use commercially reasonable efforts to develop, obtain FDA approval for and commercialize at least one product for the treatment of DEB in humans.

BBP-454: License Agreement with Regents of The University of California

In September 2016, through our subsidiary TheRas, Inc., or TheRas, we entered into a license agreement with the Regents of the University of California, or UCSF, which was amended in January 2017, August 2017, September 2018 and December 2019, relating to certain patent rights related to KRAS inhibitors and modulators, which we refer to collectively as the UCSF License.

Under the UCSF License, we acquired an exclusive, royalty-bearing, sublicensable, worldwide license to make, have made, use, sell, offer for sale and import products, services and methods covered by the licensed patent rights, and to perform licensed processes, in each case, in prophylactic and therapeutic uses in humans. In addition, we received an option for certain inventions conceived and reduced to practice during a specified term. Under the UCSF License, UCSF retains, on behalf of itself and a third party, the right to make, use and practice certain of the licensed intellectual property rights for research and educational purposes, and the right to license to other academic and nonprofit organizations to practice the patent rights for research and educational purposes, including with respect to sponsored research performed on behalf of commercial entities. The rights and interests of any such commercial entity shall be subject to the licenses granted to us pursuant to the UCSF License. The UCSF License is also subject to pre-existing rights of the U.S. Government and the NIH.

In connection with the UCSF License and subsequent amendments, we paid issue fees totaling $300,000. In addition, under the terms of the UCSF License, we are required to pay to UCSF certain annual license maintenance fees unless we are selling or otherwise exploiting licensed products or services paying royalties to UCSF on net sales for such licensed products or services. With respect to such royalty obligations, we agreed to pay UCSF low single-digit tiered royalties on annual net sales of licensed products and services, with a minimum royalty requirement of $100,000. Our obligation to pay royalties continues on a country-by-country basis until the expiration of all licensed patent rights covering licensed products in such country. In addition, we are obligated to make contingent milestone payments totaling up to $22.4 million upon the achievement of certain clinical or regulatory milestones. In the event that we sublicense the patent rights, UCSF is also entitled to receive a percentage of the sublicensing income received by us.

We are also required to make a one-time “Index Milestone Payment” to UCSF in the event of (i) an initial public offering, or (ii) a change of control transaction, in each case with respect to TheRas. Such Index Milestone Payment is calculated by multiplying (a) a number of shares equal to a specified percentage of the then-outstanding fully-diluted shares of common stock of TheRas by (b)(1) in the case of an initial public offering by TheRas, the offering price per share of the securities sold to the underwriters in the offering, or (2) in the case of a change of control transaction with respect to TheRas, the per share consideration that would be received by TheRas’ shareholders in such transaction, in each case subject to certain adjustments. To the extent that an Index Milestone Payment becomes due prior to a bona fide financing transaction of at least $45 million, such Index Milestone Payment is equal to the greater of the amount calculated as described above, or $1.8 million.

Under the UCSF License, we also assumed certain obligations with respect to fund-raising, and must report on our progress in achieving the milestones set forth in the UCSF License on a periodic basis. The UCSF License also includes certain participation rights pursuant to which UCSF has the right to purchase specified amounts of securities offered by TheRas in financing transactions.

Under the UCSF License, we are obligated to diligently proceed with the development, manufacture and sale of at least one licensed product and/or service, and to earnestly and diligently market such licensed product and/or service after receipt of any requisite regulatory approvals and in quantities sufficient to meet market demand. We are also required to use good faith and diligent efforts to meet the milestones set forth in the UCSF License, subject to any revisions that may be permitted under certain circumstances. UCSF has the right to either terminate the UCSF License or reduce the license to a nonexclusive license if we are unable to perform our diligence obligations.

The agreement will continue until the last to expire or abandonment of the patent rights on a licensed product-by-licensed product and country-by-country basis. We may terminate the agreement by providing prior written notice to UCSF or we may terminate the rights under patent rights on a country-by-country basis by giving notice in writing to UCSF. UCSF has the right to terminate the agreement if we fail to make any payments, challenge any UCSF patent rights or otherwise materially breach the agreement and fail to cure such breach within a specified grace period.

BBP-398: Collaboration and License Agreement with the Board of Regents of The University of Texas System and The University of Texas M.D. Anderson Cancer Center

In March 2017, through our subsidiary Navire Pharma, Inc. (formerly known as PTP Pharmaceuticals, Inc.), or Navire, we entered into a collaboration and license agreement with The Board of Regents of the University of Texas System, or the Board of Regents, and The University of Texas M.D. Anderson Cancer Center, or MD Anderson. Under the agreement, we acquired an exclusive, royalty-bearing, sublicensable, worldwide license to develop, make, use and sell SHP2 and PTPN11 inhibitors covered by the licensed technology in all fields. The Board of Regents and MD Anderson each retain the right to practice the licensed patent rights for non-commercial, research and academic purposes, and also to grant non-exclusive licenses to other academic and nonprofit organizations to practice the patent rights for non-commercial, research and educational purposes (but excluding any research sponsored by a for-profit entity). Our license is also subject to a non-exclusive license granted to the U.S. government. To further the goals of the collaboration agreement, we granted a non-exclusive license to our technology to MD Anderson for the purpose of carrying out the development plan.

In partial consideration for the exclusive license grant, we issued the Board of Regents shares of common stock of Navire valued at approximately $280,000 pursuant to a stock purchase agreement entered into simultaneously. If commercial sales of a licensed product commence, we will pay MD Anderson royalties at percentage rates ranging in the low single digits on net sales of licensed products. We may offset payments made to third parties to obtain rights needed for the commercialization of a licensed product against royalties payable to MD Anderson provided that such expenses in a given year may not be credited against more than a specified percentage of the royalties in such year and subject to a minimum floor in the low single digits. Our obligation to pay various royalties continues on a country by country basis with respect to any licensed product depends on regulatory status, patent coverage, and financing status. For licensed products that satisfy certain regulatory conditions, the related royalty extends for three years after the first sale. Additionally, if certain financing conditions are achieved, then (i) for licensed products covered by licensed patents, the royalty obligation continues until the expiration of all licensed patent rights covering such licensed product in such country, and (ii) for licensed products without coverage by licensed patents, the royalty obligation extends for 10 years after first sale.

Under the collaboration and license agreement, we are obligated to use commercially reasonable efforts to conduct all development activities under the agreement and to commercialize the licensed products following regulatory approval.

The agreement will continue for thirty years unless earlier terminated. We may terminate the agreement for convenience, provided that MD Anderson shall not be required to forego payments made or equity issued to MD Anderson under the collaboration and license agreement or the stock purchase agreement. MD Anderson has the right to terminate the agreement if we fail to pay royalties or otherwise materially breach the agreement or the stock purchase agreement and fail to cure such breach within a specified cure period, or if BridgeBio Pharma LLC commits a material breach of its obligations under any agreement with Navire, or if Navire breaches obligations under a Series A Preferred Stock Purchase Agreement between Navire and BridgeBio Pharma LLC.

Government Regulation

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

U.S. Government Regulation of Drug and Biological Products

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or FDCA, and its implementing regulations and biologics under the FDCA and the Public Health Service Act, or PHSA, and their implementing regulations. Both drugs and biologics also are subject to other federal, state and local statutes and regulations, such as those related to competition. The process of obtaining regulatory approvals and the subsequent

compliance with appropriate federal, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or following approval may subject an applicant to administrative actions or judicial sanctions. These actions and sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, license revocation, a clinical hold, untitled or warning letters, voluntary or mandatory product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal fines or penalties. Any agency or judicial enforcement action could have a material adverse effect on our business, the market acceptance of our products and our reputation.

Our product candidates must be approved by the FDA through either an NDA or a Biologics License Application, or BLA, process before they may be legally marketed in the United States. The process generally involves the following:

- completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with Good Laboratory Practices, or GLP, requirements;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an Institutional Review Board, or IRB, or independent ethics committee at each clinical trial site before each human trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, Good Clinical Practices, or GCP, requirements and other clinical trial-related regulations to establish the safety and efficacy of the investigational product for each proposed indication;
- submission to the FDA of an NDA or BLA;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to accept the filing for review;
- satisfactory completion of one or more FDA pre-approval inspections of the manufacturing facility or facilities where the drug or biologic will be produced to assess compliance with Current Good Manufacturing Practices, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug or biologic's identity, strength, quality and purity;
- potential FDA audit of the clinical trial sites that generated the data in support of the NDA or BLA;
- payment of user fees for FDA review of the NDA or BLA; and
- FDA review and approval of the NDA or BLA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug or biologic in the United States.

The preclinical and clinical testing and approval process requires substantial time, effort and financial resources, and the regulatory scheme for drugs and biologics is evolving and subject to change at any time. We cannot be certain that any approvals for our product candidates will be granted on a timely basis, or at all.

Preclinical Studies

Before testing any drug, biological or gene therapy candidate in humans, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as *in vitro* and animal studies to assess safety and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal and state regulations and requirements, including GLP regulations for safety/toxicology studies.

An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin. Some long-term preclinical testing, such as animal tests of reproductive AEs and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time, the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence. Additionally, the review of information in an IND submission may prompt FDA to, among other things, scrutinize existing INDs or marketed products and could generate requests for information or clinical holds on other product candidates or programs.

Clinical Trials

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

In addition to the submission of an IND to the FDA before initiation of a clinical trial in the United States, certain human clinical trials involving recombinant or synthetic nucleic acid molecules had historically been subject to review by the NIH Recombinant DNA Advisory Committee, or the RAC, of the NIH Office of Biotechnology Activities, or the OBA, pursuant to the NIH Guideline. On August 17, 2018, the NIH issued a notice in the Federal Register and issued a public statement proposing changes to the oversight framework for gene therapy trials, including changes to the applicable NIH Guidelines to modify the roles and responsibilities of the RAC with respect to human clinical trials of gene therapy products, and requesting public comment on its proposed modifications. During the public comment period, which closed October 16, 2018, the NIH announced that it will no longer accept new human gene transfer protocols for review as a part of the protocol registration process or convene the RAC to review individual clinical protocols. In April 2019, NIH announced the updated guidelines, which reflect these proposed changes, and clarify that these trials will remain subject to the FDA's oversight and other clinical trial regulations, and oversight at the local level will continue as set forth in the NIH Guidelines. Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an Institutional Biosafety Committee, or an IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them.

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

Clinical trials generally are conducted in three sequential phases, known as Phase 1, Phase 2 and Phase 3, and may overlap.

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

- Phase 2 clinical trials involve studies in disease-affected patients to evaluate proof of concept and/or determine the dose required to produce the desired benefits. At the same time, safety and further PK and PD information is collected, possible adverse effects and safety risks are identified, and a preliminary evaluation of efficacy is conducted.

- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product labeling.

In August 2018, the FDA released a draft guidance entitled “Expansion Cohorts: Use in First-In-Human Clinical Trials to Expedite Development of Oncology Drugs and Biologics,” which outlines how drug developers can utilize an adaptive trial design commonly referred to as a seamless trial design in early stages of oncology drug development, i.e., the first-in-human clinical trial, to compress the traditional three phases of trials into one continuous trial called an expansion cohort trial. Information to support the design of individual expansion cohorts are included in IND applications and assessed by FDA. Expansion cohort trials can potentially bring efficiency to drug development and reduce developmental costs and time.

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

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators 15 days after the trial sponsor determines the information qualifies for reporting for serious and unexpected suspected AEs, findings from other studies or animal or *in vitro* testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must also notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction as soon as possible but in no case later than seven calendar days after the sponsor’s initial receipt of the information.

Phase 1, Phase 2, Phase 3 and other types of clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB’s requirements or if the drug or biologic has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check points based on access to certain data from the trial. Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the drug or biologic as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product and, among other things, companies must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidates do not undergo unacceptable deterioration over their shelf life.

FDA Review Process

Following completion of the clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA or BLA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. The NDA or BLA is a request for approval to market the drug or biologic for one or more specified indications and must contain proof of safety and efficacy for a drug or safety, purity and potency for a biologic. The application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of FDA. FDA approval of an NDA or BLA must be obtained before a drug or biologic may be marketed in the United States.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA or BLA must be accompanied by a user fee. FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs or BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

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

The FDA has developed the Oncology Center of Excellence RTOR pilot program to facilitate a more efficient review process for certain oncology product candidates. Although this program allows FDA to begin reviewing clinical data prior to submission of a complete NDA or BLA, the program is not intended to change the PDUFA review timelines.

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

NDA or BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data.

Orphan Drug Designation and Exclusivity

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

Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety or providing a major contribution to patient care or in instances of drug supply issues. Competitors, however, may receive approval of either a different product for the same indication or the same product for a different indication but that could be used off-label in the orphan indication. Orphan drug exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval before we do for the same product, as defined by the FDA, for the same indication we are seeking approval, or if our product is determined to be contained within the scope of the competitor's product for the same indication or disease. If we pursue marketing approval for an indication broader than the orphan drug designation we have received, we may not be entitled to orphan drug exclusivity. Orphan drug status in the European Union has similar, but not identical, requirements and benefits.

Rare Pediatric Disease Designation and Priority Review Vouchers

Under the FDCA, as amended, the FDA incentivizes the development of drugs and biologics that meet the definition of a "rare pediatric disease," defined to mean a serious or life-threatening disease in which the serious of life-threatening manifestations primarily affect individuals aged from birth to 18 years and the disease affects fewer than 200,000 individuals in the United States or affects more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making in the United States a drug for such disease or condition will be received from sales in the United States of such drug. The sponsor of a product candidate for a rare pediatric disease may be eligible for a voucher that can be used to obtain a priority review for a subsequent human drug or biologic application after the date of approval of the rare pediatric disease drug product, referred to as a priority review voucher, or PRV. A sponsor may request rare pediatric disease designation from the FDA prior to the submission of its NDA or BLA. A rare pediatric disease designation does not guarantee that a sponsor will receive a PRV upon approval of its NDA or BLA. Moreover, a sponsor who chooses not to submit a rare pediatric disease designation request may nonetheless receive a PRV upon approval of their marketing application if they request such a voucher in their original marketing application and meet all of the eligibility criteria. If a PRV is received, it may be sold or transferred an unlimited number of times. Congress has extended the PRV program through September 30, 2024, with the potential for PRVs to be granted through September 30, 2026.

Expedited Development and Review Programs

A sponsor may seek to develop and obtain approval of its product candidates under programs designed to accelerate the development, FDA review and approval of new drugs and biologics that meet certain criteria. For example, the FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs and biologics that are intended to treat a serious or life threatening disease or condition and demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to both the product and the specific indication for which it is being studied. For a fast track-designated product, the FDA may consider sections

of the NDA or BLA for review on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application. The sponsor can request the FDA to designate the product for fast track status any time before receiving NDA or BLA approval, but ideally no later than the pre-NDA or pre-BLA meeting.

A product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development or review, such as priority review and accelerated approval. Priority review means that, for a new molecular entity or original BLA, the FDA sets a target date for FDA action on the marketing application at six months after accepting the application for filing as opposed to ten months. A product is eligible for priority review if it is designed to treat a serious or life-threatening disease condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biologic designated for priority review in an effort to facilitate the review. If criteria are not met for priority review, the application for a new molecular entity or original BLA is subject to the standard FDA review period of ten months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

A product may also be eligible for accelerated approval if it is designed to treat a serious or life-threatening disease or condition and demonstrates an effect on either a surrogate endpoint that is reasonably likely to predict clinical benefit or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the disease or condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biologic receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. FDA may withdraw approval of a drug or indication approved under accelerated approval if, for example, the confirmatory trial fails to verify the predicted clinical benefit of the product.

Additionally, a drug or biologic may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application, which may include holding meetings with the sponsor and the review team throughout the development of the therapy; providing timely advice to, and interactive communication with, the sponsor regarding the development of the drug to ensure that the development program to gather the nonclinical and clinical data necessary for approval is as efficient as practicable; involving senior managers and experienced review staff, as appropriate, in a collaborative, cross-disciplinary review; assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor; and considering alternative clinical trial designs when scientifically appropriate, which may result in smaller trials or more efficient trials that require less time to complete and may minimize the number of patients exposed to a potentially less efficacious treatment. Breakthrough therapy designation comes with all of the benefits of fast track designation, which means that the sponsor may file sections of the BLA for review on a rolling basis if certain conditions are satisfied, including an agreement with the FDA on the proposed schedule for submission of portions of the application and the payment of applicable user fees before the FDA may initiate a review.

As part of the 21st Century Cures Act, Congress amended the FDCA to facilitate an efficient development program for, and expedite review of regenerative medicine advanced therapies, or RMATs, which include cell and gene therapies, therapeutic tissue engineering products, human cell and tissue products, and combination products using any such therapies or products. RMATs do not include those human cells, tissues, and cellular and tissue based products regulated solely under section 361 of the PHSA and 21 CFR Part 1271. This program is intended to facilitate efficient development and expedite review of regenerative medicine therapies, which are intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition and qualify for RMAT designation. A drug

sponsor may request that the FDA designate a drug as a RMAT concurrently with or at any time after submission of an IND. The FDA has 60 calendar days to determine whether the drug meets the criteria, including whether there is preliminary clinical evidence indicating that the drug has the potential to address unmet medical needs for a serious or life-threatening disease or condition. A BLA for a regenerative medicine therapy that has received RMAT designation may be eligible for priority review or accelerated approval through use of surrogate or intermediate endpoints reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites. Benefits of RMAT designation also include early interactions with FDA to discuss any potential surrogate or intermediate endpoint to be used to support accelerated approval. A regenerative medicine therapy with RMAT designation that is granted accelerated approval and is subject to post-approval requirements may fulfill such requirements through the submission of clinical evidence from clinical studies, patient registries, or other sources of real world evidence, such as electronic health records; the collection of larger confirmatory data sets; or post-approval monitoring of all patients treated with such therapy prior to its approval.

The FDA has also announced the availability of the RTOR pilot program for oncology product candidates that are likely to demonstrate substantial improvements over available therapy, which may include drugs previously granted breakthrough therapy designation for the same or other indications and candidates meeting other criteria for other expedited programs, such as fast track and priority review. Submissions for RTOR consideration should also have straightforward study designs and endpoints that can be easily interpreted (such as overall survival or progression free survival). Acceptance into the RTOR pilot does not guarantee or influence approvability of the application, which is subject to the usual benefit-risk evaluation by FDA reviewers, but the program allows FDA to review data earlier, before an applicant formally submits a complete application. The RTOR pilot program does not affect FDA's PDUFA timelines.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or the time period for FDA review or approval may not be shortened. Furthermore, fast track designation, priority review, accelerated approval, breakthrough therapy and RMAT designation do not change the standards for approval.

Pediatric Information and Pediatric Exclusivity

Under the Pediatric Research Equity Act, or PREA, certain NDAs and BLAs and certain supplements to an NDA or BLA must contain data to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The Food and Drug Administration Safety and Innovation Act, or FDASIA, amended the FDCA to require that a sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 study. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

A drug or biologic product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

Post-Marketing Requirements

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping activities, reporting of

adverse experiences, complying with promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as "off-label use") and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including investigation by federal and state authorities. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication. Further, if there are any modifications to the drug or biologic, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA/BLA or NDA/BLA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for a REMS, to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the NDA or BLA must submit a proposed REMS. The FDA will not approve the NDA or BLA without an approved REMS, if required. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMP regulations. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. These manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs or biologics are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved NDA or BLA, including recall.

Once an approval is granted, the FDA may issue enforcement letters or withdraw the approval of the product if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug or biologic reaches the market. Corrective action could delay drug or biologic distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a drug or biologic, including AEs of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

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

Regulation of Companion Diagnostics

We believe that the success of certain of our product candidates may depend, in part, on the development and commercialization of a companion diagnostic. Companion diagnostics identify patients who are most likely to benefit from a particular therapeutic product; identify patients likely to be at increased risk for serious side effects as a result of treatment with a particular therapeutic product; or monitor response to treatment with a particular therapeutic product for the purpose of adjusting treatment to achieve improved safety or effectiveness. Companion diagnostics are regulated as medical devices by the FDA. In the United States, the FDCA and its implementing regulations, and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Unless an exemption or FDA exercise of enforcement discretion applies, diagnostic tests generally require marketing clearance or approval from the FDA prior to commercialization. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and approval of a premarket, or PMA approval.

To obtain 510(k) clearance for a medical device, or for certain modifications to devices that have received 510(k) clearance, a manufacturer must submit a premarket notification demonstrating that the proposed device is substantially equivalent to a previously cleared 510(k) device or to a preamendment device that was in commercial distribution before May 28, 1976, or a predicate device, for which the FDA has not yet called for the submission of a PMA. In making a determination that the device is substantially equivalent to a predicate device, the FDA compares the proposed device to the predicate device or predicate devices and assesses whether the subject device is comparable to the predicate device or predicate devices with respect to intended use, technology, design and other features which could affect safety and effectiveness. If the FDA determines that the subject device is substantially equivalent to the predicate device or predicate devices, the subject device may be cleared for marketing. The 510(k) premarket notification pathway generally takes from three to twelve months from the date the application is completed, but can take significantly longer.

PMA applications must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to demonstrate to the FDA's satisfaction the safety and effectiveness of the device. For diagnostic tests, a PMA application typically includes data regarding analytical and clinical validation studies. As part of its review of the PMA, the FDA will conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance with the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures. The FDA's review of an initial PMA application is required by statute to take between six to ten months, although the process typically takes longer, and may require several years to complete. If the FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions that must be met in order to secure the final approval of the PMA. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny the approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. Once granted, PMA approval may be withdrawn by the FDA if compliance with post-approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

On July 31, 2014, the FDA issued a final guidance document addressing the development and approval process for "In Vitro Companion Diagnostic Devices." According to the guidance document, for novel therapeutic products that depend on the use of a diagnostic test and where the diagnostic device could be essential for the safe and effective use of the corresponding therapeutic product, the premarket application for the companion diagnostic device should be developed and approved or cleared contemporaneously with the therapeutic, although the FDA recognizes that there may be cases when contemporaneous development may not be possible. However, in cases where a drug cannot be used safely or effectively without the companion diagnostic, the FDA's guidance indicates it will generally not approve the drug without the approval or clearance of the diagnostic device. The FDA also issued a draft guidance in July 2016 setting forth the principles for co-development of an in vitro companion diagnostic device with a therapeutic product. The draft guidance describes principles to guide the development and contemporaneous marketing authorization for the therapeutic product and its corresponding in vitro companion diagnostic.

Once cleared or approved, the companion diagnostic device must adhere to post-marketing requirements including the requirements of FDA's quality system regulation, adverse event reporting, recalls and corrections along with product marketing requirements and limitations. Like drug and biologic makers, companion diagnostic makers are subject to unannounced FDA inspections at any time during which the FDA will conduct an audit of the product(s) and the company's facilities for compliance with its authorities.

Biosimilars and Exclusivity

Certain of our product candidates are regulated as biologics. An abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product was created by the Biologics Price Competition and Innovation Act of 2009, or BPCI Act, as part of the ACA. This amendment to the PHSA, in part, attempts to minimize duplicative testing. Biosimilarity, which requires that the biological product be highly similar to the reference product notwithstanding minor differences in clinically inactive components and that there be no clinically meaningful differences between the product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies and a clinical trial or trials. Interchangeability requires that a biological product be biosimilar to the reference product and that the product can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biological product without such alternation or switch. Complexities associated with the larger, and often more complex, structure of biological products as compared to small molecule drugs, as well as the processes by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

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

Other Regulatory Matters

Manufacturing, sales, promotion and other activities following product approval are also subject to regulation by numerous regulatory authorities in the United States in addition to the FDA, including the Centers for Medicare and Medicaid Services, or CMS, including the Office of Inspector General and Office for Civil Rights, other divisions of the Department of HHS, the Department of Justice, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency and state and local governments.

Healthcare providers, physicians, and third party payors will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our current and future arrangements with healthcare providers and physicians and any future arrangements with third party payers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any drugs for which we obtain marketing approval. In the United States, these laws include: the federal Anti-Kickback Statute, the False Claims Act, and HIPAA.

The Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration, directly or indirectly, in cash or in kind, that is intended to induce or reward referrals, including the purchase, recommendation, order or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. Violations of this law are punishable by imprisonment, criminal fines, administrative civil money penalties and exclusion from participation in federal healthcare programs. In addition, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

Although we would not submit claims directly to payors, drug manufacturers can be held liable under the federal civil False Claims Act, which imposes civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities (including manufacturers) for, among other things, knowingly presenting, or causing to be presented to federal programs (including Medicare and Medicaid) claims for items or services, including drugs, that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Penalties for a False Claims Act violation include three times the actual damages sustained by the government, plus mandatory civil penalties for each separate false claim, the potential for exclusion from participation in federal healthcare programs and, although the federal False Claims Act is a civil statute, conduct that results in a False Claims Act violation may also implicate various federal criminal statutes. The government may deem manufacturers to have “caused” the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers or promoting a product off-label. Claims which include items or services resulting from a violation of the federal Anti-Kickback Statute are false or fraudulent claims for purposes of the False Claims Act. Our future marketing and activities relating to the reporting of wholesaler or estimated retail prices for our products, if approved, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state and third-party reimbursement for our products, and the sale and marketing of our product candidates, are subject to scrutiny under this law.

HIPAA created 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, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up 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 federal Anti-Kickback Statute a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

The civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

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 HITECH, and their implementing regulations, mandates, among other things, the adoption of uniform standards for the electronic exchange of information in common healthcare transactions, as well as standards relating to the privacy and security of individually identifiable health information, which require the adoption of administrative, physical and technical safeguards to protect such information. Among other things, HITECH makes HIPAA’s security standards directly applicable to business associates, defined as independent contractors or agents of covered entities, which include certain health care providers, health plans, and healthcare clearinghouses, that create, receive or obtain protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities and business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney’s fees and costs associated with pursuing federal civil actions. In addition, certain state laws govern the privacy and security of health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and criminal penalties.

Additionally, the federal Physician Payments Sunshine Act, or the 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 and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, physicians, certain other healthcare professionals, and teaching hospitals and to report annually certain ownership and investment interests held by physicians, certain other healthcare professionals, and their immediate family members. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners. 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.

Similar federal, state and foreign fraud and abuse laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services. Such laws are generally broad and are enforced by various state agencies and private actions. Also, many states have similar fraud and abuse statutes or regulations that may be broader in scope and may apply regardless of payor, in addition to items and services reimbursed under Medicaid and other state programs. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant federal government compliance guidance, and require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures.

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. 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.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, individual imprisonment, exclusion of drugs from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results. 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. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from the business.

Current and Future Legislation

In the United States and some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes regarding the healthcare system directed at broadening the availability of healthcare, improving the quality of healthcare, and containing or lowering the cost of healthcare.

For example, in March 2010, the ACA was enacted in the United States. The ACA includes measures that have significantly changed, and are expected to continue to significantly change, the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical industry are that the ACA:

- made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs to 23.1% of average manufacturer price, or AMP, and adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, as well as potentially impacting their rebate liability by modifying the statutory definition of AMP.

- imposed a requirement on manufacturers of branded drugs to provide a 70% (increased pursuant to the Bipartisan Budget Act of 2018, effective as of 2019) point-of-sale discount off the negotiated price of branded drugs dispensed to Medicare Part D beneficiaries in the coverage gap (i.e., "donut hole") as a condition for a manufacturer's outpatient drugs being covered under Medicare Part D.

- extended a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations.

- expanded the entities eligible for discounts under the 340B Drug Discount Program.

- established 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.

- imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs, apportioned among these entities according to their market share in certain government healthcare programs.

- established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products. The ACA established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. Various portions of the ACA are currently undergoing legal and constitutional challenges in the United States Supreme Court; the Trump Administration issued various Executive Orders which eliminated cost sharing subsidies and various provisions that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices; and Congress has introduced several pieces of legislation aimed at significantly revising or repealing the ACA. The United States Supreme Court is expected to rule on a legal challenge to the constitutionality of the ACA in early 2021. The implementation of the ACA is ongoing, the law appears likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program.

Moreover, in May 2018, the Trump administration released its "Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs," or the Blueprint. The Blueprint contains several potential regulatory actions and legislative recommendations aimed at lowering prescription drug prices, including measures to promote innovation and competition for biologics, changes to Medicare Part D to give plan sponsors more leverage when negotiating prices with manufacturers, and updating the Medicare drug-pricing dashboard to make price increases and generic competition more transparent. HHS has already implemented certain of these measures, while others are pending. For example, in May 2019, the CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning January 1, 2020. Additional recommendations in

the Blueprint and RFI, if enacted by Congress and HHS, could lead to changes to Medicare Parts B and D, including the transition of certain drugs covered under Part B to Part D or the offering of alternative purchasing options under the Competitive Acquisition Program that currently applies to selected drugs and biologics covered under Part B. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019. Although some proposals related to the previous administration's Blueprint may require additional authorization to become effective, may ultimately be withdrawn, or may face challenges in the courts, Congress has indicated that it will continue to seek new legislative, administrative and/or additional measures to control drug costs. Likewise, the Biden administration has indicated that lowering prescription drug prices is a priority, but we do not yet know what steps the administration will take or whether such steps will be successful.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect in April 2013, following passage of the Bipartisan Budget Act of 2013, and will remain in effect through 2029 unless additional congressional action is taken. Pursuant to the CARES Act, as well as subsequent legislation, these reductions have been suspended from May 1, 2020 through March 31, 2021 due to the COVID-19 pandemic. Proposed legislation, if passed, would extend this suspension until the end of the 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 bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs.

Further, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017, or the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to request access to certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

We cannot predict what healthcare reform initiatives may be adopted in the future. Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates and may affect our overall financial condition and ability to develop product candidates.

Packaging and Distribution in the United States

If our products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. Manufacturing, sales, promotion and other activities also are potentially subject to federal and state consumer protection and unfair competition laws.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The failure to comply with any of these laws or regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, exclusion from federal healthcare programs, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals, or refusal to allow a firm to enter into supply contracts, including government contracts. Any action against us for

violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Prohibitions or restrictions on sales or withdrawal of future products marketed by us could materially affect our business in an adverse way.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

Other U.S. Environmental, Health and Safety Laws and Regulations

We may be subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

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

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of our future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit restoration of the patent term of up to five years as compensation for patent term lost during the FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. The patent-term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA or BLA.

Marketing 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 United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also

provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

European Union Drug Development

In the European Union, our future products also may be subject to extensive regulatory requirements. As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC, or Directive, has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently into their national laws. This has led to significant variations in the Member State regimes. Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU countries where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

The EU clinical trials legislation currently is undergoing a transition process mainly aimed at harmonizing and streamlining clinical-trial authorization, simplifying adverse-event reporting procedures, improving the supervision of clinical trials and increasing their transparency. In April 2014, the EU adopted a new Clinical Trials Regulation (EU) No 536/2014, or Regulation, which is set to replace the current Clinical Trials Directive 2001/20/EC. It will overhaul the current system of approvals for clinical trials in the EU. Specifically, the new Regulation, which will be directly applicable in all Member States, aims at simplifying and streamlining the approval of clinical trials in the EU. For instance, the new Regulation provides for a streamlined application procedure via a single entry point and strictly defined deadlines for the assessment of clinical trial applications. It is expected that the new Regulation will apply following confirmation of full functionality of the Clinical Trials Information System, the centralized EU portal and database for clinical trials foreseen by the regulation, through an independent audit, which is currently anticipated to occur in December 2021.

European Union Drug Marketing

Much like the Anti-Kickback Statue prohibition in the United States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the European Union. The provision of benefits or advantages to induce or reward improper performance generally is governed by the national anti-bribery laws of the European Union Member States, and the Bribery Act 2010 in the UK. Infringement of these laws could result in substantial fines and imprisonment. EU Directive 2001/83/EC, which is the EU Directive governing medicinal products for human use, further provides that, where medicinal products are being promoted to persons qualified to prescribe or supply them, no gifts, pecuniary advantages or benefits in kind may be supplied, offered or promised to such persons unless they are inexpensive and relevant to the practice of medicine or pharmacy. This provision has been transposed into the Human Medicines Regulations 2012 and so remains applicable in the UK despite its departure from the EU.

Payments made to physicians in certain EU Member States must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician’s employer, his or her competent professional organization and/or the regulatory authorities of the individual EU Member States. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the EU

Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

European Union Drug Review and Approval

In the European Economic Area, or EEA, which is comprised of the Member States of the European Union plus Norway, Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining a marketing authorization, or MA. There are two types of marketing authorizations.

- The centralized MA is issued by the European Commission through the centralized procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the EMA, and is valid throughout the entire territory of the EEA. The centralized procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced-therapy medicinal products (gene-therapy, somatic cell-therapy or tissue-engineered medicines) and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. The centralized procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EEA.

Under the centralized procedure the maximum timeframe for the evaluation of a marketing authorization application, or MAA, by the EMA is 210 days, excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP. Clock stops may extend the timeframe of evaluation of a MAA considerably beyond 210 days. Where the CHMP gives a positive opinion, it provides the opinion together with supporting documentation to the European Commission, who make the final decision to grant a marketing authorization, which is issued within 67 days of receipt of the EMA's recommendation. Accelerated assessment might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of major public health interest, particularly from the point of view of therapeutic innovation. The timeframe for the evaluation of a MAA under the accelerated assessment procedure is 150 days, excluding clock stops, but it is possible that the CHMP may revert to the standard time limit for the centralized procedure if it determines that the application is no longer appropriate to conduct an accelerated assessment.

- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the centralized procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this national MA can be recognized in another Member States through the mutual recognition procedure. If the product has not received a national MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the decentralized procedure. Under the decentralized procedure an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State, or RMS. The competent authority of the RMS prepares a draft assessment report, a draft summary of the product characteristics, or SmPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Concerned Member States) for their approval. If the Concerned Member States raise no objections, based on a potential serious risk to public health, to the assessment, SmPC, labeling, or packaging proposed by the RMS, the product is subsequently granted a national MA in all the Member States (i.e., in the RMS and the Concerned Member States).

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

Now that the United Kingdom (which comprises Great Britain and Northern Ireland) has left the European Union, Great Britain will no longer be covered by centralized MAs (under the Northern Irish Protocol, centralized MAs will continue to be recognized in Northern Ireland). All medicinal products with a current centralized MA

were automatically converted to Great Britain MAs on January, 1 2021. For a period of two years from January 1, 2021, the Medicines and Healthcare products Regulatory Agency, or MHRA, the UK medicines regulator, may rely on a decision taken by the European Commission on the approval of a new MA in the centralized procedure, in order to more quickly grant a new Great Britain MA. A separate application will, however, still be required. The MHRA also has the power to have regard to MAs approved in EEA Member States through decentralized or mutual recognition procedures with a view to more quickly granting a MA in the United Kingdom or Great Britain.

European Union New Chemical Entity Exclusivity

In the EEA, innovative medicinal products qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. The data exclusivity, if granted, prevents generic or biosimilar applicants from referencing the innovator's pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar MA in the EEA, for a period of eight years from the date of authorization of the reference product. During the additional two-year period of market exclusivity, a generic marketing authorization application can be submitted, and the innovator's data may be referenced, but no generic or biosimilar product can be marketed until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are determined to bring a significant clinical benefit in comparison with currently approved therapies. Even if an innovative medicinal product gains the prescribed period of data exclusivity, however, another company may market another version of the product if such company obtained a MA based on a marketing authorization application with a complete independent data package of pharmaceutical tests, preclinical tests and clinical trials.

European Union Orphan Designation and Exclusivity

In the EEA, the EMA's Committee for Orphan Medicinal Products grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions and either (i) such condition affects not more than five in 10,000 persons in the EEA, or (ii) it is unlikely that the development of the medicine would generate sufficient return to justify the necessary investment in its development. In either case, the applicant must also demonstrate that no satisfactory method of diagnosis, prevention or treatment has been authorized (or, if a method exists, the product would be a significant benefit to those affected compared to the product available).

In the EEA, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity is granted following grant of a marketing authorization. During this market exclusivity period, neither the EMA nor the European Commission nor any of the competent authorities in the EEA Members States can accept an application or grant a marketing authorization for a "similar medicinal product." A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. Market exclusivity may also be revoked in very select cases, such as if (i) it is established that a similar medicinal product is safer, more effective or otherwise clinically superior to the authorized product; (ii) the marketing authorization holder consents to such revocation; or (iii) the marketing authorization holder cannot supply enough orphan medicinal product. Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

From January 1, 2021, a separate process for orphan drug designation will apply in Great Britain. There will be no pre-marketing authorization orphan designation (as there is in the EEA) and the application for orphan designation will be reviewed by the MHRA at the time of the marketing authorization application. The criteria are the same as in the EEA, save that they apply to Great Britain only (e.g., there must be no satisfactory method of diagnosis, prevention or treatment of the condition concerned in Great Britain).

European Pediatric Investigation Plan

In the EEA, MAAs for new medicinal products have to include the results of studies conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee, or PDCO. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which marketing authorization is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when this data is not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. If a marketing authorization is obtained and trial results are included in the product information, even when negative, the product is eligible for six months' supplementary protection certificate extension. In the case of orphan medicinal products, a two year extension of the orphan market exclusivity may be available. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the PIP are developed and submitted.

Brexit and the Regulatory Framework in the United Kingdom

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union (commonly referred to as Brexit). Thereafter, on March 29, 2017, the country formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. The United Kingdom formally left the European Union on January 31, 2020. A transition period began on February 1, 2020, during which EU pharmaceutical law remained applicable to the United Kingdom. However this ended on December 31, 2020. Since the regulatory framework in the United Kingdom covering the quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorizations, commercial sales, and distribution of pharmaceutical products is derived from EU Directives and Regulations, Brexit could materially impact the future regulatory regime which applies to products and the approval of product candidates in the United Kingdom, as the UK legislation now has the potential to diverge from EU legislation. It remains to be seen how Brexit will impact regulatory requirements for medicinal products and devices in the United Kingdom in the long term. The MHRA has recently published detailed guidance for industry and organizations to follow now the transition period is over, which will be updated as the United Kingdom's regulatory position on medicinal products and medical devices evolves over time.

European Data Collection

The collection and use of personal health data in the EEA is governed by the General Data Protection Regulation, or GDPR, which became effective May 25, 2018. The GDPR applies to any company established in the EEA and to companies established outside the EEA that process personal data in connection with the offering of goods or services to data subjects in the European Union or the monitoring of the behavior of data subjects in the European Union. The GDPR enhances data protection obligations for data controllers of personal data, including stringent requirements relating to the consent of data subjects, expanded disclosures about how personal data is used, requirements to conduct privacy impact assessments for "high risk" processing, limitations on retention of personal data, mandatory data breach notification and "privacy by design" requirements, and creates direct obligations on service providers acting as data processors. The GDPR also imposes strict rules on the transfer of personal data outside of the EEA to countries that do not ensure an adequate level of protection, like the United States. Failure to comply with the requirements of the GDPR and the related national data protection laws of the EEA Member States may result in fines up to €20 million or 4% of a company's global annual revenues for the preceding financial year, whichever is higher. Moreover, the GDPR grants data subjects the right to claim material and non-material damages resulting from infringement of the GDPR. Given the breadth and depth of changes in data protection obligations, maintaining compliance with the GDPR, will require significant time, resources and expense, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. This may be onerous and adversely affect our business, financial condition, results of operations and prospects.

In addition, further to the United Kingdom's exit from the European Union on January 31, 2020, the GDPR ceased to apply in the United Kingdom at the end of the transition period on December 31, 2020. However, as of

January 1, 2021, the United Kingdom's European Union (Withdrawal) Act 2018 incorporated the GDPR (as it existed on December 31, 2020 but subject to certain UK specific amendments) into UK law, referred to as the UK GDPR. The UK GDPR and the UK Data Protection Act 2018 set out the United Kingdom's data protection regime, which is independent from but aligned to the European Union's data protection regime. Non-compliance with the UK GDPR may result in monetary penalties of up to £17.5 million or 4% of worldwide revenue, whichever is higher. The United Kingdom, however, is now regarded as a third country under the European Union's GDPR which means that transfers of personal data from the EEA to the United Kingdom will be restricted unless an appropriate safeguard, as recognized by the EU's GDPR, has been put in place. Although, under the EU-UK Trade Cooperation Agreement it is lawful to transfer personal data between the United Kingdom and the EEA for a six-month period following the end of the transition period, with a view to achieving an adequacy decision from the European Commission during that period. Like the EU GDPR, the UK GDPR restricts personal data transfers outside the United Kingdom to countries not regarded by the United Kingdom as providing adequate protection (this means that personal data transfers from the United Kingdom to the EEA remain free flowing).

Rest of the World Regulation

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

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

Additional Laws and Regulations Governing International Operations

If we further expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, 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 certain accounting provisions requiring the company 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.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

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

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The U.S. Securities and Exchange Commission, or the SEC, also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

Coverage and Reimbursement

Successful commercialization of new drug products depends in part on the extent to which reimbursement for those drug products 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 drug products they will pay for and establish reimbursement levels. The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford a drug product. Sales of drug products depend substantially, both domestically and abroad, on the extent to which the costs of drugs products are paid for by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drug products. In many countries, the prices of drug products are subject to varying price control mechanisms as part of national health systems. In general, the prices of drug products under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for drug products, but monitor and control company profits. Accordingly, in markets outside the United States, the reimbursement for drug products may be reduced compared with the United States.

In the United States, the principal decisions about reimbursement for new drug products are typically made by CMS, an agency within the HHS. CMS decides whether and to what extent a new drug product will be covered and reimbursed under Medicare, and private payors tend to follow CMS to a substantial degree. However, no uniform policy of coverage and reimbursement for drug products exists among third-party payors and coverage and reimbursement levels for drug products can differ significantly from payor to payor.

Third-party payors may limit coverage to specific products on an approved list or formulary, which might not include all of the FDA-approved products for a particular indication. Also, third-party payors may refuse to include a particular branded drug on their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or another alternative is available. Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity, and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs. Further, due to the COVID-19 pandemic, millions of individuals have lost or are expected to lose employer-based insurance coverage, which may adversely affect our ability to successfully commercialize our products.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, established the Medicare Part D program to provide a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Unlike Medicare Parts A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. While all Medicare drug plans must give at least a standard level of coverage set by Medicare, Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for drugs for which we obtain marketing approval. Any negotiated prices for any of our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

For a drug product to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the average

manufacturer price, or AMP, and Medicaid rebate amounts reported by the manufacturer. As of 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although under the current state of the law these newly eligible entities (with the exception of children's hospitals) will not be eligible to receive discounted 340B pricing on orphan drugs. As 340B drug pricing is determined based on AMP and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase. The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. In addition, there have been several changes to the 340B drug pricing program in recent years, which impose ceilings on prices that drug manufacturers can charge for medications sold to certain health care facilities. Legal challenges to reimbursement formula changes under the 340B drug pricing program are ongoing, and it is unclear how these developments could affect covered hospitals who might purchase our future products and affect the rates we may charge such facilities for our approved products in the future, if any.

The plan for the research was published in 2012 by the Department of HHS, the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures are made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of our drug candidates, if any such drug or the condition that they are intended to treat are the subject of a trial. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's drug could adversely affect the sales of our drug candidate. If third-party payors do not consider our drugs to be cost-effective compared to other available therapies, they may not cover our drugs after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our drugs on a profitable basis.

These laws, and future state and federal healthcare reform measures may be adopted in the future, any of which may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

Outside of the United States, the pricing of pharmaceutical products and medical devices is subject to governmental control in many countries. For example, in the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost effectiveness of a particular therapy to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. Other countries may allow companies to fix their own prices for products, but monitor and control product volumes and issue guidance to physicians to limit prescriptions. Efforts to control prices and utilization of pharmaceutical products and medical devices will likely continue as countries attempt to manage healthcare expenditures.

Human Capital Management

Our human capital philosophy relies on attracting and retaining team members who consistently demonstrate top performance. Our culture and our approach to talent reinforces this philosophy, including recruiting, professional development, performance management and total rewards. We have provided below additional details on some of our core human resources, or People, processes.

As of December 31, 2020, we and our subsidiaries, to which we refer as our affiliates, had 385 full-time employees and 11 part-time employees. Of these, 268 focus on driving forward research and development programs, either directly or through our affiliates, and 128 work across our affiliates to provide strategic business development, finance and executive leadership expertise, as well as general and administrative services generally across our affiliates. We have never had a work stoppage, and none of our employees is represented by a labor organization or under any collective-bargaining arrangements. We consider our employee relations to be good.

Recruiting

In 2020, we established an in-house talent acquisition capability to support our affiliates in hiring the right talent at the right time. This team of experienced recruiters works closely with hiring managers to understand the required skills and capabilities for an open role, and then supports the interview process and evaluation of candidates. We strive to hire top talent, and therefore need a high-quality recruiting process and candidate experience. We endeavor to fill every role with the most qualified candidate possible, which sometimes requires partnership with an external recruitment agency. We are consistently looking at new opportunities and avenues to recruit talented individuals to work at BridgeBio.

The talent acquisition team's focus in 2021 is to meet the growth needs across BridgeBio and our affiliates. We recognize that our current and potential future team members have options for employment opportunities, including with other biotech and pharma companies, research and academic institutions, government entities, and consulting and investment firms. To attract and retain top performing team members, we focus on creating an environment that allows for autonomy, growth and impact while also offering a competitive total rewards package.

Professional Development and Performance Management

We invest in the professional development of our team members through regular feedback and guidance, as well as targeted learning and development opportunities to meet demonstrated needs. We established a set of five core attributes that we expect every BridgeBio team member to demonstrate while performing in their roles: Patient Champion, Entrepreneurial Operator, Truth Seeker, Inspires Excellence and High-Quality Executor.

BridgeBio conducts semi-annual formal performance reviews for all team members to evaluate performance against these attributes. These reviews include self, peer and manager feedback. The feedback focuses on strengths and opportunities for improvement to enable the professional development of all team members. At the end of the year, the performance review also includes a formal rating and informs compensation decisions, including performance bonus, salary adjustments and promotions.

Core Values and Ethics

Millions worldwide are afflicted with genetic diseases, but small patient populations and industry reluctance to conduct early-stage development means that for many, treatments have not been forthcoming. We are committed to bridging this gap: between business case and scientific possibility, between patient and hope. This starts with our first core value: to **put patients first**. We also strive to **think independently**. Our goal is to not simply accept the ideas and opinions of others as fact, but instead to ask "why?" and "why not?" We endeavor to bring a rigorous, first-principles mindset to each problem that we take on. We pride ourselves on being **radically transparent**. A commitment to independent thinking requires us to consider the ideas of others and to adopt them if they prove best. We strive to maintain a culture where any idea is worthy of both consideration and testing. We know that **every minute counts**. Our decentralized model strives to deliver treatments from discovery to patients as fast as humanly possible by utilizing focused teams of experts for each asset. Big decisions can be taken by people best-equipped to understand them, without wasting time on unnecessary cycles. And we **let Science speak**. Our model was designed to promote the rational assessment of our programs. Decisions about a program's fate are driven by its performance against a set of objective criteria, giving each potential medicine's scientific merits the last word. All employees are responsible for upholding these values and the BridgeBio Code of Business Conduct and Ethics, which forms the foundation of our policies and practices.

Total Rewards

To attract and retain top talent, we offer a competitive total rewards package. We peg total direct compensation at the upper end of market. We link a portion of every employee's compensation to performance through a performance bonus program. To create a sense of ownership and align employee incentives with our long-term success, we offer eligible employees equity ownership in the company through stock option or restricted stock unit grants and our employee stock purchase plan. We also designed a program to incentive affiliate-level employees to achieve specific milestones at core value-inflection points, such as IND or NDA approval.

We focus our benefits offering on areas critical to keeping our employees and their immediate families healthy and productive. We offer physical and mental health benefits to all employees who work at least 20 hours per week, on average. We have a flexible paid time off policy to empower team members to take the time they need, when they need it.

Diversity, Equity and Inclusion

We believe that a diverse, equitable and inclusive culture is critical to BridgeBio's success. We are proud to promote unique voices within and outside our organization, and are eager to learn from others' experiences, as we know that a diverse and inclusive workforce is a business imperative and key to our long-term success.

As a starting point of our Diversity, Equity and Inclusion, or DE&I, efforts, a group of employees launched a "Women at Bridge" employee resource group, which receives direct support from executive management. Women at Bridge is passionate about strengthening opportunities for women and working with others who share enthusiasm for that goal. In its first few months, the group performed an assessment of diversity and inclusion at BridgeBio, identified potential gaps, and formulated steps to address them. They facilitate open and direct communication to engage the broader BridgeBio organization, including updates with our Chief Executive Officer, open forums or town hall meetings, often with a guest speaker, regular ongoing update communications, and employee engagement surveys. Recently, a number of Women at Bridge "chapters" were formed to complement the larger forum and facilitate smaller, more meaningful discussions about strengthening and reinforcing opportunities and engagement of women across the organization.

In 2021, we intend to roll out additional initiatives to guide our DE&I activities. We formed a volunteer DE&I Steering Committee, comprised of a diverse set of BBP employees, to draft a DE&I vision for BridgeBio, and to establish specific goals and priorities for 2021. As one of the DE&I Steering Committee's first initiatives, we intend to launch an Unconscious Bias education program for employees in 2021.

Response to COVID-19

With the emergence of the COVID-19 global pandemic, and prior to the shelter-in-place mandate from the State of California where the majority of our employees are located, we took extra precautions to reduce the risk of virus exposure for all employees. We encouraged all employees who were able to work from home to do so. For these newly remote employees, we provided ergonomic evaluations of their workstation, allowed flexible schedules, supported their information technology needs, and provided guidance for managers to ensure that their employees were maintaining their physical, mental and emotional wellbeing. We provided a monthly financial subsidy from April through August to accommodate for any new or ongoing at-home support that was needed.

We further supported our employees and government efforts to curb the COVID-19 pandemic through a multifaceted communication, infrastructure, and behavior modification and enforcement effort, including:

- establishing clear and regular COVID-19 policies, safety protocols, and updates to all employees;
- providing/mandating Covid-19 PCR testing protocol for all employees that need or desire to be in the office or lab;
- decreasing density and increasing physical distancing in workspaces for employees working onsite by scheduling adjustments;
- adjusting attendance policies to encourage those who are sick to stay home;
- increasing cleaning protocols across all locations;
- providing additional personal protective equipment and cleaning supplies;
- implementing protocols to address actual and suspected COVID-19 cases and potential exposure;

- prohibiting all domestic and international non-essential travel for all employees; and
- requiring masks to be worn in all locations.

Corporate and Other Information

We were incorporated as a Delaware corporation in 2019, under the name BridgeBio Pharma, Inc. Our principal executive offices are located at 421 Kipling Street, Palo Alto, CA 94301. Our telephone number is (650) 391-9740.

Our web page address is *https://bridgebio.com*. Our investor relations website is located at *https://investor.bridgebio.com*. We make available free of charge on our investor relations website under "SEC Filings" our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, our directors' and officers' Section 16 Reports and any amendments to those reports after filing or furnishing such materials to the SEC. References to our website address do not constitute incorporation by reference of the information contained on the website, and the information contained on the website is not part of this document or any other document that we file with or furnish to the SEC.

We became a large accelerated filer on December 31, 2020 because our aggregate worldwide market value of the voting and non-voting common equity held by non-affiliates as of June 30, 2020, our most recently completed second fiscal quarter, was greater than $700 million. Prior to that, we were an "emerging growth company", or EGC, as defined in the Jumpstart Our Business Startups Act of 2012. As an EGC, we were eligible for exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and reduced disclosure obligations regarding executive compensation. We can no longer avail ourselves of these exemptions and are now required to comply with the standards and compliance dates for large accelerated filers.

ITEM 1A. RISK FACTORS

Our business involves significant risks, some of which are described below. You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this Annual Report on Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the related notes. If any of the following risks actually occurs, it could harm our business, prospects, operating results and financial condition and future prospects. In such event, the market price of our common stock could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. This Annual Report on Form 10-K also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this Annual Report.

Risks Related to Our Financial Position and Growth Strategy

Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have not generated any revenue since inception, which, together with our limited operating history, may make it difficult for you to assess our future viability.

Pharmaceutical and biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a clinical-stage biopharmaceutical company with a limited operating history upon which you can evaluate our business and prospects. Our subsidiaries, on whose success we largely rely, are also early-stage biopharmaceutical companies. To date, we have focused principally on identifying, acquiring or in-licensing and developing our product candidates at the subsidiary level, all of which are in discovery, lead optimization, preclinical or clinical development. Our product candidates will require substantial additional development time, including extensive clinical research, and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales.

We are not profitable and have incurred losses in each year since our inception in April 2015. Our net losses for the years ended December 31, 2020, 2019 and 2018 were $505.5 million, $288.6 million and $169.5 million, respectively. As of December 31, 2020, we had an accumulated deficit of $888.8 million. We have no products approved for commercial sale and have not generated any revenues from product sales, and have financed operations solely through the sale of equity securities and debt financings. We continue to incur significant research and development, or R&D, and other expenses related to ongoing operations and expect to incur losses for the foreseeable future. In addition, we believe that potential delays in our ongoing and planned clinical trials and adjustments to certain of our study procedures, such as enabling alternate site, telehealth and home visits, and at home drug delivery, with respect to our ongoing clinical trials, as a result of the SARS-CoV-2, the novel strain of coronavirus that causes coronavirus disease 19, or COVID-19, pandemic, could increase our expenditures or draw out our expenditures over a longer period of time than originally estimated. Additionally, changes to our selection of contract research organizations, or CROs, for non-clinical laboratory activities and engagement with contract manufacturing organizations, or CMOs, to mitigate any potential near-term impacts to our supply chain may increase our expenditures relative to initial expectations. We anticipate these losses will increase substantially in future periods and we will not generate any revenue from product sales until after we have successfully completed clinical development and received regulatory approval for the commercial sale of one or more product candidates.

Because of the numerous risks and uncertainties associated with drug development, we are unable to predict the timing or amount of our expenses, or when we will be able to generate any meaningful revenue or achieve or maintain profitability, if ever. In addition, our expenses could increase beyond our current expectations if we are required by the U.S. Food and Drug Administration, or FDA, or comparable foreign regulatory authorities, to conduct nonclinical or preclinical studies or clinical trials in addition to those that we currently anticipate or to otherwise provide data beyond that which we currently believe is necessary to support an application for marketing approval or to continue clinical development, or if there are any delays in any of our or our future collaborators' clinical trials or the development of our product candidates that we may identify. Even if our future product candidates that we may identify are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate and ongoing compliance efforts.

We may never be able to develop or commercialize a marketable drug or achieve profitability. Revenue from the sale of any product candidate for which regulatory approval is obtained will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to obtain reimbursement at any price and whether we own the commercial rights for that territory. Our growth strategy depends on our ability to generate revenue. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to achieve sustained profitability would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our research and development pipeline, market our product candidates, if approved, that we may identify and pursue, or continue our operations. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital.

If we obtain a controlling interest in additional companies in the future, it could adversely affect our operating results and the value of our common stock, thereby disrupting our business.

As part of our strategy, we expect to form and invest in additional wholly-owned subsidiaries and variable interest entities, or VIEs. Investments in our existing and any future subsidiaries involve numerous risks, including, but not necessarily limited to:

- risk of conducting research and development activities in new therapeutic areas or treatment modalities in which we have little to no experience;
- diversion of financial and managerial resources from existing operations;
- our ability to negotiate a proposed acquisition, in-license or investment in a timely manner or at a price or on terms and conditions favorable to us;
- our ability to combine and integrate a potential acquisition into our existing business to fully realize the benefits of such acquisition;
- the impact of regulatory reviews on a proposed acquisition, in-license or investment; and
- the outcome of any legal proceedings that may be instituted with respect to a potential acquisition, in-license or investment.

If we fail to properly evaluate potential acquisitions, in-licenses, investments or other transactions associated with the creation of new research and development programs or the maintenance of existing ones, we might not achieve the anticipated benefits of any such transaction, we might incur costs in excess of what we anticipate, and management resources and attention might be diverted from other necessary or valuable activities. For instance, in January 2021, we completed our acquisition of all of the outstanding shares of common stock of Eidos that were not previously owned by us or our subsidiaries, to which we refer as the Eidos Merger. In connection with the Eidos Merger and our integration of Eidos' historical operations into our business, the attention of certain members of each company's management and each company's resources were and may continue to be diverted from day-to-day business operations, and we may fail to realize the anticipated benefits of the transaction. Additionally, the interests of our stockholders were diluted as a result of our issuance of shares of our common stock to Eidos' stockholders and our assumption of certain equity awards of Eidos in connection with the transaction. We may engage in similar discussions in the future with respect to other potential transactions that may divert our time and resources from our ongoing operations. In addition, from time to time we have pursued, and may in the future pursue, research and development programs through our wholly-owned subsidiaries and VIEs that we may ultimately determine not to advance, based on our ongoing assessment of the likelihood of success relative to the costs and risks associated with the program.

Risks Related to the Clinical Development of Our Product Candidates

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

Clinical testing is expensive, time consuming and subject to uncertainty. We cannot guarantee that any of our ongoing and planned clinical trials will be conducted as planned or completed on schedule, if at all. Moreover, even if these trials are initiated or conducted on a timely basis, issues may arise that could result in the suspension or

termination of such clinical trials. A failure of one or more clinical trials can occur at any stage of testing, and our ongoing and future clinical trials may not be successful. Events that may prevent successful or timely initiation or completion of clinical trials include:

- delays in clinical trial enrollment or clinical trial initiation resulting from the COVID-19 pandemic or any future pandemics;
- inability to generate sufficient preclinical, toxicology or other *in vivo* or *in vitro* data to support the initiation or continuation of clinical trials;
- delays in confirming target engagement, patient selection or other relevant biomarkers to be utilized in preclinical and clinical product candidate development;
- delays in reaching a consensus with regulatory agencies as to the design or implementation of our clinical trials;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical trial site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an Investigational New Drug application, or IND, or IND amendment, clinical trial application, or CTA, or CTA amendment, or equivalent application or amendment; or as a result of a new safety finding that presents unreasonable risk to clinical trial participants or a negative finding from an inspection of our clinical trial operations or study sites;
- developments in trials for other product candidates with the same targets or related modalities as our product candidates conducted by competitors that raise regulatory or safety concerns about risk to patients of the treatment, or if the FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- difficulties in securing access to materials for the comparator arm of certain of our clinical trials;
- delays in identifying, recruiting and enrolling suitable patients to participate in clinical trials, and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulty collaborating with patient groups and investigators;
- failure by CROs, other third parties or us to adhere to clinical trial requirements;
- failure to perform in accordance with the FDA's or any other regulatory authority's current good clinical practices, or GCP, requirements, or regulatory guidelines in other countries;
- occurrence of adverse events, or AEs, associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical trials of any product candidates that we may identify and pursue being greater than we anticipate;
- clinical trials of any product candidates that we may identify and pursue producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon product development programs;
- transfer of manufacturing processes to larger-scale facilities operated by a CMO, or by us, and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and

- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of product candidates that we may identify for use in clinical trials, or the inability to do any of the foregoing.

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

We could also encounter delays if an ongoing or planned clinical trial is suspended or terminated by us, by the data safety monitoring board, or DSMB, including for our ongoing Phase 3 clinical trial of acoramidis, our ongoing and planned Phase 2 and Phase 3 clinical trials of infigratinib, our planned clinical trial of BBP-631 and our ongoing Phase 2b clinical trial of encaleret, or by the FDA or other regulatory authority, or if the IRBs of the institutions in which such trials are being conducted suspend or terminate the participation of their clinical investigators and sites subject to their review. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. We have in the past received, and may receive in the future, partial or full clinical hold notices from the FDA or other regulatory authorities, which have required, and may in the future require, us to conduct additional studies, generate additional data, amend our clinical trial protocols and/or delay or halt the initiation or continuation of our clinical trials. We may be required or may voluntarily determine to place one or more of our product candidates on clinical hold in the future for various reasons, which could delay or otherwise impair our clinical development efforts and ability to obtain regulatory approval for any such product candidate. Additionally, the FDA may determine, upon review of an IND submission, that we have not provided sufficient information needed to assess the risks to subjects of the proposed studies, or that our IND submission is otherwise insufficient to support initiation of a clinical trial. There is no guarantee that FDA will agree that our responses are sufficient, and we may be required to conduct additional preclinical studies or manufacturing steps before FDA allows our proposed clinical trials to proceed.

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

Delays in the initiation, conduct or completion of any clinical trial of our product candidates will increase our costs, slow down the product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. In the event we identify any additional product candidates to pursue, we cannot be sure that submission of an IND or a CTA will result in the FDA or comparable foreign regulatory authority allowing clinical trials to begin in a timely manner, if at all. Any of these events could have a material adverse effect on our business, prospects, financial condition and results of operations.

Results of earlier studies or clinical trials may not be predictive of future clinical trial results, and initial studies or clinical trials may not establish an adequate safety or efficacy profile for our product candidates to justify proceeding to advanced clinical trials or an application for regulatory approval.

The results of nonclinical and preclinical studies and clinical trials may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. In addition, for certain of our product candidates that we acquired, we did not undertake the preclinical studies and clinical trials ourselves. The results of preclinical studies and clinical trials in one set of patients or disease indications, or from preclinical studies or clinical trials that we did not lead, may not be predictive of those obtained in another. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through nonclinical studies and initial clinical trials. A number of companies in the pharmaceutical and biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we cannot be certain that we will not face similar setbacks. Even if early-stage clinical trials are successful, we may need to conduct additional clinical trials of our product candidates in additional patient populations or under different treatment conditions before we are able to seek approvals from the FDA and regulatory authorities outside the United States to market and sell these product candidates. Our failure to obtain marketing approval for our product candidates for commercially viable indications, or at all, would substantially harm our business, prospects, financial condition and results of operations. For example, if acoramidis is first approved for TTR amyloidosis-cardiomyopathy, or ATTR-CM, on the basis of efficacy endpoints other than for reduction in mortality or hospitalization, acoramidis might be limited to a second-line claim until such data were available. Any of these events could limit the commercial potential of acoramidis and have a material adverse effect on our business, prospects, financial condition and results of operations.

Additionally, some clinical trials of our product candidates performed to date were generated from open-label studies and were conducted at a limited number of clinical sites on a limited number of patients. An “open-label” clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product candidate or either an existing approved drug or placebo. Most typically, open-label clinical trials test only the investigational product candidate and sometimes may do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. Open-label clinical trials may be subject to a “patient bias” where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. Moreover, patients selected for early clinical trials often include the most severe sufferers and their symptoms may have been bound to improve notwithstanding the new treatment. In addition, open-label clinical trials may be subject to an “investigator bias” where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. Given that our Phase 2 clinical trial of acoramidis included an open-label clinical trial extension and our Phase 2 dose-escalation and expansion study of infigratinib in children with achondroplasia, or PROPEL 2, is designed as an open-label trial, the results from these clinical trials may not be predictive of future clinical trial results with these or other product candidates for which we include an open-label clinical trial when studied in a controlled environment with a placebo or active control.

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

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. The indications for which we plan to evaluate our current product candidates represent a rare disease or condition with limited patient populations from which to draw participants in clinical trials. Due to our focus on the development of product candidates for the treatment of Mendelian diseases and genetically driven cancers, many of which are rare conditions, we may not be able to identify and enroll a sufficient number of patients, or those with required or desired characteristics and criteria, in a timely manner.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including:

- the size and nature of a patient population;
- the patient eligibility criteria defined in the applicable clinical trial protocols, which may limit the patient populations eligible for clinical trials to a greater extent than competing clinical trials for the same indication;
- the size of the study population required for analysis of the trial's primary endpoints;
- the severity of the disease under investigation;
- the proximity of patients to a trial site;
- the design of the trial;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the approval or concurrent enrollment of clinical trials involving competing product candidates currently under development for Mendelian diseases or genetically driven cancers, or competing clinical trials for similar therapies or targeting patient populations meeting our patient eligibility criteria;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies and product candidates;
- the ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete such trials for any reason, including due to the ongoing COVID-19 pandemic.

If we have difficulty enrolling sufficient numbers of patients to conduct clinical trials as planned, we may need to delay or terminate ongoing or planned clinical trials, either of which would have an adverse effect on our business.

Use of our product candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or halt their clinical development, prevent their regulatory approval, cause us to suspend or discontinue clinical trials, abandon a product candidate, limit their commercial potential, if approved, or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.

As is the case with pharmaceuticals generally, it is likely that there may be side effects and adverse events, or AEs, associated with our product candidates' use. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials, and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if our product candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the product candidate if approved. We may also be required to modify or terminate our study plans based on findings in our preclinical studies or clinical trials. For instance, in our Phase 2 clinical trial of infigratinib for the treatment of FGFR-driven cancers, the most commonly reported treatment emergent AE of any grade was hyperphosphatemia, which is an electrolyte disorder in which there is an elevated level of phosphate in the blood. These and other AEs that we may observe in our ongoing and future clinical trials of our product candidates could require us to delay, modify or abandon our development plans for the affected product candidate or other product candidates that share properties of the affected product candidate. Many product candidates that initially show promise in early-stage testing may later be found to cause side effects that prevent further development. As we work to advance existing product candidates and to identify new product candidates, we cannot be certain that later testing or trials of product candidates that initially showed promise in early testing will not be found to cause similar or different unacceptable side effects that prevent their further development.

It is possible that as we test our product candidates in larger, longer and more extensive clinical trials, or as the use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other AEs that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition and prospects significantly.

Additionally, adverse developments in clinical trials of pharmaceutical and biopharmaceutical products conducted by others may cause the FDA or other regulatory oversight bodies to suspend or terminate our clinical trials or to change the requirements for approval of any of our product candidates.

In addition to side effects caused by the product candidate, the administration process or related procedures also can cause adverse side effects. If any such AEs occur, our clinical trials could be suspended or terminated. If we are unable to demonstrate that any AEs were caused by the administration process or related procedures, the FDA, the European Commission, the European Medicines Agency, or the EMA, or other regulatory authorities could order us to cease further development of, or deny approval of, a product candidate for any or all targeted indications. Even if can demonstrate that all future serious adverse events, or SAEs, are not product-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the trial. Moreover, if we elect, or are required, to not initiate, delay, suspend or terminate any future clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition and prospects significantly.

Additionally, if any of our product candidates receives marketing approval, the FDA could impose a boxed warning in the labeling of our product and could require us to adopt a risk evaluation and mitigation strategy, or REMS, and could apply elements to assure safe use to ensure that the benefits of the product outweigh its risks, which may include, among other things, a Medication Guide outlining the risks of the product for distribution to patients and a communication plan to health care practitioners. Furthermore, if we or others later identify undesirable side effects caused by our product candidates once approved, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- we may be required by the FDA to implement a REMS;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these occurrences could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and may harm our business, financial condition and prospects significantly.

Certain of our product candidates under development for the treatment of patient populations with significant comorbidities that may result in deaths or serious adverse or unacceptable side effects and require us to abandon or limit our clinical development activities.

Patients in certain of our ongoing and planned clinical trials of product candidates in genetically driven cancers, including clinical trials of infigratinib of FGFR-driven cancers, as well as patients who may undergo treatment with other product candidates that we may develop, may also receive chemotherapy, radiation, and/or other high dose or myeloablative treatments in the course of treatment of their disease, and may therefore experience side effects or AEs, including death, that are unrelated to our product candidates. While these side effects or AEs may be unrelated to our product candidates, they may still affect the success of our clinical trials. The inclusion of critically ill patients in our clinical trials may also result in deaths or other adverse medical events due to underlying disease or to other therapies or medications that such patients may receive. Any of these events could prevent us from advancing our product candidates through clinical development, and from obtaining regulatory approval, and would impair our ability to commercialize our product candidates. Any inability to advance our product candidates through clinical development may harm our business, financial condition, results of operations and prospects.

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

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

Risks Related to Regulatory Review and Approval of our Product Candidates

Our product candidates are in preclinical or clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. To date, we have focused substantially all of our efforts and financial resources on identifying, acquiring, and developing our product candidates, including conducting lead optimization, nonclinical studies, preclinical studies and clinical trials, and providing general and administrative support for these operations. We cannot be certain that any clinical trials will be conducted as planned or completed on schedule, if at all. Our inability to successfully complete preclinical and clinical development could result in additional costs to us and negatively impact our ability to generate revenue. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize product candidates. We currently have no products approved for sale and have not generated any revenue from sales of drugs, and we may never be able to develop or successfully commercialize a marketable drug.

All of our product candidates require additional development; management of preclinical, clinical and manufacturing activities; and regulatory approval. In addition, we will need to obtain adequate manufacturing supply; build a commercial organization; commence marketing efforts; and obtain reimbursement before we generate any significant revenue from commercial product sales, if ever. Many of our product candidates are in early-stage research or translational phases of development, and the risk of failure for these programs is high. We cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we and our subsidiaries may not be able to continue operations, which may result in us winding down and dissolving the subsidiary, selling or out-licensing the technology or pursuing an alternative strategy.

If we are unable to obtain regulatory approval in one or more jurisdictions for any product candidates that we may identify and develop, our business will be substantially harmed.

We cannot commercialize a product until the appropriate regulatory authorities have reviewed and approved the product candidate. Approval by the FDA and comparable foreign regulatory authorities is lengthy and unpredictable, and depends upon numerous factors, including substantial discretion of the regulatory authorities. Approval policies, regulations or the type and amount of nonclinical or clinical data necessary to gain approval may change during the course of a product candidate's development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. We have not obtained regulatory approval for any product candidates, and it is possible that our current product candidates and any other product candidates which we may seek to develop in the future will not ever obtain regulatory approval. We cannot be certain that any of our product candidates will receive regulatory approval or be successfully commercialized even if we receive regulatory approval.

Obtaining marketing approval is an extensive, lengthy, expensive and inherently uncertain process, and regulatory authorities may delay, limit or deny approval of our product candidates for many reasons, including, but not limited to:

- the inability to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that the applicable product candidate is safe and effective as a treatment for our targeted indications;
- the FDA or comparable foreign regulatory authorities may disagree with the design, endpoints or implementation of our clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety or efficacy in the full population for which we seek approval;
- the FDA or comparable foreign regulatory authorities may require additional preclinical studies or clinical trials beyond those that we currently anticipate;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;
- the data collected from clinical trials of product candidates that we may identify and pursue may not be sufficient to support the submission of a new drug application, or NDA, biologics license application, or BLA, or other submission for regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA or comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or comparable foreign regulatory authorities may identify deficiencies in the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change in a manner that renders the clinical trial design or data insufficient for approval.

In addition, even if an NDA or other submission for regulatory approval is filed and accepted for review, as in the case of our NDA for fosdenopterin in molybdenum cofactor deficiency, or MoCD, Type A and our NDA for infigratinib in cholangiocarcinoma, the FDA or comparable regulatory authorities may delay their review or approval process or may decline to grant regulatory approval for a variety of reasons. The lengthy approval process, as well as the unpredictability of the results of clinical trials and evolving regulatory requirements, may result in our failure to obtain regulatory approval to market product candidates that we may pursue in the United States or elsewhere, which would significantly harm our business, prospects, financial condition and results of operations.

Our clinical trials may fail to demonstrate substantial evidence of the safety and efficacy of product candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive nonclinical studies, preclinical studies and clinical trials that the applicable product candidate is both safe and effective for use in each target indication, and in the case of our product candidates regulated as biological products, that the product candidate is safe, pure, and potent for use in its targeted indication. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical development process. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval.

We cannot be certain that our current clinical trials or any other future clinical trials will be successful. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a

material adverse effect on our business, financial condition and results of operations. In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA or comparable foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. This is particularly true for clinical trials in very rare diseases, such as with fosdenopterin for MoCD Type A, where the very small patient population makes it difficult or impossible to conduct two traditional, adequate and well-controlled studies, and therefore the FDA or comparable foreign regulatory authorities are often required to exercise flexibility in approving therapies for such diseases. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates. Even if regulatory approval is secured for a product candidate, the terms of such approval may limit the scope and use of the specific product candidate, which may also limit its commercial potential.

We may in the future conduct clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct one or more clinical trials outside the United States, including in Europe. For instance, our clinical trials of infigratinib and fosdenopterin each included patients outside of the United States, and our Phase 3 clinical trials of acoramidis include patients outside of the United States. The acceptance by the FDA or comparable foreign regulatory authority of study data from clinical trials conducted outside the United States or another jurisdiction may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction, including from our ongoing and planned Phase 3 clinical trials of acoramidis, for which we have enrolled cohorts outside the United States. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in product candidates that we may develop not receiving approval or clearance for commercialization in the applicable jurisdiction.

Even if we obtain FDA approval for product candidates that we may identify and pursue in the United States, we may never obtain approval to commercialize any product candidates outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and effectiveness. 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 processes vary among countries and can involve additional product testing and validation and additional or different administrative review periods from those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Seeking foreign regulatory approval could result in difficulties and costs and require additional nonclinical studies or clinical trials which could be costly and time-consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates in those countries. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not

have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approval in international markets is delayed, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

Even though we may apply for orphan drug designation for our product candidates, we may not be able to obtain orphan drug marketing exclusivity.

Our business strategy focuses on the development of product candidates for the treatment of genetic diseases, which may be eligible for FDA or EMA orphan drug designation. Regulatory authorities in some jurisdictions, including the United States and European Union, may designate drugs or biologics for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In order to obtain orphan drug designation, the request must be made before submitting an NDA or BLA. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including an NDA or BLA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other drugs or biologics for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

In the European Economic Area, or the EEA, the Committee for Orphan Medicinal Products of the EMA grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition, which either affects not more than five in 10,000 persons in the EEA, or where it is unlikely that the medicine would generate sufficient return to justify the necessary investment in its development. In each case, there must be no satisfactory method of diagnosis, prevention, or treatment which is authorized or, if a method exists, the product would be of significant benefit to those affected by the condition.

We have obtained from the FDA orphan drug designations for: BBP-009 for the treatment of nevoid basal cell carcinoma syndrome, or Gorlin syndrome; acoramidis for the treatment of transthyretin amyloidosis; encaleret for the treatment of autosomal dominant hypocalcemia (including ADH type 1 and ADH type 2); BBP-589 for the treatment of dystrophic epidermolysis bullosa; BBP-631 for the treatment of CAH 21OHD; fosdenopterin for the treatment of MoCD Type A; infigratinib for the treatment of cholangiocarcinoma; BBP-812 for the treatment of Canavan Disease; BBP-671 for the treatment of Pantothenate Kinase Associated Neurodegeneration, or PKAN, and Propionic Acidemia, or PA; and BBP-711 for the treatment of Primary hyperoxaluria, or PH1. We have obtained from the EMA orphan drug designation for: BBP-009 for the treatment of nevoid basal cell carcinoma syndrome, or Gorlin syndrome; acoramidis for the treatment of ATTR amyloidosis; BBP-589 for the treatment of epidermolysis bullosa; fosdenopterin for the treatment of MoCD Type A; BBP-631 for the treatment of congenital adrenal hyperplasia; BBP-812 for the treatment of Canavan Disease; and BBP-418 for the treatment of limb-girdle muscular dystrophy. We may seek orphan drug designation for other product candidates. Even if we obtain orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for

designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved. In addition, although we may seek orphan drug designation for other product candidates, we may never receive such designations. Any failure to obtain, maintain or otherwise recognize the benefits of orphan drug designation for our product candidates could have a material adverse effect on our prospects.

The FDA has granted rare pediatric disease designation to each of fosdenopterin for the treatment of MoCD Type A, BBP-671 for the treatment of PKAN and PA, and BBP-711 for the treatment of PH1. However, a marketing application for any of fosdenopterin, BBP-671 or BBP-711, if approved, may not meet the eligibility criteria for a priority review voucher.

The FDA has granted rare pediatric disease designation to each of fosdenopterin for the treatment of MoCD Type A, BBP-671 for the treatment of PKAN and PA, and BBP-711 for the treatment of PH1. Designation of a drug as a drug for a rare pediatric disease does not guarantee that an NDA for such drug will meet the eligibility criteria for a rare pediatric disease priority review voucher at the time the application is approved. Under the Federal Food, Drugs, and Cosmetic Act, or FDCA, we will need to request a rare pediatric disease priority review voucher in our original NDA for each of fosdenopterin, BBP-671 and BBP-711. The FDA may determine that an NDA for any of fosdenopterin, BBP-671 or BBP-711, if approved, does not meet the eligibility criteria for a priority review voucher, including for the following reasons:

- MoCD Type A, PKAN or PA, or PH1 no longer meets the definition of a rare pediatric disease;
- the NDA contains an active ingredient (including any ester or salt of the active ingredient) that has been previously approved in an NDA;
- the NDA is not deemed eligible for priority review;
- the NDA does not rely on clinical data derived from studies examining a pediatric population and dosages of the drug intended for that population (that is, if the NDA does not contain sufficient clinical data to allow for adequate labeling for use by the full range of affected pediatric patients); or
- the NDA is approved for a different adult indication than the rare pediatric disease for which any of fosdenopterin, BBP-671 or BBP-711 is designated (for example, if any of fosdenopterin, BBP-671 or BBP-711 is approved for an indication based on specific genetic alterations that would be inclusive of, but not limited to, fosdenopterin, BBP-671 or BBP-711).

The authority for the FDA to award rare pediatric disease priority review vouchers for drugs and biologics that receive rare pediatric disease designation on or prior to September 30, 2024 is currently limited to drugs and biologics that receive rare pediatric disease designation on or prior to September 30, 2024, and the FDA may only award rare pediatric disease priority review vouchers through September 30, 2026. However, it is possible the FDA's authority to award rare pediatric disease priority review vouchers will be further extended by Congress. Absent any such extension, if an NDA for any of fosdenopterin, BBP-671 or BBP-711 is not approved prior to September 30, 2026 for any reason, regardless of whether it meets the criteria for a rare pediatric disease priority review voucher, it will not be eligible for a priority review voucher.

We may not elect or be able to take advantage of any expedited development or regulatory review and approval processes available to product candidates granted breakthrough therapy, fast track or regenerative medicine advanced therapy designation by the FDA.

We intend to evaluate and continue ongoing discussions with the FDA on regulatory strategies that could enable us to take advantage of expedited development pathways for certain of our product candidates, although we cannot be certain that our product candidates will qualify for any expedited development pathways or that regulatory authorities will grant, or allow us to maintain, the relevant qualifying designations. Potential expedited development pathways that we could pursue include breakthrough therapy, fast track designation and/or regenerative medicine advanced therapy, or RMAT.

Breakthrough therapy designation is intended to expedite the development and review of product candidates that are designed to treat serious or life-threatening diseases when "preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development." The designation of a

product candidate as a breakthrough therapy provides potential benefits that include more frequent meetings with the FDA to discuss the development plan for the product candidate and ensure collection of appropriate data needed to support approval; more frequent written correspondence from the FDA about matters such as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program, beginning as early as Phase 1; organizational commitment involving senior managers; and eligibility for rolling review and priority review.

Fast track designation is designed for product candidates intended for the treatment of a serious or life-threatening disease or condition, where nonclinical or clinical data demonstrate the potential to address an unmet medical need for this disease or condition.

We may seek RMAT designation for one or more of our product candidates. In 2017, the FDA established the RMAT designation as part of its implementation of the 21st Century Cures Act to expedite review of any drug that meets the following criteria: it qualifies as a RMAT, which is defined as a cell therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, with limited exceptions; it is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such a disease or condition. Like breakthrough therapy designation, RMAT designation provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate, and eligibility for rolling review and priority review. Products granted RMAT designation may also be eligible for accelerated approval on the basis of a surrogate or intermediate endpoint reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites. RMAT-designated products that receive accelerated approval may, as appropriate, fulfill their post-approval requirements through the submission of clinical evidence, clinical trials, patient registries, or other sources of real world evidence, such as electronic health records; through the collection of larger confirmatory data sets; or via post-approval monitoring of all patients treated with such therapy prior to approval of the therapy.

Although BBP-589 has received fast track designation for the treatment of dystrophic epidermolysis bullosa, or DEB, fosdenopterin has received breakthrough therapy designation for MoCD, BBP-009 has received breakthrough therapy designation for the reduction of life-long, serious clinical morbidity and disease burden of persistently developing BCCs in patients with basal cell nevus syndrome, or BCNS, which is also known as Gorlin Syndrome, infigratinib has received fast track designation for the first-line treatment of adult patients with unresectable locally advanced or metastatic cholangiocarcinoma with FGFR2 gene fusions or translocations, and BBP-551 has received fast track designation for the treatment of LCA due to inherited mutations in LRAT and RPE65 genes and for the treatment of autosomal recessive RP due to inherited mutations in LRAT and RPE genes, we may elect not to pursue any of breakthrough therapy, fast track or RMAT designations for our other product candidates, and the FDA has broad discretion whether or not to grant these designations.

Even if we believe a particular product candidate is eligible for breakthrough therapy, fast track designation or RMAT, there can be no assurance that the FDA would decide to grant it. Breakthrough therapy designation, fast track and RMAT designation do not change the standards for product approval, and there is no assurance that such designation or eligibility will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the breakthrough therapy, fast track or RMAT designation. Thus, even if we do receive breakthrough therapy, fast track or RMAT designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw breakthrough therapy, fast track or RMAT designation if it believes that the product no longer meets the qualifying criteria. Our business may be harmed if we are unable to avail ourselves of these or any other expedited development and regulatory pathways.

Additionally, the FDA has accepted our NDA for infigratinib in cholangiocarcinoma for review under the Real-Time Oncology Review, or RTOR, pilot program, which is an initiative of the FDA's Oncology Center of Excellence designed to expedite the delivery of safe and effective cancer treatments to patients. Although this program allows the FDA to review data earlier, before an applicant formally submits a complete application, acceptance into the RTOR pilot does not guarantee or influence approvability of the application, which is subject to the usual benefit-risk evaluation by FDA reviewers, and it does not affect the FDA's PDUFA timelines.

If we are unable to successfully validate, develop and obtain regulatory approval for companion diagnostic tests for our drug candidates that require or would commercially benefit from such tests, or experience significant delays in doing so, we may not realize the full commercial potential of these drug candidates.

In connection with the clinical development of our drug candidates for certain indications, we may work with collaborators to develop or obtain access to *in vitro* companion diagnostic tests to identify patient subsets within a disease category who may derive selective and meaningful benefit from our drug candidates. For example, we are currently developing a companion diagnostic for infigratinib in patients with CCA in collaboration with Foundation Medicine, or FMI. Such companion diagnostics would be used during our clinical trials as well as in connection with the commercialization of our product candidates. To be successful, we or our collaborators will need to address a number of scientific, technical, regulatory and logistical challenges. The FDA and comparable foreign regulatory authorities regulate *in vitro* companion diagnostics as medical devices and, under that regulatory framework, will likely require the conduct of clinical trials to demonstrate the safety and effectiveness of any diagnostics we may develop, which we expect will require separate regulatory clearance or approval prior to commercialization.

We may rely on third parties for the design, development and manufacture of companion diagnostic tests for our therapeutic drug candidates that may require such tests. If we enter into such collaborative agreements, we will be dependent on the sustained cooperation and effort of our future collaborators in developing and obtaining approval for these companion diagnostics. It may be necessary to resolve issues such as selectivity/specificity, analytical validation, reproducibility, or clinical validation of companion diagnostics during the development and regulatory approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a product candidate, data generated in later clinical trials may fail to support the analytical and clinical validation of the companion diagnostic. We and our future collaborators may encounter difficulties in developing, obtaining regulatory approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to our therapeutic candidates themselves, including issues with achieving regulatory clearance or approval, production of sufficient quantities at commercial scale and with appropriate quality standards, and in gaining market acceptance. If we are unable to successfully develop companion diagnostics for these therapeutic drug candidates, or experience delays in doing so, the development of these therapeutic drug candidates may be adversely affected, these therapeutic drug candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutics that obtain marketing approval. As a result, our business, results of operations and financial condition could be materially harmed. In addition, a diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic test that we anticipate using in connection with development and commercialization of our product candidates or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our therapeutic candidates.

If approved, our investigational products regulated as biologics may face competition from biosimilars approved through an abbreviated regulatory pathway.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a 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 the other company's product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty.

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

been the subject of recent litigation. Moreover, the extent to which a biosimilar, once licensed, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If competitors are able to obtain marketing approval for biosimilars referencing any of our products, if approved, our products may become subject to competition from such biosimilars, which would impair our ability to successfully commercialize and generate revenues from sales of such products.

Even if we obtain regulatory approval for a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

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

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

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

The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing, labeling, advertising and promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved label. We will have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have approval.

The holder of an approved NDA, BLA or MAA must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval was obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our products. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

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

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

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected. The FDA's and other regulatory authorities' policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If any of our product candidates are approved and we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, if approved. In particular, while the FDA permits the dissemination of truthful and non-misleading information about an approved product, a manufacturer may not promote a product for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. If we are found to have promoted such off-label uses, we may become subject to significant liability. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees, corporate integrity agreements or permanent injunctions under which specified promotional conduct must be changed or curtailed. If we cannot successfully manage the promotion of our product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Risks Related to the Novel Nature of our Product Candidates

Certain of our product candidates, including our protein therapeutic and gene therapy product candidates, are novel, complex and difficult to manufacture. We could experience manufacturing problems that result in delays in our development or commercialization programs or otherwise harm our business.

The manufacturing processes our CMOs use to produce our product candidates, including our protein therapeutic and gene therapy product candidates, are complex, novel and have not been validated for commercial use. Several factors have caused and may cause future production interruptions, including restrictions on certain manufacturing operations and shortages in on-site personnel at our CMOs' manufacturing facilities as a result of governmental "stay at home" orders in response to the COVID-19 pandemic, equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers.

Several of our small molecule product candidates are particularly complex and difficult to manufacture, in some cases due to the number of steps required, the process complexity and the toxicity of end or intermediate-stage products. Our protein therapeutic and gene therapy product candidates require processing steps that are more complex than those required for most small molecule drugs. Moreover, unlike small molecules, the physical and chemical properties of certain of our biologic product candidates generally cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the product is consistent from lot-to-lot or will perform in the intended manner. Accordingly, our CMOs must employ multiple steps to control the manufacturing

process to assure that the process is reproducible and the product candidate is made strictly and consistently in compliance with the process. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory to conduct clinical trials or supply commercial markets. We may encounter problems achieving adequate quantities and quality of clinical-grade materials that meet the FDA, the EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

In addition, the FDA, the EMA and other foreign regulatory authorities may require us to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, the EMA or other foreign regulatory authorities may require that we not distribute a lot until the agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects.

Our CMOs also may encounter problems hiring and retaining the experienced scientific, quality assurance, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our CMOs' manufacturing process or facilities could result in delays in planned clinical trials and increased costs, and could make us a less attractive collaborator for potential partners, including larger biotechnology companies and academic research institutions, which could limit access to additional attractive development programs. Problems in our manufacturing process could also restrict our ability to meet potential future market demand for any products that may be approved.

Certain of our product candidates are based on a novel adeno-associated virus, or AAV, gene therapy technology with which there is limited clinical or regulatory experience to date, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory approval.

Certain of our product candidates are based on gene therapy technology and our future success depends on the successful development of this novel therapeutic approach. We cannot assure you that any development problems we or other gene therapy companies experience in the future related to gene therapy technology will not cause significant delays or unanticipated costs in the development of our product candidates, or that such development problems can be solved. In addition, the clinical study requirements of the FDA, EMA and other regulatory agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or extensively studied therapeutic modalities. Further, as we are developing novel treatments for diseases in which there is limited clinical experience with new endpoints and methodologies, there is heightened risk that the FDA, the EMA or comparable foreign regulatory bodies may not consider the clinical trial endpoints to provide clinically meaningful results, and the resulting clinical data and results may be more difficult to analyze. To date, few gene therapy products have been approved by the FDA or comparable foreign regulatory authorities, which makes it difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates in the United States, the European Union or other jurisdictions. Further, approvals by one regulatory agency may not be indicative of what other regulatory agencies may require for approval.

Regulatory requirements governing gene therapy products have evolved and may continue to change in the future. For example, the FDA established the Office of Tissues and Advanced Therapies within its Center for Biologics Evaluation and Research, or CBER, to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. These and other regulatory review agencies, committees and advisory groups and the requirements and guidelines they promulgate may lengthen the regulatory review process, require us to perform additional preclinical studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these treatment candidates, or lead to significant post-approval limitations or restrictions.

The FDA, National Institutes of Health, or NIH, other regulatory agencies at both the federal and state level in the United States, U.S. congressional committees, and the EMA and other foreign governments, have expressed interest in further regulating the biotechnology industry, including gene therapy and genetic testing. For example, the EMA advocates a risk-based approach to the development of a gene therapy product. Any such further regulation may delay or prevent commercialization of some or all of our product candidates. For example, in 1999, a patient died during a gene therapy clinical trial that utilized an adenovirus vector and it was later discovered that adenoviruses could generate an extreme immune system reaction that can be life-threatening. In January 2000, the FDA halted that trial and began investigating 69 other gene therapy trials underway in the United States, 13 of which required remedial action. In 2003, the FDA suspended 27 additional gene therapy trials involving several hundred patients after learning that some patients treated in a clinical trial in France had subsequently developed leukemia. While the new AAV vectors that we use across our portfolio of gene therapy product candidates have been designed and developed to help reduce these side effects, gene therapy is still a relatively new approach to disease treatment, and past as well as different adverse side effects could develop.

Regulatory requirements in the United States and abroad governing gene therapy products have changed frequently and may continue to change in the future. For example, in addition to the submission of an IND, to the FDA, before initiation of a clinical trial in the United States, certain human clinical trials for cell therapy products and gene therapy had historically been subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Following an initial review, RAC members would make a recommendation as to whether the protocol raises important scientific, safety, medical, ethical or social issues that warrant in-depth discussion at the RAC's quarterly meetings. Although the FDA decides whether individual gene therapy protocols may proceed under an IND, the RAC's recommendations were shared with the FDA and the RAC public review process, if undertaken, could have impeded or delayed the initiation of a clinical trial, even if the FDA has reviewed the trial and approved its initiation or has notified the sponsor that the study may begin. Conversely, the FDA can put an IND on clinical hold even if the RAC provided a favorable review or has recommended against an in-depth public review.

On August 17, 2018, the NIH issued a notice in the Federal Register and issued a public statement proposing changes to the oversight framework for gene therapy trials, including changes to the applicable NIH Guidelines to modify the roles and responsibilities of the RAC with respect to human clinical trials of gene therapy products, and requesting public comment on its proposed modifications. During the public comment period, which closed on October 16, 2018, the NIH had announced that it would no longer accept new human gene transfer protocols for review as part of the protocol registration process under the existing NIH Guidelines or convene the RAC to review individual clinical protocols. In April 2019, NIH announced the updated guidelines, which reflect these proposed changes, and clarify that these trials will remain subject to the FDA's oversight and other clinical trial regulations, and oversight at the local level will continue as otherwise set forth in the NIH Guidelines. Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an Institutional Biosafety Committee, or IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to the public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. Even though we may not be required to submit a protocol for our gene therapy product candidates through the NIH for RAC review, we will still be subject to significant regulatory oversight by the FDA, and in addition to the government regulators, the applicable IBC and IRB of each institution at which we or our collaborators conduct clinical trials of our product candidates, or a central IRB if appropriate, would need to review and approve the proposed clinical trial.

Similarly, the EMA governs the development of gene therapies in the European Union and may issue new guidelines concerning the development and marketing authorization for gene therapy products and require that we comply with these new guidelines.

These regulatory review committees and advisory groups and the new guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies or trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization

of our product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we will be required to consult with these regulatory and advisory groups and comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of such product candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delays as a result of an increased or lengthier regulatory approval process or further restrictions on the development of our product candidates can be costly and could negatively impact our ability to complete clinical trials and commercialize our current and future product candidates in a timely manner, if at all.

Our product candidates based on gene therapy technology may cause undesirable and unforeseen side effects or be perceived by the public as unsafe, which could delay or prevent their advancement into clinical trials or regulatory approval, the imposition of a clinical hold, limit the commercial potential or result in significant negative consequences.

Public attitudes may be influenced by claims that gene therapy as a novel technology is unsafe, unethical, or immoral, and, consequently, our product candidates may not gain the acceptance of the public or the medical community. Adverse public attitudes may adversely impact our ability to enroll clinical trials. In addition, the FDA has imposed an increased number of clinical holds on gene therapy candidates in recent years. Moreover, our success will depend upon physicians prescribing, and their patients being willing to receive, treatments that involve the use of product candidates we may develop in lieu of, or in addition to, existing treatments with which they are already familiar and for which greater clinical data may be available. For example, there have been several significant adverse side effects in prior clinical trials of gene therapy product candidates, including reported cases of leukemia and death seen in other trials using other vectors. While new AAV vectors have been developed to reduce these side effects, gene therapy is still a relatively new approach to disease treatment and additional adverse side effects could develop. There also is the potential risk of delayed AEs following exposure to gene therapy products due to persistent biologic activity of the genetic material or other components of products used to carry the genetic material.

Possible adverse side effects that could occur with treatment with gene therapy products include an immunologic reaction early after administration which could be detrimental to the patient's health or substantially limit the effectiveness and durability of the treatment. For example, an increasingly anticipated side effect of AAV gene therapy is the development of a T-cell immunological response, most often seen affecting the liver. Any actual or perceived negative effects of our AAV gene therapy product candidates or those under development by third parties could impair our ability to continue the development of these product candidates and have an adverse effect on our prospects.

Risks Related to Reliance on Third Parties

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

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct some aspects of research and preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If we need to enter into alternative arrangements, it would delay our product development activities.

Our reliance on these third parties for research and development activities reduces control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our respective clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and applicable legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. In addition, the FDA and comparable foreign regulatory authorities require compliance with GCPs for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, some

or all of the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional nonclinical or clinical trials or to enroll additional patients before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials complies with the GCP regulations. For any violations of laws and regulations during the conduct of clinical trials, we could be subject to untitled and warning letters or enforcement action that may include civil penalties up to and including criminal prosecution. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for any product candidates we may develop and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines. Our failure or the failure of these third parties to comply applicable regulatory requirements or our stated protocols could also subject us to enforcement action.

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

We rely entirely on third parties for the manufacturing of our product candidates or other product candidates that we may develop for preclinical studies and clinical trials and expect to continue to do so for commercialization. Our business could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture drug supplies for our ongoing clinical trials or any future clinical trials that we may conduct, and we lack the resources to manufacture any product candidates on a commercial scale. We rely, and expect to continue to rely, on third-party manufacturers to produce our current product candidates or other product candidates that we may identify for clinical trials, as well as for commercial manufacture if any product candidates that receive marketing approval. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the trial, any significant delay or discontinuity in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay the clinical development and potential regulatory approval of our product candidates, which could harm our business and results of operations. We also expect to rely primarily on third parties for the manufacturing of commercial supply of our product candidates, if approved.

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

- reliance on the third party for sourcing of raw materials, components, and such other goods as may be required for execution of its manufacturing processes and the oversight by the third party of its suppliers;
- reliance on the third party for regulatory compliance and quality assurance for the manufacturing activities each performs;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of proprietary information, including trade secrets and know-how; and
- the possible termination or non-renewal of the agreement by the third party at a time that is costly or inconvenient for us.

Furthermore, all of our CMOs are engaged with other companies to supply and/or manufacture materials or products for such companies, which exposes our manufacturers to regulatory risks for the production of such materials and products. The facilities used by our contract manufacturers to manufacture our product candidates are subject to review by the FDA pursuant to inspections that will be conducted after we submit an NDA or BLA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMP, requirements for manufacture of drug and biologic products. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure or maintain regulatory approval for our product candidates manufactured at these manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory agency does not approve these facilities for the manufacture of our product candidates or if any agency withdraws its approval in the future, we may need to find alternative manufacturing facilities, which would negatively impact the ability to develop, obtain regulatory approval for or market our product candidates, if approved.

Our product candidates may compete with other product candidates and marketed drugs for access to manufacturing facilities. For example, the FDA granted Emergency Use Authorization to two vaccines for COVID-19 in late 2020 and the World Health Organization granted Emergency Use authorization to two additional vaccines for COVID-19 in February 2021, and more are likely to be authorized in the coming months. The resultant demand for vaccines and potential for manufacturing facilities and materials to be commandeered under the Defense Production Act of 1950, or equivalent foreign legislation, may make it more difficult to obtain materials or manufacturing slots for the products needed for our clinical trials, which could lead to delays in these trials. Any performance failure on the part of our existing or future manufacturers could delay clinical development, marketing approval or commercialization. Our current and anticipated future dependence upon others for the manufacturing of our product candidates may adversely affect our future profit margins and our ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

The drug substance and drug product for certain of our product candidates are currently acquired from single-source suppliers. The loss of these suppliers, or their failure to supply us with the drug substance or drug product, could materially and adversely affect our business.

The drug substance and drug product for certain of our product candidates, including Veratrum californicum, or corn lily, from which we obtain cyclopamine for BBP-009, are grown or manufactured by single-source suppliers or CMOs under development and manufacturing contracts and services and quality agreements and purchase orders. We do not currently have any other suppliers for the drug substance or drug product of these product candidates and, although we believe that there are alternate sources of supply that could satisfy our clinical and commercial requirements, we cannot assure you that identifying alternate sources and establishing relationships with such sources would not result in significant delay in the development of our product candidates.

Our dependence on single-source suppliers exposes us to certain risks, including the following:

- our suppliers may cease or reduce production or deliveries, raise prices or renegotiate terms;
- delays caused by supply issues may harm our reputation; and
- our ability to progress our business could be materially and adversely impacted if our single-source suppliers upon which we rely were to experience a significant business challenges, disruption or failures due to issues such as financial difficulties or bankruptcy, issues relating regulatory or quality compliance issues, or other legal or reputational issues.

Additionally, we may not be able to enter into supply arrangements with alternative suppliers on commercially reasonable terms, or at all. A delay in the development of our product candidates or having to enter into a new agreement with a different third party on less favorable terms than we have with our current suppliers could have a material adverse impact upon on our business.

If the contract manufacturing facilities on which we rely do not continue to meet regulatory requirements or are unable to meet our supply demands, our business will be harmed.

All entities involved in the preparation of product candidates for clinical trials or commercial sale, including our existing CMOs for all of our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP, or similar regulatory requirements outside the United States. These regulations govern manufacturing processes and procedures, including recordkeeping, 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 product candidates. Our failure, or the failure of third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, suspension of production, seizures or recalls of product candidates or marketed drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect clinical or commercial supplies of our product candidates.

We or our CMOs must supply all necessary documentation in support of an NDA, BLA or MAA on a timely basis, and must adhere to regulations enforced by the FDA and other regulatory agencies through their facilities inspection program. Some of our CMOs have never produced a commercially approved pharmaceutical product and therefore have not obtained the requisite regulatory authority approvals to do so. The facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee the CMOs, we cannot control the manufacturing process of, and are completely dependent on, our CMO partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical trial or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

Additionally, if supply from one approved manufacturer is interrupted, an alternative manufacturer would need to be qualified through an NDA, BLA supplement or MAA variation, or equivalent foreign regulatory filing, which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. In some cases, the technical skills required to manufacture our product candidates may be unique or proprietary to the original CMO and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back-up or alternate supplier, or we may be unable to transfer such skills at all. In addition, if we are required to change CMOs for any reason, we will be required to verify that the new CMO maintains facilities and procedures that comply with quality standards and with all applicable regulations. We will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process will produce our product candidate according to the specifications previously submitted to the FDA or another regulatory authority. The delays associated with the verification of a new CMO could negatively affect our ability to develop product candidates or commercialize our products in a timely manner or within budget. In addition, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our prior clinical supply used in our clinical trials and that of any new manufacturer. We may be unsuccessful in demonstrating the comparability of clinical supplies, which could require the conduct of additional clinical trials. Accordingly, switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us to incur higher costs and could cause the delay or termination of clinical trials, regulatory submissions, required approvals, or commercialization of our product candidates. Furthermore, if our suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue.

Collaborative relationships with third parties could cause us to expend significant resources and incur substantial business risk with no assurance of financial return.

We anticipate relying upon strategic collaborations for marketing and commercializing our existing product candidates. For example, Eidos is party to a license agreement with Alexion Pharma International Operations Unlimited Company, or Alexion, pursuant to which we depend on Alexion for the clinical development and commercialization of acoramidis in Japan. In addition, we may rely even more on strategic collaborations for R&D of other product candidates, and we may sell or license other product offerings through strategic partnerships with pharmaceutical and biotechnology companies.

If we enter into R&D collaborations during the early phases of product development, success will in part depend on the performance of research collaborators. We will not directly control the amount or timing of resources devoted by research collaborators to activities related to product candidates. Research collaborators may not commit sufficient resources to our R&D programs. If any research collaborator fails to commit sufficient resources, the preclinical or clinical development programs related to the collaboration could be delayed or terminated. Also, collaborators may pursue existing or other development-stage products or alternative technologies in preference to those being developed in collaboration with us. Finally, if we fail to make required milestone or royalty payments to collaborators or to observe other obligations in agreements with them, the collaborators may have the right to terminate or stop performance of those agreements.

Establishing strategic collaborations is difficult and time-consuming. Our discussions with potential collaborators may not lead to the establishment of collaborations on favorable terms, if at all. Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position. 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. Even if we successfully establish collaborations, these relationships may never result in the successful development or commercialization of product candidates or the generation of sales revenue. To the extent that we enter into collaborative arrangements, the related product revenues are likely to be lower than if we directly marketed and sold products. Such collaborators may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for any future product candidate.

Management of our relationships with collaborators will require:

- significant time and effort from our management team;
- coordination of our marketing and R&D programs with the marketing and R&D priorities of our collaborators; and
- effective allocation of our resources to multiple projects.

If we are unable to establish or maintain such strategic collaborations on terms favorable to us in the future, our R&D efforts and potential to generate revenue may be limited.

We are parties to and may seek to enter into additional collaborations, licenses and other similar arrangements, and may not be successful in maintaining existing arrangements or entering into new ones, and even if we are, we may not realize the benefits of such relationships.

The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include risks that:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to collaborations;

- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to their acquisition of competitive products or their internal development of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a development program, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future product candidates or that results in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, which may result in a need for additional capital to pursue further development or commercialization of the applicable current or future product candidates;
- collaborators may own or co-own intellectual property covering products that result from our collaboration with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property;
- disputes may arise with respect to the ownership of any intellectual property developed pursuant to our collaborations; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Additionally, we may seek to enter into additional collaborations, joint ventures, licenses and other similar arrangements for the development or commercialization of our product candidates, due to capital costs required to develop or commercialize the product candidate or manufacturing constraints. We may not be successful in our efforts to establish such collaborations for our product candidates because our research and development pipeline may be insufficient, our product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy or significant commercial opportunity. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process can be time consuming and complex. Further, any future collaboration agreements may restrict us from entering into additional agreements with potential collaborators. We cannot be certain that, following a strategic transaction or license, we will achieve an economic benefit that justifies such transaction.

Even if we are successful in our efforts to establish such collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, development or approval of a product candidate is delayed, the safety of a product candidate is questioned or sales of an approved product candidate are unsatisfactory.

In addition, any potential future collaborations may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if

approved, and may not conduct those activities in the same manner as we do. Any termination of collaborations we enter into in the future, or any delay in entering into collaborations related to our product candidates, could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our product candidates, including acoramidis, infigratinib, BBP-631 and encaleret, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize product candidates similar or identical to ours, and our ability to successfully commercialize our product candidates may be impaired.

As is the case with other pharmaceutical and biopharmaceutical companies, our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others, particularly patents, in the United States and other countries with respect to our product candidates and technology. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates.

Obtaining and enforcing pharmaceutical and biopharmaceutical patents is costly, time consuming and complex, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal, technological and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Furthermore, 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 and can involve other factors such as expert opinion. Our analysis of these issues, including interpreting the relevance or the scope of claims in a patent or a pending application, determining applicability of such claims to our proprietary technologies or product candidates, predicting whether a third party's pending patent application will issue with claims of relevant scope, and determining 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 product candidates. We do not always conduct independent reviews of pending patent applications of and patents issued to third parties. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our product candidates, in whole or in part, or which effectively prevent others from commercializing competitive product candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative product candidates in a non-infringing manner.

Our ability to enforce patent rights also depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. If we initiate lawsuits to protect or enforce our patents, or litigate against third-party claims, such proceedings would be expensive and would divert the attention of our management and technical personnel. Such proceedings could also provoke third parties to assert

claims against us, including that some or all of the claims in one or more of our patents are invalid or otherwise unenforceable.

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

In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical product candidates to ours, or limit the duration of the patent protection of our product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Furthermore, our intellectual property rights may be subject to a reservation of rights by one or more third parties. For example, the research resulting in certain of our patent rights and technology was funded in part by the U.S. government. As a result, the government has certain rights, including march-in rights, to such patent rights and technology. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. These rights may permit the government to disclose our information to third parties and to exercise march-in rights to use or allow third parties to use our technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of such rights or by any third party of its reserved rights could harm our competitive position, business, financial condition, results of operations, and prospects.

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by others, and the patent protection, prosecution and enforcement for some of our product candidates may be dependent on our licensors.

We currently are reliant upon licenses of certain intellectual property rights and proprietary technology from third parties that are important or necessary to the development of our proprietary technology, including technology related to our product candidates. These licenses, and other licenses we may enter into in the future, may not provide adequate rights to use such intellectual property rights and proprietary technology in all relevant fields of use or in all territories in which we may wish to develop or commercialize technology and product candidates in the future. Licenses to additional third-party proprietary technology or intellectual property rights that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms. In that event, we may be required to expend significant time and resources to redesign our proprietary technology or product candidates or to develop or license replacement technology, which may not be feasible on a technical or commercial basis. If we are unable to do so, we may not be able to develop and commercialize technology and product candidates in fields of use and territories for which we are not granted rights pursuant to such licenses, which could harm our competitive position, business, financial condition, results of operations and prospects significantly.

In some circumstances, we may not have the right to control the preparation, filing, prosecution and enforcement of patent applications, or to maintain the patents, covering technology that we license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before

we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that our licensors or collaborators will prosecute, maintain, enforce and defend such intellectual property rights in a manner consistent with the best interests of our business, including by taking reasonable measures to protect the confidentiality of know-how and trade secrets, or by paying all applicable prosecution and maintenance fees related to intellectual property registrations for any of our product candidates. We also cannot be certain that our licensors have drafted or prosecuted the patents and patent applications licensed to us in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. This could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

In addition, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in product candidates that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize product candidates, we may be unable to achieve or maintain profitability. In addition, we may seek to obtain additional licenses from our licensors and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensors, including by agreeing to terms that could enable third parties (potentially including our competitors) to receive licenses to a portion of the intellectual property rights that are subject to our existing licenses. Any of these events could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties, or these agreements are terminated or we otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

We are party to various agreements that we depend on to operate our business, and our rights to use currently licensed intellectual property, or intellectual property to be licensed in the future, are or will be subject to the continuation of and our compliance with the terms of these agreements. For example, we are a party to an exclusive license agreement with the Board of Trustees of the Leland Stanford Junior University, or Stanford, and may need to obtain additional licenses from others to advance our research and development activities to allow the commercialization of acoramidis or any other product candidates we may identify and pursue. Our license agreement with Stanford imposes, and we expect that future license agreements will impose, various development, diligence, commercialization, and other obligations on us. In particular, under our license agreement with Stanford, we are required to use commercially reasonable efforts to engage in various development and commercialization activities with respect to licensed products, and must satisfy specified milestone and royalty payment obligations. We are also a party to a license agreement with Novartis International Pharmaceutical Ltd. for infigratinib under which we are required to use commercially reasonable efforts to develop infigratinib, and to obtain regulatory approval for and commercialize at least one therapeutic product incorporating infigratinib in the United States and the European Union.

In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. For example, if our license agreement with Stanford is terminated, competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to acoramidis and we may be required to cease our development and commercialization of acoramidis. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;

- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, certain provisions in our license 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 agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and *inter partes* reexamination proceedings before the USPTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that acoramidis, infigratinib, BBP-631, encaleret or other product candidates that we may identify may be subject to claims of infringement of the patent rights of third parties.

Other third parties may assert that we are employing their proprietary technology without authorization. There may be other third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire.

Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all, or it may be non-exclusive, which could result in our competitors gaining access to the same intellectual property rights.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products

or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

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

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional or international patent application filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

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

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

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

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

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

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose proprietary information, including trade secrets, and we may not be able to obtain adequate remedies for such breaches. We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. We may not be able to obtain adequate remedies in the event of such unauthorized use. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be 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. Trade secrets will also over time be disseminated within the industry through independent development, the publication of journal articles and the movement of personnel skilled in the art from company to company or academic to industry scientific positions. Though our agreements with third parties typically restrict the ability of our advisors, employees, collaborators, licensors, suppliers, third-party contractors and consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights. In addition, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Despite employing the contractual and other security precautions described above, the need to share trade secrets 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. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position, business, financial condition, results of operations, and prospects would be harmed.

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

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third

parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our competitive position, business, financial condition, results of operations and prospects.

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

Competitors may infringe our patents or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering one or more of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including novelty, nonobviousness, written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue clinical trials, continue research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring product candidates to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

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

Our agreements with employees and our personnel policies provide that any inventions conceived by an individual in the course of rendering services to us shall be our exclusive property. Although our policy is to have all such individuals enter into these agreements, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. The assignment of intellectual property may not be automatic upon the creation of an invention and despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information.

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court.

If we or one of our licensing partners initiated legal proceedings against a third party to enforce a patent covering one or more of our product candidates, the defendant could counterclaim that the patent covering the relevant product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including novelty, nonobviousness, written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection would have a material adverse impact on our business.

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

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact 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.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on outside counsel to pay these fees due to non-U.S. patent agencies. However, we cannot guarantee that our licensors have similar systems and procedures in place to pay such fees. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

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

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States

can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology and pharmaceutical products, 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. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to a patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our or our licensor’s patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also may affect patent litigation. 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. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued patents, all of which could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

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

Risks Related to Commercialization

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

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

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

Sales of medical products also depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that our product is safe, therapeutically effective and cost effective as compared with competing treatments. If any product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenue, and we may not become profitable.

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

We do not have a sales or marketing infrastructure and have little experience in the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing, and commercial support infrastructure to market and sell our product candidates, if and when they are approved. We may also elect to enter into collaborations or strategic partnerships with third parties to engage in commercialization activities with respect to selected product candidates, indications or geographic territories, including territories outside the United States, although there is no guarantee we will be able to enter into these arrangements even if the intent is to do so.

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

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

- the inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price products at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our products to segments of the patient population;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If we enter into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, our product revenue or the profitability of product revenue may be lower than if we were to market and sell any products we may develop internally. In addition, we may not be successful in entering into arrangements with third parties to commercialize our product candidates or may be unable to do so on terms that are favorable to us or them. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively or may expose us to legal and regulatory risk by not adhering to regulatory requirements and restrictions governing the sale and promotion of prescription drug products, including those restricting off-label promotion. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates, if approved.

The insurance coverage and reimbursement status of newly-approved products is uncertain. Our product candidates may become subject to unfavorable pricing regulations, third-party coverage and reimbursement practices, or healthcare reform initiatives, which would harm our business. Failure to obtain or maintain adequate coverage and reimbursement for new or current products could limit our ability to market those products and decrease our ability to generate revenue.

The regulations that govern marketing approvals, pricing, coverage, and reimbursement for new drugs vary widely from country to country. In the United States, recently enacted legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing

review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if any product candidates we may develop obtain marketing approval.

Our ability to successfully commercialize our product candidates also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers, and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. The availability of coverage and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford treatments such as gene therapy products. Sales of these or other product candidates that we may identify will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicines, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

There is also significant uncertainty related to the insurance coverage and reimbursement of newly approved products and coverage may be more limited than the purposes for which the medicine is approved by the FDA or comparable foreign regulatory authorities. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. No uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. It is difficult to predict what CMS will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European countries. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize product candidates, and our overall financial condition.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from

countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and profitable reimbursement rates third-party payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. In order to obtain reimbursement, physicians may need to show that patients have superior treatment outcomes with our products compared to standard of care drugs, including lower-priced generic versions of standard of care drugs. We expect to experience pricing pressures in connection with the sale of any of our product candidates, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

Additionally, we may develop companion diagnostic tests for use with our product candidates. For instance, we are partnered with FMI to develop a companion diagnostic for use in our NDA submission for infigratinib for second-line CCA. We, or our collaborators, may be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we seek for our product candidates, once approved. Even if we obtain regulatory approval or clearance for such companion diagnostics, there is significant uncertainty regarding our ability to obtain coverage and adequate reimbursement for the same reasons applicable to our product candidates. Medicare reimbursement methodologies, whether under Part A, Part B, or clinical laboratory fee schedule may be amended from time to time, and we cannot predict what effect any change to these methodologies would have on any product candidate or companion diagnostic for which we receive approval. Our inability to promptly obtain coverage and adequate reimbursement from both third-party payors for the companion diagnostic tests that we develop and for which we obtain regulatory approval could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of pharmaceutical products. Arrangements with third-party payors and customers can expose pharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, which may constrain the business or financial arrangements and relationships through which such companies sell, market and distribute pharmaceutical products. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of ownership, pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. The applicable federal and state healthcare laws and regulations 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 and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties; the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA; the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations; federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities, including compensation of physicians with stock or stock options, could, despite efforts to comply, be subject to challenge under one or more of such laws. Additionally, the FDA or foreign regulators may not agree that we have mitigated any risk of bias in our clinical trials due to payments or equity interests provided to investigators or institutions which could limit a regulator’s acceptance of those clinical trial data in support of a marketing application. Moreover, efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that

governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, exclusion from participation in Medicare, Medicaid and other federal healthcare programs, integrity and oversight agreements to resolve allegations of non-compliance, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

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 Federal Trade Commission 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 HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH. Depending on the facts and circumstances, we could be subject to civil, criminal, and administrative penalties if we knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

California recently enacted the California Consumer Privacy Act, or CCPA, which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. Further, a new privacy law, the California Privacy Rights Act, or CPRA, was passed by California voters on November 3, 2020. The CPRA will create additional obligations relating to personal information that are scheduled to take effect on January 1, 2023 (with certain provisions having retroactive effect to January 1, 2022). While the legislation and proposed regulations include the CCPA and CPRA contain an exception for activities that are subject to HIPAA, we cannot yet determine the impact the CCPA, CPRA or other such future laws, regulations and standards may have on our business. The uncertainty surrounding the implementation of the CCPA, CPRA and other similar laws, regulations and standards that may be adopted in other jurisdictions exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information. Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, 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.

European data collection is governed by restrictive regulations governing the use, processing and cross-border transfer of personal information.

In the event we decide to conduct additional clinical trials or continue to enroll subjects in our ongoing or future clinical trials in the European Union, we may be subject to additional privacy restrictions. The collection and use of personal health data in the European Union is governed by the provisions of the General Data Protection Regulation 2016/679, or GDPR. This Regulation imposes several requirements relating to the consent of the

individuals to whom the personal data relates, the information provided to the individuals, notification of data processing obligations to the competent national data protection authorities and the security and confidentiality of the personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States. Failure to comply with the requirements of the GDPR, and the related national data protection laws of the European Union Member States may result in fines and other administrative penalties. The GDPR introduced new data protection requirements in the European Union and substantial fines for breaches of the data protection rules. The GDPR regulations may impose additional responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with these and/or new data protection rules. This may be onerous and adversely affect our business, financial condition, prospects and results of operations.

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

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates or any future product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product for which we obtain marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the ACA was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjects biological products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% (as of 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. Various portions of the ACA are currently undergoing legal and constitutional challenges in the United States Supreme Court; the Trump Administration issued various Executive Orders which eliminated cost sharing subsidies and various provisions that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices; and Congress has introduced several pieces of legislation aimed at significantly revising or repealing the ACA. The United States Supreme Court is expected to rule on a legal challenge to the constitutionality of the ACA in early 2021. The implementation of the ACA is ongoing, the law appears likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs. Litigation and legislation related to the ACA are likely to continue, with unpredictable and uncertain results.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in 2013, and, due to subsequent legislative amendments, will remain in effect through 2029 unless additional Congressional action is taken. Pursuant

to the CARES Act and subsequent legislation, these reductions were suspended from May 1, 2020 through March 31, 2021 due to the COVID-19 pandemic. As the legislation currently stands, the reductions will go back into effect January 2021 and will remain in effect through 2030 unless additional Congressional action is taken. Proposed legislation, if passed, would extend this suspension until conclusion of the COVID-19 national emergency. The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state 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, including the former administration's budget for fiscal year 2020 contained further drug price control measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase 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. The U.S. Department of Health and Human Services, has already implemented several of these provisions to date. In May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning January 1, 2020. Additionally, 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 rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. Although a number of these and other proposed measures will require authorization through additional legislation to become effective, it is unclear whether the Biden administration will challenge, reverse, revoke or otherwise modify these recent executive and administrative actions.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

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

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, lower reimbursement, and new payment methodologies. This could lower the price that we receive for any approved product. Any denial in coverage or reduction in reimbursement from Medicare or other government-funded programs may result in a similar denial or reduction in payments from private payors, which may prevent us from being able to generate sufficient revenue, attain profitability or commercialize our product candidates, if approved.

Recent federal legislation and actions by state and local governments may permit reimportation of drugs from foreign countries into the United States, including foreign countries where the drugs are sold at lower prices than in the United States, which could materially adversely affect our operating results.

We may face competition in the United States for our product candidates, if approved, from therapies sourced from foreign countries that have placed price controls on pharmaceutical products. In the United States, the Medicare Modernization Act contains provisions that may change U.S. importation laws and expand pharmacists' and wholesalers' ability to import cheaper versions of an approved drug and competing products from Canada, where there are government price controls. These changes to U.S. importation laws will not take effect unless and until the Secretary of the HHS certifies that the changes will pose no additional risk to the public's health and safety and will result in a significant reduction in the cost of products to consumers. Further, the MMA provides that these changes to U.S. importation laws will not take effect unless and until the Secretary of HHS certifies that the changes will pose no additional risk to the public's health and safety and will result in a significant reduction in the cost of products to consumers. On September 23, 2020, the Secretary of HHS made such certification to Congress, and on October 1, 2020, the FDA published a final rule that allows for the importation of certain prescription drugs from Canada. Under the final rule, States and Indian Tribes, and in certain future circumstances pharmacists and wholesalers, may submit importation program proposals to the FDA for review and authorization. Since the issuance of the final rule, on November 23, 2020, several industry groups filed federal lawsuits in the U.S. District Court for the District of Columbia, requesting injunctive relief to prevent implementation of the rule. Further, authorities in Canada have passed rules designed to safeguard the Canadian drug supply from shortages. On September 25, 2020, CMS stated drugs imported by States under this rule will not be eligible for federal rebates under Section 1927 of the Social Security Act and manufacturers would not report these drugs for "best price" or Average Manufacturer Price purposes. Since these drugs are not considered covered outpatient drugs, CMS further stated it will not publish a National Average Drug Acquisition Cost for these drugs. Separately, the FDA also issued a final guidance document outlining a pathway for manufacturers to obtain an additional National Drug Code, or NDC, for an FDA-approved drug that was originally intended to be marketed in a foreign country and that was authorized for sale in that foreign country. If implemented, importation of drugs from Canada and the MFN Model may materially and adversely affect the price we receive for any of our product candidates. The regulatory and market implications of the final rule and guidance are unknown at this time. Proponents of drug reimportation may attempt to pass legislation that would directly allow reimportation under certain circumstances. Legislation or regulations allowing the reimportation of drugs, if enacted, could decrease the price we receive for any products that we may develop and adversely affect our future revenues and prospects for profitability. We will continue to monitor developments and their potential effect on our business.

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

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

There are a number of large pharmaceutical and biotechnology companies that are currently pursuing the development and commercialization of products for the treatment of the indications that our four core value drivers are pursuing, including, but not limited to: tafamidis, a TTR tetramer stabilizer (presently marketed by Pfizer Inc. as Vyndamax and Vyndaqel), a competitor to acoramidis; vosoritide, a CNP analogue, a potential competitor to low-dose infigratinib as a treatment for achondroplasia; crinecerfont, a CRF1receptor antagonist, a competitor to BBP-631; and Natpara, a parathyroid hormone, a competitor to encaleret. If any of these or other competitors, including competitors for our other product candidates, receive FDA approval before we do, our product candidates would not be the first treatment on the market, and our market share may be limited. In addition to competition from other companies targeting our target indications, any products we may develop may also face competition from other types of therapies.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of our targeted disease indications or similar indications, which could give such products significant regulatory and market timing advantages over our product candidates. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications that we are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete and we may not be successful in marketing any product candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize. See "Risks Related to Our Intellectual Property."

If the market opportunities for our product candidates are smaller than we believe they are, our revenue may be adversely affected, and our business may suffer. Our ability to successfully identify patients and acquire a significant market share will be necessary for us to achieve profitability and growth.

We focus research and product development on treatments for Mendelian diseases and genetically driven cancers, many of which are rare or orphan indications. Our projections of both the number of individuals who are affected by our target disease indications and have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. The effort to identify patients with diseases we seek to treat is in early stages, and we cannot accurately predict the number of patients for whom treatment might be possible. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our results of operations and our business. Further, even if we obtain significant market share for the product candidates under development in our key value driver programs, because the potential target populations are small, we may never achieve profitability despite obtaining such significant market share. In addition, market share could be limited by the availability of other treatments including Vyndamax (tafamidis) and Vyndaqel (tafamidis meglumine), for which Pfizer Inc. has been approved for the treatment of ATTR-CM the United States and Japan (Vyndaqel only). As a result, even if approved, acoramidis will not be the first treatment on the market for ATTR-CM, and its market share and potential to generate revenues may be limited.

Risks Related to Our Business and Industry

The COVID-19 pandemic could adversely impact our business, results of operations and financial condition.

Due to the continued evolution and uncertain global impact of the COVID-19 pandemic, we cannot precisely determine or quantify the impact this pandemic will have on our business, results of operations and financial condition. The extent to which COVID-19 may impact us will depend on a variety of factors and future

developments, which are highly uncertain and cannot be predicted with confidence, including the duration, scope and severity of the pandemic, the duration and extent of travel restrictions and social distancing in the United States and other countries, business closures or business disruptions, and the effectiveness of actions taken in the United States and other countries to contain and treat COVID-19, including global vaccination efforts.

Public health actions being undertaken globally in response to the COVID-19 pandemic, including quarantines, stay-at-home, executive and similar government orders and the prioritization of healthcare resources, could adversely impact our business, results of operations and financial condition. As a result of these public health actions, we have and continue to experience, and may in the future experience, disruptions that severely impact our business, clinical trials and preclinical studies, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19, being forced to quarantine or not accepting home health visits; and
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials.

In the last quarter of 2020, a “second wave” of COVID-19 and additional lockdowns have been placed into effect in several parts of the United States. New, more contagious strains of COVID-19 have been reported in different parts of the world commencing in December 2020 and have since reached the United States. Depending on the duration and impact of the “second wave” and additional strains of COVID-19 and depending on where the infections rates are highest, our business, results of operations and preclinical and clinical development processes may be negatively impacted, including the ability of regulators to continue ensuring the timely review and approval of applications. For example, as of June 23, 2020, the FDA noted it is continuing to ensure timely reviews of applications for medical products during the COVID-19 pandemic in line with its user fee performance goals; however, the FDA may not be able to continue its current pace and approval timelines could be extended, including where a pre-approval inspection or an inspection of clinical sites is required and, due to the COVID-19 pandemic and travel restrictions, the FDA is unable to complete such required inspections during the review period. In 2020, several companies announced receipt of complete response letters due to the FDA’s inability to complete required inspections for their applications. Our ability to conduct our business in the manner and on the timelines presently planned could have a material adverse impact on our business, results of operations and financial condition.

To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section, such as those relating to our clinical development operations, the supply chain for our ongoing and planned clinical trials, and the availability of governmental and regulatory authorities to conduct inspections of our clinical trial sites, review materials submitted by us in support of our applications for regulatory approval and grant approval for our product candidates. In addition, a recurrence or “second wave” of COVID-19 cases could cause other widespread or more severe impacts depending on where infection rates are highest. While certain vaccines and treatments for COVID-19 have been authorized for use, some in emergency cases, there can be no assurance that such measures will halt or slow the progression of the COVID-19 in a timely manner or at all.

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

We are highly dependent on the management, research and development, clinical, financial and business development expertise of our executive officers, our directors, our Management Committee as well as the other members of our scientific and clinical teams. However, some of these executive officers, directors and other personnel split their time between BridgeBio and certain of our other subsidiaries. For instance, Neil Kumar serves as chief executive officer and a director both to us and Eidos and Eric David serves as chief executive officer of both Adrenas Therapeutics, Inc. and Aspa Therapeutics, Inc. As a result, these executive officers, directors and members of our Management Committee may not be able to devote their full attention to us, which could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

While we believe that we have put in place policies and procedures to identify such conflicts and any such policies and procedures were negotiated at arm's length in conformity with fiduciary duties, such conflicts of interest may nonetheless arise. The existence and consequences of such potential conflicts could expose us to loss of profits, claims by our investors and creditors, and harm our business and our results of operations. The risks related to our dependence upon Dr. Kumar are compounded by Dr. Kumar's significant ownership percentage and Dr. Kumar's role in both our company and our subsidiaries, including Eidos. If we were to lose Dr. Kumar or any of our other executives or key personnel, we may not be able to find appropriate replacements on a timely basis. In addition, because certain of our employees provide a centralized source of support across multiple subsidiaries, the loss of any of these employees could negatively affect the operations of the affected subsidiaries, and our financial condition and results of operations could be materially adversely affected.

Furthermore, each of our executive officers may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or employees. Recruiting and retaining qualified scientific and clinical personnel and, if we progress the development of our drug pipeline toward scaling up for commercialization, sales and marketing personnel, will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval for and commercialize our product candidates. Competition to hire qualified personnel in our industry is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Furthermore, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

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

Our reliance on a central team consisting of a limited number of employees who provide various administrative, research and development and other services across our organization, and on dedicated teams at the subsidiary level presents operational challenges that may adversely affect our business.

As of December 31, 2020, we had 113 employees who are employed by our wholly-owned subsidiary, BridgeBio Services, Inc., upon which we rely for various administrative, research and development and other support services shared among us. While we believe this structure enables us to reduce certain infrastructure costs, the small size of our central team may cause us to be unable to devote adequate personnel, time and resources to support the operations of all of our subsidiaries, including their research and development activities, employee recruiting and retention efforts and the management financial and accounting and reporting matters. From time to time, members of our central team may not have access to adequate information regarding aspects of the business and operations of our subsidiaries to sufficiently manage these affairs. Additionally, because our dedicated subsidiary-level employees and management are primarily incentivized at the subsidiary level, these employees and management team members may not be sufficiently incentivized to maximize the overall value of our entire organization. If our central team fails to provide adequate administrative, research and development or other services across our entire organization, or our subsidiary-level employees and management do not perform in a manner that aligns with the interests of our entire organization, our business, financial condition and results of operations could be harmed.

Changes in funding for, or disruptions to the operations of, the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products or take action with respect to other regulatory matters can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, the availability of personnel and other resources in light of governmental "stay at home" orders in response to the COVID-19 pandemic, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved, or for other actions to be taken, by relevant government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. Since March 2020, foreign and domestic inspections by the FDA have largely been on hold due to impacts of the COVID-19 pandemic, with the FDA announcing plans in July 2020 to resume prioritized domestic inspections. Should FDA determine that an inspection is necessary for approval of a marketing application and an inspection cannot be completed during the review cycle due to restrictions on travel, the FDA has stated that it generally intends to issue a complete response letter. Further, if there is inadequate information to make a determination on the acceptability of a facility, the FDA may defer action on the application until an inspection can be completed. In 2020, several companies announced receipt of complete response letters due to the FDA's inability to complete required inspections for their applications. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic and may experience delays in their regulatory activities. Additionally, as of June 23, 2020, the FDA noted it is continuing to ensure timely reviews of applications for medical products during the COVID-19 pandemic in line with its user fee performance goals. On July 16, 2020, the FDA noted that it is continuing to expedite oncology product development with its staff teleworking full-time. However, the FDA may not be able to continue its current pace and approval timelines could be extended, including where a pre-approval inspection or an inspection of clinical sites is required and due to the COVID-19 pandemic and travel restrictions the FDA is unable to complete such required inspections during the review period. If a prolonged government shutdown or disruption to the operations of the FDA occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Similarly, a prolonged government shutdown or disruption to the operations of the USPTO could prevent the timely review of our patent applications, which could delay the issuance of any U.S. patents to which we might otherwise be entitled. Future government shutdowns and similar events could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

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

As of December 31, 2020, we had 385 full-time employees across all of our companies. As we mature, we expect to expand our full-time employee base and to hire more consultants and contractors. Our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time toward managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Because we have multiple programs and product candidates in our development pipeline and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on development opportunities or product candidates that may be more profitable or for which there is a greater likelihood of success.

We focus on the development of product candidates to address Mendelian diseases and genetically driven cancers, regardless of the treatment modality or the particular target indication within this space. Because we have limited financial and personnel resources, we may forego or delay pursuit of opportunities with potential target indications or product candidates that later prove to have greater commercial potential than our current and planned development programs and product candidates. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and other future product candidates for specific indications may not yield any commercially viable future product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may be required to relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such future product candidates.

Additionally, we may pursue additional in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. Identifying, selecting and acquiring promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual acquisition or license of a successful product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. For example, if we are unable to identify programs that ultimately result in approved products, we may spend material amounts of our capital and other resources evaluating, acquiring and developing products that ultimately do not provide a return on our investment.

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

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

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

Although we maintain product liability insurance, including coverage for clinical trials that we sponsor, 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 we commence additional clinical trials and if we successfully commercialize any product candidates. The market for insurance coverage is increasingly expensive, and the costs of insurance coverage will increase as our clinical programs increase in size. 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.

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

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with the laws of the FDA and comparable foreign regulatory

authorities; provide true, complete and accurate information to the FDA and comparable foreign regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities. If we obtain FDA approval of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education and other business arrangements in the healthcare industry are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and commission, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of business conduct and ethics applicable to our employees and directors, but it is not always possible to identify and deter misconduct by employees and third parties, 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 be in compliance with such laws. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our international operations may expose us to business, regulatory, political, operational, financial, pricing and reimbursement and economic risks associated with doing business outside of the United States.

We currently have no employees outside the United States, but we are conducting clinical trials internationally through a global CRO and our business strategy incorporates potential international expansion to target patient populations outside the United States. If we receive regulatory approval for and commercialize any of our product candidates in patient populations outside the United States, we may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of risks, including, but not limited to:

- multiple, conflicting, and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits, and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors, or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products, and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism, and political unrest, outbreak of disease (such as the outbreak of the novel strain of coronavirus in December 2019), boycotts, curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation, and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our potential international expansion and operations and, consequently, our results of operations.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired, which could negatively affect the price of our common stock.

As a public company, we are required to maintain internal control over financial reporting and to report any material weaknesses in such internal controls. The Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, requires that we evaluate and determine the effectiveness of our internal control over financial reporting and, pursuant to Section 404(b) of the Sarbanes Oxley Act, or Section 404, beginning with our second annual report following our IPO, provide a management report on internal control over financial reporting. In addition, now that we are no longer an emerging growth company, we are required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our results of operations, cause us to fail to meet our reporting obligations, result in a restatement of our financial statements for prior periods, or adversely affect the results of management evaluations and independent registered public accounting firm audits of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC.

In addition, to the extent we acquire or establish additional consolidated subsidiaries and VIEs, the financial statements of such entities may not be initially prepared by us, and we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in our adding monitoring and audit processes, and increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future, which could lead to delays in our external reporting. In particular, this may occur where we are establishing such entities with partners that do not have sophisticated financial accounting processes in place, or where we are entering into new relationships at a rapid pace, straining our integration capacity. We have in the past identified material weaknesses in our internal control over financial reporting. Although these material weaknesses were remediated, we could identify additional material weaknesses in the future. If we identify any such additional material weaknesses or are required to restate previously issued financial statements for any additional periods, our reputation could be impaired which could cause a loss of investor confidence and adversely materially affect our business, operating results and financial condition. Additionally, if we do not receive the information from the consolidated subsidiaries or controlled VIEs on a timely basis, it could cause delays in our external reporting. Ineffective disclosure controls and procedures and internal controls over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock.

Historically, we have relied upon and expect to continue to rely upon third-party contracted service providers to assist with our financial reporting. The process of designing, implementing and maintaining the internal control over financial reporting required to comply with the Sarbanes-Oxley Act is time consuming, costly, and complicated. If we are unable to assert that our internal control over financial reporting is effective or when required in the future, if our independent registered public accounting firm issues an adverse opinion on the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could be adversely affected and we could become subject to investigations or sanctions by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources.

We do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud.

A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error

or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

Risks Related to Our Indebtedness

We have incurred a significant amount of debt and may in the future incur additional indebtedness. Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

As of December 31, 2020, we and our subsidiaries had total consolidated indebtedness of $642.5 million, including $550.0 million of indebtedness outstanding under our unsecured 2.50% Convertible Senior Notes due 2027, or the 2027 Notes, $75.0 million of indebtedness under our Amended and Restated Loan and Security Agreement and $17.5 million of indebtedness outstanding under the Eidos' SVB and Hercules Loan Agreement. In addition, with the Fourth Amendment to our Credit Agreement in April 2020 increasing the available facilities to $125.0 million, we may borrow additional amounts thereunder from Hercules and become subject to additional obligations and restrictions in connection with these additional borrowings. Furthermore, in the first quarter of 2021, we incurred an additional $747.5 million of indebtedness through our issuance and sale of unsecured 2.25% Convertible Senior Notes due 2029, or the 2029 Notes. Subject to the limitations in the terms of our existing and future indebtedness, we and our subsidiaries may incur additional indebtedness, secure existing or future indebtedness, or refinance our indebtedness. We may be required to use a substantial portion of our cash flows from operations to pay interest and principal on our indebtedness. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, depends on our future performance and our ability to generate sufficient cash flow from our operations, which are subject to economic, financial, competitive and other factors beyond our control. Such payments will reduce the funds available to us for working capital, capital expenditures, and other corporate purposes and limit our ability to obtain additional financing for working capital, capital expenditures, expansion plans, and other investments, which may in turn limit our ability to implement our business strategy, heighten our vulnerability to downturns in our business, the industry, or in the general economy, limit our flexibility in planning for, or reacting to, changes in our business and the industry, and prevent us from taking advantage of business opportunities as they arise. Additionally, if we are unable to generate sufficient cash flow to service our indebtedness and fund our operations, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

In addition, to the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this "Risk Factors" section, such as risks associated with our indebtedness under our 2027 Notes, our 2029 Notes and our Amended and Restated Loan and Security Agreement, Eidos' indebtedness under the SVB and Hercules Loan Agreement, our need to raise additional capital to support our operations and to service our indebtedness, and our ability to comply with the covenants contained in the agreements that govern our indebtedness.

We have incurred indebtedness under our convertible senior notes and are party to a loan and security agreement that contain operating and financial covenants that may restrict our business and financing activities.

In March 2020, we issued the 2027 Notes, pursuant to which we pay interest semiannually in arrears at a rate of 2.50% per year. The 2027 Notes will mature on March 15, 2027 unless earlier converted or repurchased, at which time we will settle any conversions of the 2027 Notes in cash, shares of our common stock or a combination thereof, at our election. In January and February 2021, we issued the 2029 Notes, pursuant to which we pay interest semiannually in arrears at a rate of 2.25% per year. The 2029 Notes will mature on February 1, 2029 unless earlier converted or repurchased, at which time we will settle any conversions of the 2029 Notes in cash, shares of our common stock or a combination thereof, at our election. Under certain circumstances, the holders of the 2027 Notes and the 2029 Notes, or collectively, the Notes, may require us to repay all or a portion of the principal and interest

outstanding under the Notes in cash prior to their respective maturity dates, which could have an adverse effect on our financial results.

In June 2018, we entered into a loan and security agreement, or the Loan and Security Agreement, with Hercules Capital, Inc., or Hercules, pursuant to which we were extended a term loan in the aggregate principal amount of up to $35.0 million. In December 2018, we entered into an amendment to the Loan and Security Agreement with Hercules, pursuant to which we were extended an additional term loan in the aggregate principal amount of up to $20.0 million. In May 2019, we entered into a second amendment to the Loan and Security Agreement with Hercules, pursuant to which we were extended a second additional term loan in the aggregate principal amount of up to $20.0 million, increasing the total principal amount outstanding to $75.0 million under the Loan and Security Agreement, as amended to date, or the Amended and Restated Loan and Security Agreement. In March 2020, we executed a third amendment to the Loan and Security Agreement primarily to allow us to issue our 2027 Notes and to enter into the Capped Call and Share Repurchase Transactions. In April 2020, we entered into a fourth amendment to the Hercules Term Loan, which among other things, increased the available loan facilities aggregating to $125.0 million. The Amended and Restated Loan and Security Agreement may restrict our ability, among other things, to:

- sell, transfer or otherwise dispose of any of our business or property, subject to limited exceptions;
- make material changes to our business;
- enter into transactions resulting in significant changes to the voting control of our stock;
- make certain changes to our organizational structure;
- consolidate or merge with other entities or acquire other entities;
- incur additional indebtedness or create encumbrances on our assets;
- pay dividends, or make distributions on and, in certain cases, repurchase our stock;
- enter into transactions with our affiliates;
- repay subordinated indebtedness; or
- make certain investments.

In addition, we are required under our Amended and Restated Loan and Security Agreement to comply with various operating covenants and default clauses that may restrict our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. A breach of any of these covenants or clauses could result in a default under the Amended and Restated Loan and Security Agreement, which could cause all of the outstanding indebtedness under the facility to become immediately due and payable.

Under the Amended and Restated Loan and Security Agreement, we also have an obligation to pledge our equity interests in our subsidiaries. In addition, certain of our non-operating subsidiaries, which are subsidiaries other than those predominantly involved in advancing our development programs are also obligated to enter into a joinder agreement, whereby they are also required to comply with the terms of the Amended and Restated Loan and Security Agreement. In addition, our subsidiary, Eidos Therapeutics, Inc. is also party to a loan and security agreement with SVB and Hercules Capital, Inc., under which the lenders have agreed to loan to Eidos up to $55.0 million and Eidos is required to make and maintain certain financial covenants, representations and warranties and other customary agreements and is subject to customary events of default. Any breach by us or Eidos of, or any event of default under, our respective loan agreements could result in a material adverse effect on our business, financial condition and operating results.

The conditional conversion feature of the Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Notes is triggered, holders of the Notes will be entitled to convert the notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other

than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board, or the FASB, issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification 470-20, Debt with Conversion and Other Options, or "ASC 470-20". Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the notes offered hereby) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet at the issuance date, and the value of the equity component is treated as debt discount for purposes of accounting for the debt component of the Notes. As a result, we are required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the notes to their face amount over the respective terms of the notes. We report lower net income in our financial results because ASC 470-20 requires interest to include both the current period's amortization of the debt discount and the instrument's coupon interest rate, which could adversely affect our future financial results, the trading price of our common stock or the trading price of the Notes.

Risk Related to Our Need for Additional Capital

We will require substantial additional funding to achieve our business goals. If we are unable to obtain this funding when needed and on acceptable terms, we could be forced to delay, limit or terminate our product development efforts.

Developing biopharmaceutical products is expensive and time-consuming, and we expect to require substantial additional capital to conduct research, preclinical testing and human studies, may establish pilot scale and commercial scale manufacturing processes and facilities, and establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support our existing programs and pursue potential additional programs. We are also responsible for the payments to third parties of expenses that may include milestone payments, license maintenance fees and royalties, including in the case of certain of our agreements with academic institutions or other companies from whom intellectual property rights underlying their respective programs have been in-licensed or acquired. Because the outcome of any preclinical or clinical development and regulatory approval process is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of any future product candidates we may identify.

As of December 31, 2020, we had working capital of $547.2 million and cash, cash equivalents and marketable securities of $607.1 million. We expect that our cash and cash equivalents will be sufficient to fund our operations through at least the next 12 months from the date of this report. However, our operating plan may change as a result of many factors currently unknown to us, including the effects of the COVID-19 pandemic on our research and development activities, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations or license and development agreements. Any additional fundraising efforts for us may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize product candidates that we may identify and pursue. Moreover, such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations, or other restrictions that may affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future funding requirements will depend on many factors, including, but not limited to:

- the time and cost necessary to complete ongoing and planned clinical trials, including our ongoing and planned Phase 3 clinical trials of acoramidis, our ongoing and planned Phase 2 and Phase 3 clinical trials of infigratinib, our planned clinical trial of BBP-631 and our ongoing Phase 2 clinical trial of encaleret;
- the time and cost necessary to pursue regulatory approvals for our product candidates, and the costs of post-marketing studies that could be required by regulatory authorities;
- the progress, timing, scope and costs of our nonclinical studies, preclinical studies, clinical trials and other related activities, including the ability to enroll patients in a timely manner, for the ongoing and planned clinical trials set forth above, and potential future clinical trials;
- the costs of obtaining adequate clinical and commercial supplies of raw materials and drug products for our product candidates, including protein or gene therapies such as BBP-589, BBP-631, and BBP-812 and any other product candidates we may identify and develop;
- our ability to successfully identify and negotiate acceptable terms for third-party supply and contract manufacturing agreements with CMOs;
- our ability to successfully commercialize product candidates;
- the manufacturing, selling and marketing costs associated with our product candidates, including the cost and timing of expanding our internal sales and marketing capabilities or entering into strategic collaborations with third parties to leverage or access these capabilities;
- the amount and timing of sales and other revenues from our product candidates, if any are approved, including the sales price and the availability of adequate third-party reimbursement;
- the cash requirements of any future acquisitions or discovery of product candidates;
- the time and cost necessary to respond to technological and market developments;
- the costs of acquiring, licensing or investing in intellectual property rights, products, product candidates and businesses;
- our ability to continue to discover and develop additional product candidates, and the time and costs associated with identifying additional product candidates;
- our ability to attract, hire and retain qualified personnel; and
- the costs of maintaining, expanding and protecting our intellectual property portfolio.

Additional funds may not be available when we need them, on terms that are acceptable, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit or terminate one or more research or development programs or the commercialization of any product candidates or be unable to expand operations or otherwise capitalize on business opportunities, as desired, which could materially affect our business, prospects, financial condition and results of operations.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to current product candidates or to any future product candidates on unfavorable terms.

We may seek additional capital through any number of available sources, including, but not limited to, public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. We, and indirectly, our stockholders, will bear the cost of issuing and servicing any such securities and of entering into and maintaining any such strategic partnerships or other arrangements. Because any decision by us to issue debt or equity securities in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future financing transactions. To the extent that we raise additional capital through the sale of additional equity or debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of additional indebtedness would result in increased fixed payment obligations and could involve

additional restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term, but limit our potential cash flow and revenue in the future. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses or other rights on unfavorable terms.

In addition, if one of our subsidiaries raises funds through the issuance of equity securities to third parties, our stockholders' equity interests in such subsidiary could be substantially diminished. If one of our subsidiaries raises additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or our product candidates or grant licenses on terms that are not favorable to us.

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

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

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

In addition, if we undertake such a transaction, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense, any of which could have a material adverse effect on our business, prospects, financial condition and results of operations. The Eidos Merger in particular may result in reduction of our cash and dilutive issuances of our equity securities given the option of the Eidos stockholders to receive cash or stock consideration, the payment of either of which could harm our financial condition and negatively impact our stockholders.

Risks Related to Our Common Stock

We no longer qualify as an "emerging growth company" and will be required to comply with certain provisions of the Sarbanes-Oxley Act and can no longer take advantage of reduced disclosure requirements.

Based on the market value of our common stock held by non-affiliates as of June 30, 2020, we no longer qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, as of the year following December 31, 2020. As a result, we may incur additional and increasing costs to comply with our reporting and other obligations that we had not historically incurred due to our status as an emerging growth company or as a smaller reporting company. These costs include (i) being required to comply with the auditor attestation requirements of Section 404, (ii) increased disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (iii) requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. These additional obligations will require us to dedicate internal resources, engage outside consultants, and

adopt a detailed work plan to assess and document the adequacy of internal controls over financial reporting, continue steps to improve control processes, as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal controls over financial reporting.

The market price of our common stock has been and may be highly volatile, and purchasers of our common stock could incur substantial losses.

The market price of our common stock has been and is likely to continue to be volatile. Our stock price has been and may be subject to wide fluctuations in response to a variety of factors, including the following:

- adverse results or delays in our preclinical studies or clinical trials;
- reports of AEs or other negative results in clinical trials of third parties' product candidates that target our product candidates' target indications;
- inability for us to obtain additional funding on reasonable terms or at all;
- any delay in filing an IND, BLA or NDA for our product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that IND, BLA or NDA;
- failure to develop successfully and commercialize our product candidates;
- announcements we make regarding our current product candidates, acquisition of potential new product candidates and companies and/or in-licensing;
- failure to maintain our existing license arrangements or enter into new licensing and collaboration agreements;
- failure by us or our licensors to prosecute, maintain or enforce our intellectual property rights;
- changes in laws or regulations applicable to future products;
- inability to obtain adequate clinical or commercial supply for our product candidates or the inability to do so at acceptable prices;
- adverse regulatory decisions, including failure to reach agreement with applicable regulatory authorities on the design or scope of our planned clinical trials;
- failure to obtain and maintain regulatory exclusivity for our product candidates;
- regulatory approval or commercialization of new products or other methods of treating our target disease indications by our competitors;
- failure to meet or exceed financial projections we may provide to the public or to the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our strategic collaboration partner or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of our key scientific or management personnel;
- significant lawsuits, including patent or stockholder litigation, against us;
- changes in the market valuations of similar companies;
- sales or potential sales of substantial amounts of our common stock; and
- trading volume of our common stock.

In addition, companies trading in the stock market in general, and Nasdaq, in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors, including the effects of the COVID-19 pandemic on the global economy, may negatively affect the market price of our common stock, regardless of our actual operating performance.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, would result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We will need additional capital in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our Amended and Restated 2019 Stock Option and Incentive Plan, or the A&R 2019 Plan, we are authorized to grant stock options and other stock-based awards to our employees, directors and consultants. In addition, pursuant to our 2019 Inducement Equity Plan, we are authorized to grant stock options and other stock-based awards to prospective officers and employees who are not currently employed by us or one of our subsidiaries. If our board of directors, or the Board of Directors, elects in the future to increase the number of shares available for future grant and, in the case of the A&R 2019 Plan, if our stockholders approve of any such further increase, our stockholders may experience additional dilution, and our stock price may fall.

Any sales of a significant portion of our total outstanding shares into the market could cause the market price of our common stock to decline significantly.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock.

Shares of unvested restricted stock and common stock issued and outstanding as of the 2019 Reorganization will become available for sale immediately upon the vesting of such shares. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff agreement, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act.

Certain holders of our common stock have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. In July 2020, we filed a registration statement on Form S-3ASR that became effective automatically upon filing. Pursuant to this registration statement, we may issue up to $350.0 million in common stock in sales deemed to be an “at the market offering” as defined by the Securities Act and, so long as we qualify as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act, an unlimited amount of shares of our common stock, preferred stock, debt securities, warrants and/or units. In July 2020, we filed a registration statement on Form S-3ASR, or the Selling Stockholder Form S-3, relating to the offer and resale from time to time by certain of our stockholders, of up to an aggregate of 65,121,374 shares of our common stock. In February 2021, one of our stockholders completed a sale of 3,450,000 shares of our common stock in an underwritten public offering pursuant to the Selling Stockholder Form S-3. We have also filed registration statements on Form S-8 registering the issuance of shares of common stock issued or reserved for future issuance under our equity compensation and equity inducement plans. Shares registered under these registration statements on Form S-8 can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

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

The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us or our business. If one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

Our principal stockholders and certain members of our management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Based upon our common stock outstanding as of December 31, 2020, KKR Genetic Disorder L.P., or together with its affiliates, KKR, Viking Global Opportunities Illiquid Investments Sub-Master LP and Neil Kumar, our chief executive officer, beneficially own 56.2% of our outstanding common stock. These stockholders will have the ability to influence us through their ownership positions. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law contain provisions that may have the effect of delaying or preventing a change in control of us or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize “blank check” preferred stock, which could be issued by our Board of Directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified Board of Directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our Board of Directors or stockholders holding at least 25% of our outstanding voting stock;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;
- provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even if less than a quorum, or by the holders of a majority of the outstanding shares of capital stock then entitled to vote at an election of directors;
- specify that no stockholder is permitted to cumulate votes at any election of directors;
- expressly authorize our Board of Directors to modify, alter or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate of incorporation and amended and restated bylaws.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our

outstanding voting stock to merge or combine with us. Any provision of our amended and restated certificate of incorporation or amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated bylaws designate specific courts as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated bylaws, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claim for (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of or based on a fiduciary duty owed by any of our current or former directors, officers or employees to us or our stockholders; (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or amended and restated bylaws; (iv) any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or amended and restated bylaws; or (v) any action asserting a claim governed by the internal affairs doctrine of the State of Delaware. Our amended and restated bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. The forum selection clauses in our amended and restated bylaws may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. Our operating results may fluctuate due to a variety of factors, many of which are outside of our control and may be difficult to predict, including but not limited to the following:

- the timing, results and cost of, and level of investment in, our clinical development activities for our current product candidates and any other product candidates we may identify and pursue, which may change from time to time;
- the cost of manufacturing our current product candidates and the related materials or other product candidates that we may identify, which may vary depending on the quantity of production and the terms of agreements with manufacturers;
- our ability to conduct our ongoing and planned clinical trials in accordance with our current plans and to obtain regulatory approval for our current product candidates or other product candidates that we may identify, and the timing and scope of any such approvals we may receive;
- the timing and success or failure of clinical trials for competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- expenditures that we or will or may incur to acquire or develop additional product candidates and technologies;
- our ability to attract, hire and retain qualified personnel;
- the level of demand for our current product candidates or other product candidates that we may identify, should they receive approval, which may vary significantly;
- future accounting pronouncements or changes in our accounting policies;
- the risk/benefit profile, cost and reimbursement policies with respect to our current product candidates or other product candidates that we may identify, if approved, and existing and potential future drugs that compete with our product candidates; and
- the changing and volatile U.S., European and global economic environments, including volatility associated with the global COVID-19 pandemic.

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 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.

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

We have incurred substantial losses during our history and we do not expect to become profitable in the near future and we may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset a portion of future taxable income, if any, subject to expiration of such carryforwards in the case of carryforwards generated prior to 2018. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. Our prior equity offerings and other changes in our stock ownership may have resulted in such ownership changes. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which are outside of our control. As a result, if we earn net taxable income, our ability to use our pre-change NOLs to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. Additional limitations on our ability to utilize our NOLs to offset future taxable income may arise as a result of our corporate structure whereby NOLs generated by certain of our subsidiaries or controlled entities may not be available to offset taxable income earned by other subsidiaries, controlled entities or BridgeBio. In addition, under the Tax Act, the amount of post-2017 NOLs that we are permitted to deduct in any taxable year is limited to 80% of our taxable income in such year. The Tax Act generally eliminates the ability to carry back any NOLs to prior taxable years, except that, under the CARES Act, net operating losses generated in 2018, 2019 and 2020 may be carried back five taxable years, while allowing post-2017 unused NOLs to be carried forward indefinitely. There is a risk that due to changes under the Tax Act, regulatory changes, or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. At the state level, there may also be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For these reasons, we may not be able to realize a tax benefit from the use of our NOLs, even if we attain profitability.

We have never and do not currently intend to pay dividends on our common stock, and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation in the price of our common stock.

We have never paid cash dividends on any of our capital stock and do not currently intend to pay any cash dividends on our common stock for the foreseeable future. In addition, pursuant to the Amended and Restated Loan and Security Agreement with Hercules, we are not permitted to declare or pay any cash dividends or make cash distributions on any class of our capital stock or any other equity interest, except in limited circumstances. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

We have incurred and will continue to incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives. We are subject to financial reporting and other requirements for which our accounting and other management systems and resources may not be adequately prepared.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Exchange Act, which requires, among other things, that we file with the SEC, annual, quarterly and current reports with respect to our business and financial

condition and that of our consolidated subsidiaries. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and Nasdaq to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requirements to file annual, quarterly, and event driven reports with respect to our business and financial condition, and requirements for the establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices.

Pursuant to Section 404, we are required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we were an "emerging growth company" as defined in the JOBS Act, our auditors were not required to formally attest to the effectiveness of our internal control over financial reporting. As of the end of our fiscal year ended December 31, 2020, we qualified as a "large accelerated filer" as defined in the Exchange Act and, as a result, ceased to qualify as an emerging growth company. Accordingly, commencing with our Annual Report on Form 10-K for the year ended December 31, 2020, we are required to have our auditors formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404. Our compliance with Section 404 necessitates that we incur substantial accounting expense and expend significant management efforts. We will continue to dedicate internal resources, potentially engage outside consultants, and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation-related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Our implementation of these requirements may require us to incur additional expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

Additionally, there continues to be public interest and increased legislative pressure related to environmental, social and governance, or ESG, activities of public companies. We risk negative stockholder reaction, including from proxy advisory services, as well as damage to our brand and reputation, if we do not act responsibly in a number of key areas, including diversity and inclusion, environmental stewardship, support for local communities, corporate governance and transparency and considering ESG and human capital factors in our operations. There is a growing number of states requiring organizations to report their board composition as well or mandating gender diversity and representation from underrepresented communities, including New York and California.

We expect the rules and regulations applicable to us as a public company to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business, including our subsidiaries. For example, our status as a public company makes it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the level of coverage that we believe is appropriate for a public company. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors, our board committees or as executive officers.

Risks Following the Eidos Merger

We may not realize the anticipated benefits and synergies from the Eidos Merger or do so within the anticipated timeframe.

The success of our merger with Eidos, whereby we acquired all of the outstanding shares of common stock of Eidos, or the Eidos Common Stock, other than shares of Eidos Common Stock that (i) are owned by Eidos as treasury stock, (ii) are owned by us and our subsidiaries and, in each case, not owned on behalf of third parties and (iii) are subject to outstanding awards of shares of Eidos Common Stock that are subject to forfeiture conditions (subject to certain exceptions), or the Eidos Merger, will depend, in part, on our ability to realize the anticipated benefits of acquiring all of the shares of Eidos. As a result, the anticipated benefits of the Eidos Merger may not be realized fully within the expected timeframe or at all or may take longer to realize or cost more than expected, which could materially impact the business, cash flow, financial condition or results of operations as well as adversely impact the price of our shares of common stock. Potential difficulties that we may encounter in connection with the Eidos Merger, many of which may be beyond the control of management, include the following:

- our inability to successfully integrate Eidos' business in a manner that permits us to achieve the full synergies anticipated to result from the Eidos Merger;
- the loss of key employees that may be difficult to replace in the very competitive biopharmaceutical field;
- the disruption of each company's ongoing businesses, which may adversely affect our ability to maintain relationships with suppliers, distributors, alliance partners, creditors, clinical trial investigators or managers of its clinical trials;
- unanticipated changes in applicable laws and regulations; and
- potential unknown liabilities and unforeseen increased or new expenses, delays or regulatory conditions associated with the Eidos Merger.

In addition, at times, the attention of certain members of each company's management and each company's resources may be focused on the integration of Eidos following the merger and diverted from day-to-day business operations, which may disrupt each company's ongoing business.

We may be subject to litigation in connection with the Eidos Merger.

Lawsuits have been filed against us, certain of our subsidiaries, Eidos and Eidos' directors in connection with the Eidos Merger. Moreover, additional lawsuits may be filed against us, Eidos, our subsidiaries or our respective directors or executive officers in connection with the Eidos Merger and the related transactions, and while it is not possible to accurately predict future litigation and its impact, it is possible that such suits could result in substantial costs to BridgeBio and Eidos. In addition, lawsuits may be filed against the combined company. If any such lawsuit is filed, it could result in a reduction in our current stock price and our stock price, substantial costs and diversion of management's attention and resources, which could adversely affect our business, financial condition or results of operations, whether or not a settlement or other resolution is achieved.

The defense or settlement of any legal proceedings or future litigation could be time-consuming and expensive, divert the attention of BridgeBio management and/or Eidos management away from their regular business, and, if any one of these legal proceedings or any future litigation is adversely resolved against either BridgeBio or Eidos, could have a material adverse effect on their respective financial condition, results of operations or liquidity.

General Risks Related to Our Company

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 harm our business.

We 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. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. 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. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

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

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

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

Our ability to invest in and expand our business and meet our financial obligations, to attract and retain third-party contractors and collaboration partners and to raise additional capital depends on our operating and financial performance, which, in turn, is subject to numerous factors, including the prevailing economic and political conditions and financial, business and other factors beyond our control, such as the rate of unemployment, the number of uninsured persons in the United States, political influences and inflationary pressures. For example, an overall decrease in or loss of insurance coverage among individuals in the United States due to high levels of unemployment (particularly as a result of the COVID-19 pandemic), underemployment or the repeal of certain provisions of the ACA, may decrease the demand for healthcare services and pharmaceuticals. Additionally, the availability of healthcare services and resources is currently constrained due to the COVID-19 pandemic. If fewer patients are seeking medical care because they do not have insurance coverage or are unable to obtain medical care for their conditions due to resource constraints on the healthcare system, we may experience difficulties in any eventual commercialization of our product candidates and our business, results of operations, financial condition and cash flows could be adversely affected.

In addition, our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets upon which pharmaceutical and biopharmaceutical companies such as us are dependent for sources of capital. In the past, global financial crises have caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, including as a result of the COVID-19 pandemic, could result in a variety of risks to our business, including a reduced ability to raise additional capital when needed on acceptable terms, if at all, and weakened demand for our product candidates. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the COVID-19 pandemic, current economic climate and financial market conditions could adversely impact our business.

Our internal computer systems, or those used by our third-party research institution collaborators, CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal computer systems and those of our current and future CROs and other contractors and consultants may be vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, cybersecurity threats, war, and telecommunication and electrical failures. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of development programs and business operations. For example, the loss of clinical trial data from completed, ongoing or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for research and development, the manufacture and supply of drug product and drug substance and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed. We also rely on third-party service providers for aspects of our internal control over financial reporting, and such service providers may experience a material system failure or fail to carry out their obligations in other respects, which may impact our ability to produce accurate and timely financial statements, thus harming our operating results, our ability to operate our business, and our investors' view of us.

Certain data breaches must also be reported to affected individuals and the government, and in some cases to the media, under provisions of HIPAA, as amended by HITECH, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the EU GDPR and relevant member state law in the EU and other foreign laws, and financial penalties may also apply.

Our insurance policies may not be adequate to compensate us for the potential losses arising from breaches, failures or disruptions of our infrastructure, catastrophic events and disasters or otherwise. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and defending a suit, regardless of its merit, could be costly and divert management's attention.

Furthermore, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business.

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

Earthquakes, outbreak of disease, or other natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage, cybersecurity attack or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party CMOs, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. For example, we may experience delays in the supply of drug product for our clinical trials as a result of disruptions to the operations of the manufacturing facilities of some of our third-party CMOs due to the global COVID-19 pandemic. Any continued or subsequent measures taken by governmental authorities or business to contain the spread of COVID-19, or the perception that such measures may be required in the future should another outbreak occur, could adversely affect our business, financial condition or results of operations by limiting our CMOs' ability to manufacture product, forcing closure of facilities that we rely upon or increasing the costs associated with obtaining clinical supplies of our product candidates. The extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the severity of and duration of COVID-19 pandemic and the actions to contain the pandemic or treat its impact, among others. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove

adequate in the event of a serious disaster or similar event. In addition, cybersecurity liability insurance is difficult to obtain and may not cover any damages we would sustain based on any breach of our computer security protocols or other cybersecurity attack. We may incur substantial expenses as a result of the limited nature of our 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.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our research, product candidates, investigational medicines, and the diseases our product candidates and investigational medicines are being developed to treat. Social media practices in the biopharmaceutical industry continue to evolve and regulations relating to such use are not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business, resulting in potential regulatory actions against us. For example, patients may use social media channels to comment on their experience in an ongoing blinded clinical study or to report an alleged adverse event. When such disclosures occur, there is a risk that we fail to monitor and comply with applicable adverse event reporting obligations or we may not be able to defend our business or the public's legitimate interests in the face of the political and market pressures generated by social media due to restrictions on what we may say about our development candidates and investigational medicines. There is also a risk of inappropriate disclosure of sensitive information or negative or inaccurate posts or comments about us on any social networking website. If any of these events were to occur or we otherwise fail to comply with applicable regulations, we could incur liability, face regulatory actions, or incur other harm to our business.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2020, the following are the material properties that we occupy:

Property Description	Location	Square Footage	Owned or Leased	Initial Lease Term End Date	Lease Extension Options
Office space	Palo Alto, CA	3,900	Leased	2020	Extended through 2023 in 2019
Office space	San Francisco, CA	10,552	Leased	2026	None
Office space	San Francisco, CA	10,000	Leased	2021	Three-year option to extend
Office space and laboratory facility	Raleigh, NC	11,376	Leased	2024	Five-year option to extend

ITEM 3. LEGAL PROCEEDINGS

As of the date of this Annual Report on Form 10-K, we were not party to any material legal proceedings. In the future, we may become party to legal proceedings and claims arising in the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we do not believe we are party to any claim or litigation the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse impact on our financial position, results of operations or cash flows. Regardless of the outcome, litigation can have an adverse effect on us because of defense and settlement costs, diversion of management resources and other factors.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Our common stock began trading on The Nasdaq Global Select Market, or the Nasdaq, under the symbol "BBIO" on June 27, 2019. Prior to that date, there was no public trading market for shares of our common stock.

Holders

As of February 19, 2021, there were 35 stockholders of record of our common stock. As many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid any dividends and do not anticipate paying any dividends on our common stock in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

Information about our equity compensation plans in Item 12 of Part III of this Annual Report on Form 10-K is incorporated herein by reference.

Stock Performance Graph

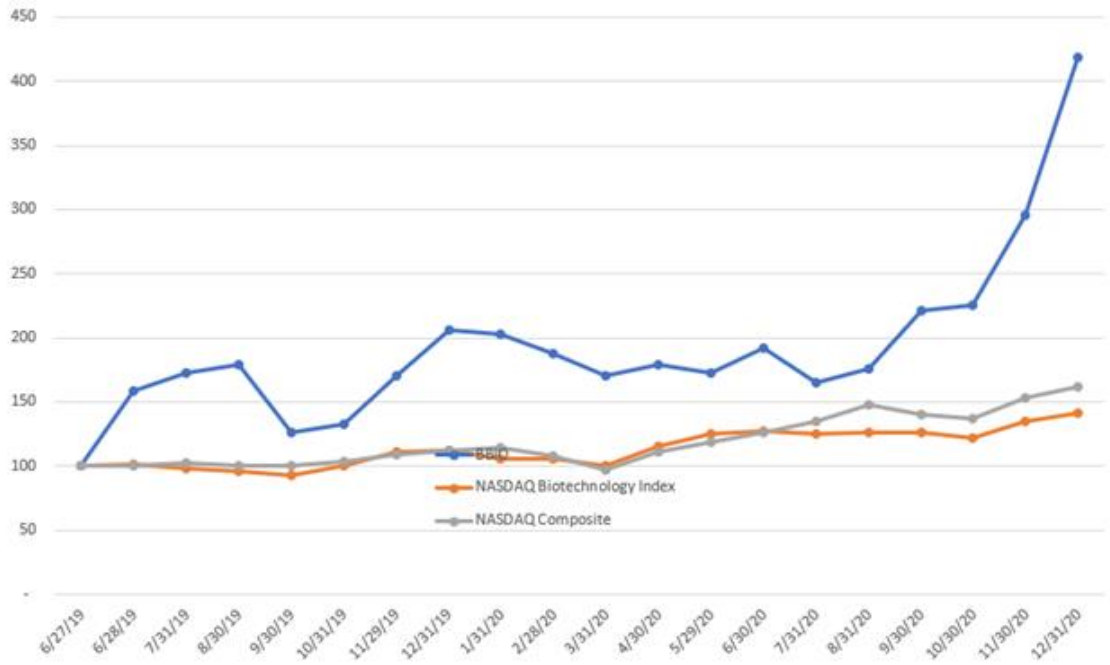
The graph set forth below compares the cumulative total stockholder return on our common stock for the period commencing on June 27, 2019, the date our common stock began trading on the Nasdaq, and ending on December 31, 2020, with the cumulative total return of the Nasdaq Composite Index and the Nasdaq Biotechnology Index over the same period. This graph assumes the investment of $100.00 on June 27, 2019 in each share of our common stock at the initial public offering price of $17.00, the Nasdaq Composite Index, and the Nasdaq Biotechnology Index, and assumes the reinvestment of dividends.

The comparisons shown in the graph below are based upon historical data. We caution that the stock price performance shown in the graph below is not necessarily indicative of, nor is it intended to forecast, the potential future performance of our common stock. Information used in the graph was obtained from sources believed to be reliable including Nasdaq, Bloomberg and Reuters, but we are not responsible for any errors or omissions in such information.

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate this Annual Report on Form 10-K or future filings made by us under those statutes, this Stock Performance Graph section is not "soliciting material," shall not be deemed filed with the U.S. Securities and Exchange Commission and shall not be deemed incorporated by reference into any of those prior filings or into any future filings made by us under those statutes.

COMPARISON OF CUMULATIVE TOTAL RETURN*

Among BridgeBio Pharma, Inc., the Nasdaq Composite Index and the Nasdaq Biotechnology Index



* $100 invested on June 27, 2019 in shares of our common stock or index, including reinvestment of dividends.

Sales of Unregistered Securities

During the year ended December 31, 2020, we did not issue or sell any unregistered securities other than as disclosed in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.

Issuer Purchases of Equity Securities

We used approximately $75.0 million of the net proceeds from the offering of our 2.50% Convertible Senior Notes due 2027, or 2027 Notes, to repurchase 2,414,681 shares of our common stock concurrently with the closing of the offering from certain of the initial purchasers of the 2027 Notes in privately negotiated transactions, or the Repurchases. The agreed to purchase price per share of common stock in the Repurchases is equal to $31.06, which was the last reported sale price per share of our common stock on the Nasdaq on March 4, 2020.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

Reserved.

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 the financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In some cases, you can identify these statements by forward-looking words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "estimate," or "continue," and similar expressions or variations. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included in this Annual Report on Form 10-K. The forward-looking statements in this Annual Report on Form 10-K represent our views as of the date of this Annual Report on Form 10-K. Except as may be required by law, we assume no obligation to update these forward-looking statements or the reasons that results could differ from these forward-looking statements. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Annual Report on Form 10-K.

Overview

BridgeBio Pharma, Inc. (we or the Company) is a team of experienced drug discoverers, developers, and innovators working to create life-altering medicines that target well-characterized genetic diseases at their source. BridgeBio was founded in 2015 to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. Our pipeline of over 30 development programs includes product candidates ranging from early discovery to late-stage development. Several of our programs target indications that we believe present the potential for our product candidate, if approved, to target portions of market opportunities of at least $1.0 billion in annual sales.

We focus on genetic diseases because they exist at the intersection of high unmet patient need and tractable biology. Our approach is to translate research pioneered at academic laboratories and leading medical institutions into products that we hope will ultimately reach patients. We are able to realize this opportunity through a confluence of scientific advances: (i) identification of the genetic underpinnings of disease as more cost-efficient genome and exome sequencing becomes available; (ii) progress in molecular biology; and (iii) the development and maturation of longitudinal data and retrospective studies that enable the linkage of genes to diseases. We believe that this early-stage innovation represents one of the greatest practical sources for new drug creation.

Since our inception in 2015, we have focused substantially all of our efforts and financial resources on acquiring and developing product and technology rights, building our intellectual property portfolio and conducting research and development activities for our product candidates within our wholly-owned subsidiaries and controlled entities, including partially-owned subsidiaries and subsidiaries we consolidate based on our deemed majority control of such entities as determined using either the variable interest entity, or VIE model, or the voting interest entity, or VOE model. To support these activities, we and our wholly-owned subsidiary, BridgeBio Services, Inc., (i) identify and secure new programs, (ii) set up new wholly-owned subsidiaries and controlled entities, (iii) recruit key management team members, (iv) raise and allocate capital across the portfolio and (v) provide certain shared services, including accounting, legal, information technology and human resources, as well as workspaces. We do not have any products approved for sale and have not generated any revenue from product sales. To date, we have funded our operations with proceeds from the sale of our equity securities, issuance of convertible notes, debt borrowings and, to a lesser extent, revenue from licensing arrangements.

Since our inception, we have incurred significant operating losses. For the years ended December 31, 2020, 2019 and 2018, we incurred net losses of $505.5 million, $288.6 million and $169.5 million, respectively. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates at our wholly-owned subsidiaries and controlled entities. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years.

Due to the inherently unpredictable nature of preclinical and clinical development, and given our novel therapeutic approaches and the stage of development of our product candidates, we cannot determine and are unable to estimate with certainty the timelines we will require and the costs we will incur for the development of our product candidates. Clinical and preclinical development timelines and costs, and the potential of development success, can differ materially from expectations due to a variety of factors. For example, in light of developments relating to the global outbreak of SARS-CoV-2, the novel strain of coronavirus that causes Coronavirus disease 19, or COVID-19, the focus of healthcare providers and hospitals on fighting the virus, and consistent with the U.S. Food and Drug Administration's updated industry guidance for conducting clinical trials issued on March 18, 2020, we have experienced delays in or temporary suspension of the enrollment of patients in our subsidiaries' ongoing clinical trials. We additionally may experience delays in certain ongoing key program activities, including commencement of planned clinical trials, as well as non-clinical experiments and investigational new drug application-enabling good laboratory practice toxicology studies. The exact duration of delays and their overall impact on our business are currently unknown, and we are continuing to actively monitor the COVID-19 pandemic as it continues to rapidly evolve. Accordingly, we may take further precautionary and preemptive actions as may be required by federal, state or local authorities or that we determine are in the best interests of public health and safety and that of our patient community, employees, partners, suppliers and stockholders. We cannot predict the effects that such actions, the duration of the COVID-19 pandemic or its impact on global business operations and economic conditions, may have on our business or strategy, including the effects on our ongoing and planned clinical development activities and prospects, or on our financial and operating results. For example, depending on the full impact and prevalence of COVID-19 over time, we currently expect to provide top-line data from Part A of our Phase 3 clinical trial of acoramidis in ATTR-CM in late 2021 or early 2022.

Basis of Presentation and Consolidation

Since our inception, we have created wholly-owned subsidiaries or made investments in certain controlled entities, including partially-owned subsidiaries for which we have majority voting interest under the VOE model or for which we are the primary beneficiary under the VIE model, which we refer to collectively as our consolidated entities. Ownership interests in entities over which we have significant influence, but not a controlling financial interest, are accounted for as cost and equity method investments. Ownership interests in consolidated entities that are held by entities other than us are reported as redeemable convertible noncontrolling interests and noncontrolling interests in our consolidated balance sheets. Losses attributed to redeemable convertible noncontrolling interests and noncontrolling interests are reported separately in our consolidated statements of operations.

Results of Operations

Comparison of the years ended December 31, 2020 and 2019

We have included our financial results for 2020 compared to 2019. Additional information required by Item 7 for the year ended December 31, 2018 can be found in Item 7 in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the U.S. Securities and Exchange Commission, or the SEC, on March 3, 2020 and is incorporated herein by reference.

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

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
License revenue	$ 8,249	$ 40,560	$ (32,311)
Cost of license revenue	—	2,500	(2,500)
Research and development	337,047	209,947	127,100
General and administrative	145,684	94,353	51,331
Loss from operations	(474,482)	(266,240)	(208,242)
Net loss	(505,488)	(288,585)	(216,903)
Net loss attributable to common stockholders of BridgeBio	(448,724)	(260,587)	(188,137)
Cash, cash equivalents and marketable securities	607,093	577,137	29,956

The results of operations for the years ended December 31, 2020 and 2019 are not necessarily indicative of the results to be expected for the year ending December 31, 2021 or for any other future annual or interim period.

Cash, Cash Equivalents and Marketable Securities

As of December 31, 2020, we had cash, cash equivalents and marketable securities of $607.1 million. On March 9, 2020, we issued an aggregate principal amount of $550.0 million of our 2.50% Convertible Senior Notes due 2027, or the 2027 Notes, in a private offering, or the 2020 Note Offering, to qualified institutional buyers. We received net proceeds from the 2020 Note Offering of approximately $537.0 million, after deducting purchasers' discount and offering expenses. We used approximately $49.3 million of the net proceeds from the 2020 Note Offering to pay for the cost of capped call transactions and approximately $75.0 million to pay for the repurchase of shares of our common stock. We also received net proceeds of $24.1 million from the at-the-market issuance of shares by Eidos Therapeutics, Inc., or Eidos, in February 2020. During the year ended December 31, 2020, we used cash of approximately $399.7 million to support our operations.

License Revenue

License revenue includes the recognition of upfront payments received in connection with our license agreements. The level of license revenue to be recognized depends in part upon the estimated recognition period of the upfront payments allocated to continuing performance obligations, the achievement of milestones and other contingent events, the amount of research and development work, and entering into new collaboration agreements, if any.

License revenue for the year ended December 31, 2020 was $8.2 million arising primarily from the recognition of the $8.0 million upfront payment received by our subsidiary, Navire Pharma, Inc., from LianBio under the Navire-LianBio License Agreement (see Note 11 to our consolidated financial statements).

License revenue for 2019 was $40.6 million arising primarily from the recognition of the upfront payment received by Eidos of $26.7 million upon execution of the Eidos-Alexion License Agreement and $13.8 million in license revenue recognized by our subsidiary, QED Therapeutics, Inc., upon the execution of the QED-LianBio License Agreement (see Note 11 to our consolidated financial statements).

Operating Expenses

Cost of License Revenue

Cost of license revenue for the year ended December 31, 2019 represents sublicensing fees payable under the Stanford License in connection with the Eidos-Alexion License Agreement and was $2.5 million in 2019. There was no cost of license revenue in 2020.

Research and Development Expenses

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Research and development	$ 337,047	$ 209,947	$ 127,100

Research and development costs consist primarily of external costs, such as fees paid to consultants, contractors, contract manufacturing organizations, or CMOs, and contract research organizations, or CROs, in connection with our preclinical and clinical development activities, and are tracked on a program-by-program basis. License fees and other costs incurred after a product candidate has been designated and that are directly related to the product candidate are included in the specific program expense. License fees and other costs incurred prior to designating a product candidate are included in early stage research programs.

Research and development expense increased by $127.1 million in 2020 compared to 2019 primarily due to an increase in external-related costs, including manufacturing validation activities for our late-stage programs, and in personnel costs resulting from an increase in the number of employees to support progression in our research and development programs, including our increasing research pipeline.

The following table summarizes our research and development expenses by program incurred for the following periods:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Infigratinib (Previously known as BBP-831) (QED)	$ 90,022	$ 65,096
Acoramidis (Previously known as BBP-265 or AG10) (Eidos)	76,695	46,662
Fosdenopterin (Previously known as BBP-870) (Origin)	22,758	19,501
BBP-631 (Adrenas)	21,327	14,744
BBP-418 (ML Bio)	13,416	1,630
Other programs including early-stage	112,829	62,314
Total	$ 337,047	$ 209,947

General and Administrative Expenses

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
General and administrative	$ 145,684	$ 94,353	$ 51,331

General and administrative expenses increased by $51.3 million in 2020 compared to 2019 due to an increase in personnel costs resulting from an increase in the number of employees and external-related costs incurred to support organizational growth, including staged build out of our commercial organization as part of commercial launch readiness activities.

Other Income (Expense), Net

Interest Income

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Interest income	$ 4,015	$ 8,915	$ (4,900)

Interest income consists of interest income earned on our cash equivalents and marketable securities. The changes in interest income in 2020 compared to 2019 were not significant.

Interest Expense

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Interest expense	$ (36,655)	$ (8,765)	$ (27,890)

Interest expense in 2020 consists primarily of interest expense incurred under our 2027 Notes issued in March 2020, our term loans with Hercules Capital, Inc. pursuant to our Loan and Security Agreement, dated June 19, 2018, as amended, and Eidos' term loan with Silicon Valley Bank and Hercules pursuant to its Loan and Security Agreement, dated November 13, 2019, or the SVB and Hercules Loan Agreement. Interest expense in 2019 consists primarily of interest expense incurred under our term loans with Hercules. The increase of $27.9 million in 2020 compared to 2019 was primarily attributed to an increase in principal amounts.

Share in Net Loss of Equity Method Investments

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Share in net loss of equity method investments	$ —	$ (20,869)	$ 20,869

Loss from equity investment for the year ended December 31, 2019 pertained to our share of losses from our investment in PellePharm and LianBio totaling $17.1 million and $3.8 million, respectively. We recognize our share of losses from our equity method investments as incurred. We did not recognize our share of net losses for the year ended December 31, 2020 as our equity investment balances were reduced to zero as of December 31, 2019.

Other Income (Expense)

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Other income (expense)	$ 1,634	$ (1,626)	$ 3,260

Other income (expense) in 2020 consists mainly of the income recognized as a result of the change in fair value of the LianBio Warrants of approximately $3.3 million (see Note 11 to our consolidated financial statements), partially offset by the change in fair value of the LEO Call Option liability of $1.5 million. Other expense in 2019 mainly represents the LEO Call Option expense of $1.1 million arising from change in fair value of the LEO Call Option liability.

Income Taxes

Prior to the 2019 Reorganization (see Note 13 to our consolidated financial statements), which was a tax-free reorganization, BridgeBio Pharma LLC, or BBP LLC", was treated as a pass-through entity for U.S. federal income tax purposes, and as such, was generally not subject to U.S. federal income tax at the entity level. Rather, the tax liability with respect to its taxable income was passed through to its unitholders. Therefore, no provision or liability for federal income tax has been included in our consolidated financial statements prior to the reorganization. For our consolidated entities, income taxes are accounted for under the asset and liability method as described below.

Upon the Reorganization on July 1, 2019, we became subject to corporate U.S. federal and state income taxation. For U.S. federal income tax purposes, we are required to file a consolidated U.S. federal income tax return for the consolidated entities that meet the requirements as prescribed by the consolidated regulations. Those entities that do not meet the threshold to be included in the consolidated filing continue to file separate U.S. federal income tax returns. To the extent we incur operating losses in the periods in which we are treated as a corporation for tax purposes, net operating loss carryforwards may generally be used by us to offset cash taxes on future taxable income, subject to applicable tax laws.

As of December 31, 2020, we had net operating losses of approximately $852.5 million and $177.9 million for federal and state income tax purposes, respectively, available to reduce future taxable income, if any. The federal net operating losses generated prior to 2018 in the amount of $31.8 million will begin to expire in 2036 and losses generated after 2018 in the amount of $820.7 million will carry over indefinitely and would be subject to an 80% taxable income limitation in the year utilized. State net operating losses will generally begin to expire in 2036. As of December 31, 2020, we had federal research and development and orphan drug credit carryforwards of $41.0 million, which will expire beginning in 2037 if not utilized. As of December 31, 2020, we had state research and development credit carryforwards of $6.3 million. The state research and development tax credits will expire at various dates while the California research and development tax credits will carry over indefinitely.

A valuation allowance is provided for deferred tax assets where the recoverability of the assets is uncertain. The determination to provide a valuation allowance is dependent upon the assessment of whether it is more likely than not that sufficient future taxable income will be generated to utilize the deferred tax assets. Based on the weight of the available evidence, which includes our consolidated entities' historical operating losses and forecast of future losses, we have provided a valuation allowance against the deferred tax assets resulting from the tax loss and credits carried forward. As a result of the issuance of our 2027 Notes in 2020, it was determined that our existing deferred tax assets do not fully offset the deferred tax liabilities when reviewing the reversals of temporary differences. This resulted in a deferred tax liability of $1.1 million that was recognized for the year ended December 31, 2020. The valuation allowance increased by $95.5 million and $79.2 million for the years ended December 31, 2020 and 2019, respectively.

Utilization of the net operating loss and credit carryforwards may be subject to a substantial annual limitation due to an ownership change limitation as provided by section 382 of the Internal Revenue Code of 1986, as amended, or the Code, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. In the event that we have a change of ownership, utilization of the net operating loss and tax credit carryforwards may be restricted.

Net Loss Attributable to Redeemable Convertible Noncontrolling Interests and Noncontrolling Interests

Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests in our consolidated statements of operations consists of the portion of the net loss of those consolidated entities that is not allocated to us. Changes in the amount of net loss attributable to noncontrolling interests are directly impacted by changes in the net loss of our consolidated entities and are the result of ownership percentage changes. Refer to Note 6 to our consolidated financial statements.

Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests was $56.8 million in 2020, compared to $28.0 million in 2019.

Liquidity and Capital Resources

We have historically financed our operations primarily through the sale of our equity securities, issuance of convertible notes, debt borrowings and revenue from certain licensing arrangements. As of December 31, 2020, we had cash, cash equivalents and marketable securities of $607.1 million. The funds that were held by our wholly-owned subsidiaries and controlled entities are available for specific entity usage, except in limited circumstances. The cash and cash equivalents of $127.7 million as of December 31, 2020 belonging to Eidos may only be used solely by Eidos. As of December 31, 2020, our outstanding debt was $477.3 million, net of debt issuance costs and accretion, or $460.4 million excluding Eidos.

Since our inception, we have incurred significant operating losses. For the years ended December 31, 2020, 2019 and 2018, we incurred net losses of $505.5 million, $288.6 million and $169.5 million, respectively. We had an accumulated deficit as of December 31, 2020 of $888.8 million. We expect to continue to incur net losses over the next several years as we continue our drug discovery efforts and incur significant preclinical and clinical development costs related to our current research and development programs as well as costs related to commercial launch readiness for our late-stage programs. In particular, to the extent we advance our programs into and through later-stage clinical studies without a partner, we will incur substantial expenses. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates at our wholly-owned subsidiaries and controlled entities.

Our current business plan is also subject to significant uncertainties and risks as a result of, among other factors, our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates at our consolidated entities.

We expect our cash and cash equivalents and marketable securities will fund our operations for at least the next 12 months based on current operating plans and financial forecasts. If our current operating plans or financial forecasts change, including the effects of the COVID-19 pandemic on our research and development activities, we may require additional funding sooner in the form of public or private equity offerings, debt financings or additional collaborations and licensing arrangements. However, future financing may not be available in amounts or on terms acceptable to us, if at all.

In addition, we are closely monitoring ongoing developments in connection with the COVID-19 pandemic, which may negatively impact our financial and operating results. We will continue to assess our operating expenses and our cash and cash equivalents and, if circumstances warrant, we will make appropriate adjustments to our operating plan.

Sources of Liquidity

Initial public offerings and at-the-market share issuances

In June 2018, our controlled subsidiary, Eidos, completed its U.S. initial public offering of its common stock of which net proceeds received were $95.5 million. As of December 31, 2020, we held 24,575,501 shares of common stock of Eidos. All cash and cash equivalents held by Eidos are restricted and can be applied solely to fund the operations of Eidos. In October 2020, we entered into the Merger Agreement with Eidos, Globe Merger Sub I, Inc. and Globe Merger Sub II, Inc. (the two latter companies being our indirect wholly-owned subsidiaries), providing for, in a series of merger transactions, or the Merger Transactions, the acquisition by us of all of the outstanding shares of common stock of Eidos, or the Eidos Common Stock, other than shares of Eidos Common Stock that (i) are owned by Eidos as treasury stock, (ii) are owned by us and our subsidiaries and, in each case, not owned on behalf of third parties and (iii) are subject to an Eidos restricted share award. We completed the Merger Transactions on January 26, 2021 and Eidos became our wholly-owned subsidiary. Refer to Note 18 to our consolidated financial statements.

On July 1, 2019, we completed the initial public offering, or IPO, of our common stock. As part of the IPO, we issued and sold 23,575,000 shares of our common stock, which included 3,075,000 shares sold pursuant to the exercise of the underwriters' over-allotment option, at a public offering price of $17.00 per share. We received net proceeds of approximately $366.2 million from the IPO, after deducting underwriters' discounts and commissions of $28.1 million and offering costs of $6.5 million.

On August 2, 2019, Eidos filed a registration statement on Form S-3, or the 2019 Shelf, with the SEC in relation to the registration of common stock, preferred stock, warrants and units of any combination thereof. Eidos also simultaneously entered into an Open Market Sales Agreement, or the 2019 Sales Agreement, with the sales agents named therein, or the Sales Agents, to provide for the offering, issuance and sale of up to an aggregate offering price of $100.0 million of its common stock from time to time in "at-the-market" offerings under the 2019 Shelf and subject to the limitations thereof. Eidos will pay to the applicable Eidos Sales Agent cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the 2019 Sales Agreement. Eidos issued 385,613 shares under this offering and received $23.9 million of net proceeds through December 31, 2019. Eidos issued 448,755 shares under this offering and received $24.1 million of net proceeds in February 2020. As a result of the completion of the Merger Transactions with Eidos on January 26, 2021, Eidos' common stock ceased to trade on the Nasdaq prior to the opening of business on January 26, 2021, the 2019 Sales Agreement was terminated and the 2019 Shelf was deregistered with the SEC.

On July 7, 2020, we filed a shelf registration statement on Form S-3ASR, or the 2020 Shelf, with the SEC in relation to the registration of common stock, preferred stock, debt securities, warrants and units or any combination thereof. We also simultaneously entered into a sales agreement, dated as of July 7, 2020, or the 2020 Sales Agreement, with the sales agents named therein, or the BridgeBio Sales Agents, to provide for the offering, issuance and sale by us of up to an aggregate of $350.0 million of our common stock from time to time in "at-the-market" offerings under the 2020 Shelf and subject to the limitations thereof. We will pay to the applicable BridgeBio Sales Agents cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the 2020 Sales Agreement. We have not issued any shares or received any proceeds under the 2020 Sales Agreement through December 31, 2020.

Debt

2027 Notes

On March 9, 2020, we issued an aggregate principal amount of $550.0 million of our 2027 Notes, pursuant to an Indenture dated March 9, 2020, or the Indenture, between BridgeBio and U.S. Bank National Association, as trustee, or the Trustee, in a private offering to qualified institutional buyers, or the 2020 Note Offering, pursuant to Rule 144A under the Securities Act. The 2027 Notes issued in the 2020 Note Offering include $75.0 million aggregate principal amount of 2027 Notes sold to the initial purchasers in the offering, or the Initial Purchasers, pursuant to the exercise in full of their option to purchase additional 2027 Notes.

The 2027 Notes are senior, unsecured obligations of BridgeBio and will accrue interest payable semiannually in arrears on March 15 and September 15 of each year, beginning on September 15, 2020, at a rate of 2.50% per year. The 2027 Notes will mature on March 15, 2027, unless earlier converted or repurchased. Upon conversion, the 2027 Notes are convertible into cash, shares of our common stock or a combination of cash and shares of our common stock, at our election.

We received net proceeds from the Note Offering of approximately $537.0 million, after deducting the Initial Purchasers' discount and offering expenses. We used approximately $49.3 million of the net proceeds from the Note Offering to pay for the cost of the Capped Call Transactions, and approximately $75.0 million to pay for the repurchases of shares of our common stock in connection with the Note Offering.

A holder of 2027 Notes may convert all or any portion of its 2027 Notes at its option at any time prior to the close of business on the business day immediately preceding December 15, 2026 in multiples of $1,000 only under the following circumstances:

- During any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;

- During the five business day period after any five consecutive trading day period (the "measurement period") in which the "trading price" (as defined in the Indenture) per $1,000 principal amount of 2027 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; or
- Upon the occurrence of specified corporate events.

On or after December 15, 2026 until the close of business on the second scheduled trading day immediately preceding the maturity date, a holder may convert all or any portion of its 2027 Notes at any time, regardless of the foregoing.

The conversion rate will initially be 23.4151 shares of our common stock per $1,000 principal amount of 2027 Notes (equivalent to an initial conversion price of approximately $42.71 per share of our common stock, for a total of approximately 12,878,305 shares). The conversion rate is subject to adjustment in some events but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that occur prior to the maturity date, we will, in certain circumstances, increase the conversion rate for a holder who elects to convert its 2027 Notes in connection with such a corporate event. The maximum number of shares issuable should there be an increase in the conversion rate is 17,707,635 shares of our common stock.

We may not redeem the 2027 Notes prior to the maturity date, and no sinking fund is provided for the 2027 Notes. If we undergo a fundamental change (as defined in the Indenture), holders may require us to repurchase for cash all or any portion of their 2027 Notes at a fundamental change repurchase price equal to 100% of the principal amount of the 2027 Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. The Indenture contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the Trustee or the holders of not less than 25% in aggregate principal amount of the 2027 Notes then outstanding may declare the entire principal amount of all the Notes plus accrued special interest, if any, to be immediately due and payable. The 2027 Notes are our general unsecured obligations and rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the 2027 Notes; equal in right of payment with all of our liabilities that are not so subordinated; effectively junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

Hercules Loan and Security Agreement

In June 2018, we executed a Loan and Security Agreement with Hercules Capital, Inc., or Hercules, under which we borrowed $35.0 million, or Tranche I. The term of the loan was approximately 42 months, with a maturity date of January 1, 2022, or the Maturity Date. No principal payments were due during an interest-only period, commencing on the initial borrowing date and continuing through July 1, 2020, or the Amortization Date. In December 2018, we executed the First Amendment to the Loan and Security Agreement, whereby we borrowed an additional $20.0 million, or Tranche II, to increase the total principal balance outstanding to $55.0 million. Upon draw of the additional $20.0 million, the interest-only period on the entire facility was extended until January 1, 2021 and the maturity date for the entire facility was July 1, 2022. In May 2019, we executed the Second Amendment to the Loan and Security Agreement whereby we borrowed an additional $20.0 million, or Tranche III, to increase the total principal balance outstanding to $75.0 million.

In July 2019, the completion of BridgeBio's IPO triggered certain provisions of the Second Amendment to the Loan and Security Agreement. BridgeBio received an option to pay up to 1.5% of scheduled cash pay interest on the entire facility as payment in kind, or PIK Interest, with such cash pay interest paid as PIK Interest at a 1:1.2 ratio. The interest-only period will continue through July 1, 2021, or the Modified Amortization Date, and the entire facility received a maturity date of January 1, 2023, or the Modified Maturity Date. The outstanding balance of the Hercules Term Loan is to be repaid by BridgeBio monthly beginning on the Modified Amortization Date and extending through the Modified Maturity Date.

Under the Second Amendment to the Loan and Security Agreement, the interest rate for the Hercules Term Loan was established as follows: (1) Tranche I bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.85% and (ii) 8.85%, payable monthly; (2) Tranche II bears interest

at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 2.85% and (ii) 8.60%, payable monthly; and (3) Tranche III bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.10% and (ii) 9.10%, payable monthly.

In March 2020, we executed the Third Amendment to the Loan and Security Agreement primarily to allow us to issue our 2027 Notes and to enter into the Capped Call and transactions to repurchase shares of our common stock concurrently with closing of the 2027 Notes offering in privately negotiated transactions from certain initial purchasers of our 2027 notes, or the Share Repurchase Transactions.

In April 2020, we entered into the Fourth Amendment to the Loan and Security Agreement, or the Amended Hercules Term Loan, which among other things,

(1) extended the interest-only period under the Loan and Security Agreement to July 1, 2022, or the Amended Amortization Date, which may be further extended to January 1, 2023 and July 1, 2023, in each case, subject to certain conditions set forth in the Amended Hercules Term Loan,

(2) extended the maturity date for the term loans under the Loan and Security Agreement to November 1, 2023, or the Amended Maturity Date, which may be further extended to May 1, 2024, subject to certain conditions set forth in the Amended Hercules Term Loan,

(3) provided for an interest rate on the Tranche I equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.85% and (y) 8.75% (8.75% as of December 31, 2020), payable monthly,

(4) provided for an interest rate on the Tranche II equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 2.85% and (y) 8.60% (8.60% as of December 31, 2020), payable monthly,

(5) provided for an interest rate on the Tranche III equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.10% and (y) 8.85% (8.85% as of December 31, 2020), payable monthly, and

(6) provided for, subject to Hercules' approval in its sole and absolute discretion, an additional increase in available loan facilities aggregating to $125.0 million as follows: (a) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2020, (b) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2021, (c) an additional incremental loan following the achievement of certain performance milestones in the amount of $25.0 million, available no later than December 15, 2021 and (d) an additional $50.0 million discretionary incremental tranche, available no later than December 15, 2022.

We did not draw the incremental loan of $25.0 million that was available until December 15, 2020. There have not been any additional draws on the $100.0 million additional available facilities as of December 31, 2020.

The Hercules Term Loan contains customary representations and warranties, events of default, and affirmative and negative covenants for a term loan facility of this size and type. However, Hercules imposes no significant liquidity covenants on us and Hercules cannot limit or restrict our ability to dispose of assets, make investments, or make acquisitions. As pledged collateral for our obligations under the Hercules Term Loan, we granted Hercules a security interest in all of our assets or personal property, including all equity interests owned or hereafter acquired by us. Further, at Hercules' sole discretion we must make a mandatory prepayment equal to 75% of net cash proceeds received from the sale or licensing of any pledged or collateral assets, including intellectual property, of a consolidated entity owned by us, or the repurchase or redemption of any pledged collateral by certain specified operating companies. None of our consolidated entities are a party to, nor provide any credit support or other security in connection with the Hercules Term Loan.

In January 2021, we executed the Fifth Amendment to the Loan and Security Agreement primarily to allow us to issue our 2029 Notes (as described below) and to enter into the related capped call and share repurchase transactions, as discussed below.

Silicon Valley Bank and Hercules Loan Agreement

On November 13, 2019, Eidos entered into the SVB and Hercules Loan Agreement. The SVB and Hercules Loan Agreement provides for up to $55.0 million in term loans to be drawn in three tranches as follows: (i) Tranche A loan of $17.5 million, (ii) Tranche B loan of up to $22.5 million which is available to be drawn until October 31, 2020, and (iii) Tranche C loan of up to $15.0 million available to be drawn upon a clinical trial milestone. The Tranche C loan is available to be drawn until September 30, 2021. The Tranche A loan of $17.5 million was drawn on November 13, 2019. There have not been any additional draws on the other tranches as of December 31, 2020, including the Tranche B loan that was available until October 31, 2020.

The Tranche A loan bears interest at a fixed rate equal to the greater of either (i) 8.50% or (ii) 3.25% plus the prime rate as reported in The Wall Street Journal (8.50% as of December 31, 2020). The Tranche A loan repayment schedule provides for interest only payments until November 1, 2021, followed by consecutive equal monthly payments of principal and interest commencing on this date continuing through the maturity date of October 2, 2023.

The Tranche A loan also provides for a $0.3 million commitment fee that was paid at closing and a final payment charge equal to 5.95% multiplied by the amount funded to be paid when the loan becomes due or upon prepayment of the facility. If Eidos elects to prepay the Tranche A loan, there is also a prepayment fee of between 0.75% and 2.50% of the principal amount being prepaid depending on the timing and circumstances of prepayment. The Tranche A loan is secured by substantially all of Eidos' assets, except Eidos' intellectual property, which is the subject of a negative pledge.

In January 2021, Eidos entered into an amendment to the SVB and Hercules Loan Agreement primarily to allow Eidos to enter into the Merger Transactions. The amendment also requires Eidos to maintain a certain amount of cash and cash equivalents with SVB.

Issuance of 2029 Notes

On January 28, 2021, we issued an aggregate of $717.5 million principal amount of our 2.25% Convertible Senior Notes due 2029, or the 2029 Notes, pursuant to an Indenture dated January 28, 2021, or the 2029 Notes Indenture, between us and U.S. Bank National Association, as trustee, or the 2029 Notes Trustee, in a private offering to qualified institutional buyers , or the 2029 Note Offering, pursuant to Rule 144A under the Securities Act. The 2029 Notes issued in the 2029 Note Offering include $67.5 million aggregate principal amount of 2029 Notes sold to the initial purchasers, or the 2029 Notes Initial Purchasers, pursuant to the exercise in part of the 2029 Notes Initial Purchasers' option to purchase $97.5 million principal amount of additional 2029 Notes. On January 28, 2021, the 2029 Notes Initial Purchasers exercised the remaining portion of their option to purchase $30.0 million principal amount of additional 2029 Notes. The sale of the additional 2029 Notes closed on February 2, 2021.

The 2029 Notes will accrue interest payable semiannually in arrears on February 1 and August 1 of each year, beginning on August 1, 2021, at a rate of 2.25% per year. The 2029 Notes will mature on February 1, 2029, unless earlier converted, redeemed or repurchased. The 2029 Notes are convertible into cash, shares of BridgeBio's common stock or a combination of cash and shares of BridgeBio's common stock, at our election. The Notes are our general unsecured obligations and rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the 2029 Notes; equal in right of payment with all of our liabilities that are not so subordinated, including our 2027 Notes; effectively junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

We received net proceeds from the 2029 Note Offering of approximately $731.7 million, after deducting the 2029 Notes Initial Purchasers' discount and offering expenses. We used approximately $61.3 million of the net proceeds from the 2029 Note Offering to pay for the cost of the capped call transactions and approximately $50.0 million to pay for the repurchase of shares of our common stock in connection with the 2029 Note Offering. We intend to use the remainder of the net proceeds from the 2029 Note Offering for general corporate purposes, which may include research and development and clinical development costs to support the advancement of our drug candidates, including the continued growth of our commercial and medical affairs capabilities, the conduct of clinical trials and preclinical research and development activities; working capital; capital expenditures; repayment of outstanding indebtedness; general and administrative expenses; and other general corporate purposes.

The 2029 Notes Indenture contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the 2029 Notes Trustee or the holders of not less than 25% in aggregate principal amount of the 2029 Notes then outstanding may declare the entire principal amount of all the 2029 Notes plus accrued special interest, if any, to be immediately due and payable.

Cash Flows

The following table summarizes our cash flows during the periods indicated:

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Net cash used in operating activities	$ (399,714)	$ (253,587)	$ (146,127)
Net cash used in investing activities	(52,993)	(217,253)	164,260
Net cash provided by financing activities	447,189	398,792	48,397
Net decrease in cash and cash equivalents and restricted cash	$ (5,518)	$ (72,048)	$ 66,530

Net Cash Flows Used in Operating Activities

Net cash used in operating activities was $399.7 million in 2020, consisting primarily of our net loss of $505.5 million, adjusted for non-cash items such as $58.5 million in stock-based compensation expense, $17.7 million accretion of our 2027 Notes and term loans, $6.0 million fair value of shares issued under our license agreements, $4.7 million acquired in-process research and development assets and $3.1 million amortization of operating lease right-of-use assets, partially offset by $3.3 million change in fair value of LianBio Warrants, as well as net cash inflow of $14.9 million related to changes in operating assets and liabilities. The $14.9 million net cash inflow related to changes in operating assets and liabilities was attributed mainly to an increase of $8.6 million in accrued compensation and benefits, an increase of $6.2 million in accrued research and development liabilities and an increase of $8.3 million in other accrued and other liabilities partially offset by an increase in prepaid expenses and other current assets of $7.1 million.

Net cash used in operating activities was $253.6 million in 2019, consisting primarily of our net loss of $288.6 million, adjusted for non-cash items such as $21.4 million in stock-based compensation expense and $20.9 million for our share of losses of our equity method investments, as well as net cash outflow of $10.9 million related to changes in operating assets and liabilities. The $10.9 million net cash outflow related to changes in operating assets and liabilities was attributed mainly to an increase of $16.9 million in other assets, an increase of $13.5 million in prepaid expenses and other assets and a decrease of $4.7 million in accounts payable mostly due to payments of CROs' and CMOs' expenses for increased research activities, offset by changes in liabilities primarily due to an increase in accrued research and development liabilities of $12.0 million and an increase in accrued compensation and benefits of $9.3 million.

Net Cash Flows Used in Investing Activities

Net cash used in investing activities was $53.0 million in 2020, consisting primarily of purchases of marketable securities of $287.9 million, purchases of property and equipment of $7.5 million and payments of merger transaction costs of $6.9 million, partially offset by $249.1 million in maturities of marketable securities.

Net cash used in investing activities was $217.3 million in 2019, consisting primarily of $212.9 million used to purchase marketable securities, $2.6 million related to purchase of property and equipment and $2.5 million paid for in-process research and development assets acquired in connection with asset acquisitions.

Cash Flows Provided by Financing Activities

Net cash provided by financing activities was $447.2 million in 2020, consisting primarily of the net proceeds from the issuance of our 2027 Notes of $537.0 million, at-the-market issuance by Eidos of $24.1 million and stock option exercises of $12.9 million, offset by the repurchase of our common stock of $75.0 million and purchase of capped calls of $49.3 million, both in relation to the issuance of our 2027 Notes.

Net cash provided by financing activities was $398.8 million in 2019, consisting primarily of the net proceeds from our IPO of $366.2 million, availment of term loans of $36.9 million, at-the-market issuance by Eidos of $23.9 million, issuance of noncontrolling interest in Eidos to Alexion of $23.3 million and stock option exercises of $1.8 million, offset by $55.0 million payment in relation to our purchase of common stock of Eidos from a noncontrolling interest holder.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2020:

	Payments Due by Period				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
	(in thousands)				
Operating lease obligations	$ 5,130	$ 8,715	$ 7,677	$ 6,303	$ 27,825
Finance lease obligations	238	852	904	37	2,031
Obligation under a manufacturing agreement	4,149	—	—	—	4,149
2027 Notes	—	—	—	550,000	550,000
Interest on 2027 Notes	13,750	27,500	27,500	20,625	89,375
Term loans	1,458	91,042	—	—	92,500
Interest on term loans and final end of term payments	8,147	14,727	—	—	22,874
Total contractual obligations	$ 32,872	$ 142,836	$ 36,081	$ 576,965	$ 788,754

In March 2020, we issued an aggregate principal amount of $550.0 million of our 2027 Notes, pursuant to an Indenture dated March 9, 2020 between BridgeBio and U.S. Bank National Association, as trustee, in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act. The 2027 Notes are senior, unsecured obligations of BridgeBio and will accrue interest payable semiannually in arrears on March 15 and September 15 of each year, beginning on September 15, 2020, at a rate of 2.50% per year. The 2027 Notes will mature on March 15, 2027, unless earlier converted or repurchased. Upon conversion, the 2027 Notes are convertible into cash, shares of our common stock or a combination of cash and shares of our common stock, at our election.

In April 2020, we entered into the Amended Hercules Term Loan, which among other things:

(1) extended the interest-only period under the Loan and Security Agreement to July 1, 2022 (the Amended Amortization Date, which may be further extended to January 1, 2023 and July 1, 2023, in each case, subject to certain conditions set forth in the Amended Hercules Term Loan);

(2) extended the maturity date for the term loans under the Loan and Security Agreement to November 1, 2023 (the Amended Maturity Date, which may be further extended to May 1, 2024, subject to certain conditions set forth in the Amended Hercules Term Loan);

(3) provided for an interest rate on the Tranche I equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.85% and (y) 8.75% (8.75% as of December 31, 2020), payable monthly;

(4) provided for an interest rate on the Tranche II equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 2.85% and (y) 8.60% (8.60% as of December 31, 2020), payable monthly;

(5) provided for an interest rate on the Tranche III equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.10% and (y) 8.85% (8.85% as of December 31, 2020), payable monthly; and

(6) provided for, subject to Hercules' approval in its sole and absolute discretion, an additional increase in available loan facilities aggregating to $125.0 million as follows: (a) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2020, (b) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2021, (c) an additional incremental loan following the achievement of certain performance milestones in the amount of $25.0 million, available no later than December 15, 2021 and (d) an additional $50.0 million discretionary incremental tranche, available no later than December 15, 2022.

The Amended Hercules Term Loan also provides us with more flexibility to consummate acquisitions and investments, incur additional debt, dispose of assets and repurchase and/or redeem stock, each subject to certain conditions set forth in the Amended Hercules Term Loan. There have not been any additional draws on the $125.0 million additional available facilities as of December 31, 2020, including the available incremental loan of $25.0 million that was available to be drawn until December 15, 2020.

In October 2020, we entered into the Merger Transactions with Eidos. Pursuant to the Merger Agreement, Eidos' stockholders (other than us) had the right to receive in the transaction, at their election, either 1.85 shares of BridgeBio common stock or $73.26 in cash for each share of common stock of Eidos, or the Eidos Common Stock, subject to proration to ensure that the aggregate amount of cash consideration was no greater than $175.0 million. Upon the closing of the Merger Transactions and subject to the terms of the Merger Agreement, Eidos became our wholly-owned subsidiary, and Eidos' common stock ceased to trade on the Nasdaq.

On January 19, 2021, the stockholders of each of BridgeBio and Eidos voted to approve all proposals related to the Merger Transactions and on January 26, 2021, we closed and completed the Merger Transactions. The acquisition of the Eidos Common Stock was settled through cash payments of $21.3 million and the issuance of approximately 26.1 million shares of our common stock. Through the closing of the Merger Transactions on January 26, 2021, we have incurred estimated transaction costs aggregating to $78.2 million.

In October 2020, we entered into a twelve-year real property lease agreement for an approximately 20,000 square feet facility in Montreal, Québec. The lease is expected to commence in early 2021. Future minimum rent payments under this lease are approximately $5.7 million. Under the lease agreement, we are also required to secure a letter of credit of $1.6 million, subject to reduction of such amount by $0.1 million per year.

Effective as of October 2020, we entered into a five-year real property sublease agreement for an approximately 53,000 square feet facility in San Francisco, California. Future minimum rent payments under this sublease are approximately $11.2 million.

We have performance-based milestone compensation arrangements with certain employees and consultants, whose vesting is contingent upon meeting various regulatory and development milestones, with fixed monetary amounts known at inception that can be settled in the form of cash or equity at our sole election, upon achievement of each contingent milestone. As of December 31, 2020, the potential performance-based milestone compensation amount was up to $99.0 million. Since the timing of the payments is contingent on the occurrence of these performance-based milestones, these payments are not included in the contractual obligations table above. We also have performance-based milestone compensation arrangements with certain employees and consultants as part of the 2020 Stock and Equity Award Exchange Program, or the “Exchange Program”, which is further discussed in Note 15 to our consolidated financial statements. The compensation arrangements under the Exchange Program are excluded from the table above because such compensation arrangements are to be settled in the form of equity only.

We have certain payment obligations under various license and collaboration agreements and under certain of our asset acquisitions. Under these agreements we are required to make milestone payments upon successful completion and achievement of certain intellectual property, clinical, regulatory and sales milestones. The payment obligations under the license and collaboration agreements are contingent upon future events such as our achievement of specified development, clinical, regulatory and commercial milestones, and we will be required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. As the achievement and timing of these future milestone payments are not probable or estimable, such amounts have not been included in our consolidated balance sheet as of December 31, 2020, or in the contractual obligations table above.

In addition, we enter into agreements in the normal course of business with CROs and other vendors for clinical trials and with vendors for preclinical studies and other services and products for operating purposes, which are generally cancelable upon written notice. These payments are not included in the contractual obligations table above.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any off-balance sheet arrangements. While we have investments classified as VIEs, their purpose is not to provide off-balance sheet financing.

Critical Accounting Policies

Our management’s discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as revenues 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 following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements for the periods in this report.

Accrued Research and Development Liabilities

We record accruals for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and include these costs in accrued research and development liabilities in the consolidated balance sheet and within research and development expense in the consolidated statements of operations. These costs are a significant component of our research and development expenses.

Examples of estimated research and development expenses that we accrue include:

- fees paid to CROs in connection with preclinical and toxicology studies and clinical trials;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to CMOs in connection with the production of product and clinical trial materials; and
- professional service fees for consulting and related services.

We base our expense accruals related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on our behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors, such as the successful enrollment of patients and the completion of clinical trial milestones. Our service providers generally invoice us monthly in arrears for services performed. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. We record advance payments to service providers as prepaid assets.

We record accruals for the estimated costs of our contract manufacturing activities performed by third parties. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts include upfront payments and milestone payments, which depend on factors such as the achievement of the completion of certain stages of the manufacturing process. For purposes of recognizing expense, we assess whether we consider the production process sufficiently defined to be considered the delivery of a good or the delivery of a service, where processes and yields are developing and less certain. If we consider the process to be the delivery of a good, we recognize expense when the drug product is delivered, or we otherwise bear risk of loss. If we consider the process to be the delivery of a service, we recognize expense based on our best estimates of the contract manufacturer’s progress towards completion of the stages in the contract. We base our estimates on the best information available at the time. However, additional information may become available to us which may allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain. Any increases or decreases in cost are generally considered to be changes in estimates and will be reflected in research and development expenses in the period identified.

To date, we have not experienced significant changes in our estimates of accrued research and development liabilities after a reporting period. However, due to the nature of estimates, there is no assurance that we will not make changes to our estimates in the future as we become aware of additional information about the status or conduct of our clinical studies and other research activities.

Accrued Milestone Compensation Arrangements

We have performance-based milestone compensation arrangements with certain employees and consultants, whose vesting is contingent upon meeting various regulatory and development milestones, with fixed monetary amounts known at inception that can be settled in the form of (i) cash, (ii) equity of BridgeBio, or (iii) cash or equity of BridgeBio at our sole election, upon achievement of each contingent milestones. For arrangements that involve settlement by cash or equity of BridgeBio at our sole election, we will classify the milestone compensation arrangements as liability-classified awards when it is probable of achievement because of the possible fixed monetary amounts settlement outcomes. The arrangements would also result in settlement with a variable number of

shares based on the then-current stock price at achievement date of each contingent milestone should we elect to settle in equity.

We record accruals for the compensation expense arising from each development milestone when the specific contingent development milestone is probable of achievement and such accruals are measured at each reporting period. We estimate the probability of achieving such milestones based on the progression and expected outcome of the related clinical programs. We base our estimates on the best available information at that time. However, additional information may become available to us which may allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to milestone compensation expenses in future periods. Any increases or decreases in such expenses are generally considered to be changes in estimates and will be reflected in the period identified.

To date, we have not experienced significant changes in our estimates of accrued milestone compensation expenses after a reporting period. However, due to the nature of estimates, there is no assurance that we will not make changes to our estimates in the future as we become aware of additional information about the progression and expected outcome of our clinical programs.

Recent Accounting Pronouncements

See Note 2, “Summary of Significant Accounting Policies—Recently Adopted Accounting Pronouncements” to our consolidated financial statements appearing under Part II, Item 8 for more information.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As of December 31, 2020 and 2019, we held cash, cash equivalents and marketable securities of $607.1 million and $577.1 million, respectively. Our cash equivalents consist of amounts invested in money market accounts, such as money market funds and short-term commercial paper. Our marketable securities consisted of commercial paper, corporate debt securities and U.S. government agency securities. We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. We do not believe that our cash, cash equivalents or marketable securities have a significant risk of default or illiquidity.

As of December 31, 2020 and 2019, we had $92.5 million in variable rate debt outstanding. The Hercules Term Loan, which had a principal balance of $75.0 million, matures in November 2023, with interest-only monthly payments until July 2022. Tranche I bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.85% and (ii) 8.75% (8.75% as of December 31, 2020); Tranche II bears interest at a floating rate of equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 2.85% and (ii) 8.60% (8.60% as of December 31, 2020); and Tranche III bears interest at a floating rate of equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.10% and (ii) 8.85% (8.85% as of December 31, 2020). The SVB and Hercules Loan Agreement entered into by Eidos, which matures in October 2023, had a principal balance of $17.5 million as of December 31, 2020 and bears interest equal to the greater of either (i) 8.50% or (ii) 3.25% plus the prime rate as reported in The Wall Street Journal (8.50% as of December 31, 2020). The loan repayment schedule provides for interest only payments until November 2021, followed by consecutive equal monthly payments of principal and interest commencing on this date continuing through maturity.

A hypothetical 100 basis point change in interest rate during any of the periods presented would not have had a material impact on our financial statements.

Our 2027 Notes issued in March 2020 had a principal balance of $550.0 million as of December 31, 2020 and bear interest at a fixed rate. Our cash flows on this debt obligation are not subject to variability as a result of changes in interest rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

BRIDGEBIO PHARMA, INC.

Consolidated Balance Sheets
(in thousands, except shares and per share amounts)

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 356,082	$ 363,773
Short-term marketable securities	251,011	182,220
Receivable from a related party	—	2,845
Prepaid expenses and other current assets	35,731	19,784
Total current assets	642,824	568,622
Property and equipment, net	20,325	5,625
Operating lease right-of-use assets, net	16,508	—
Long-term marketable securities	—	31,144
Other assets	23,931	26,288
Total assets	$ 703,588	$ 631,679
Liabilities, Redeemable Convertible Noncontrolling Interests and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 8,945	$ 8,852
Accrued compensation and benefits	29,682	13,317
Accrued research and development liabilities	27,290	20,896
Accrued professional services	5,579	2,222
LEO call option liability	5,550	4,078
Build-to-suit lease obligation	—	8,000
Operating lease liabilities, current portion	3,795	—
Term loans, current portion	1,458	—
Other accrued liabilities	13,349	3,020
Total current liabilities	95,648	60,385
Term loans, net of current portion	92,421	91,791
2027 Notes, net	383,436	—
Operating lease liabilities, net of current portion	14,677	—
Other liabilities	9,520	3,527
Total liabilities	595,702	155,703
Commitments and contingencies (Note 9)		
Redeemable convertible noncontrolling interests	1,630	2,243
Stockholders' equity:		
Undesignated preferred stock, $0.001 par value; 25,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.001 par value; 500,000,000 shares authorized; 125,264,070 shares issued and 122,849,389 shares outstanding as of December 31, 2020, 123,658,287 shares issued and outstanding as of December 31, 2019	125	124
Treasury stock, at cost; 2,414,681 shares as of December 31, 2020, nil as of December 31, 2019	(75,000)	—
Additional paid-in capital	1,021,344	848,107
Accumulated other comprehensive income	192	254
Accumulated deficit	(888,755)	(440,031)
Total BridgeBio stockholders' equity	57,906	408,454
Noncontrolling interests	48,350	65,279
Total stockholders' equity	106,256	473,733
Total liabilities, redeemable convertible noncontrolling interests and stockholders' equity	$ 703,588	$ 631,679

The accompanying notes are an integral part of these consolidated financial statements.

BRIDGEBIO PHARMA, INC.

Consolidated Statements of Operations
(in thousands, except shares and per share amounts)

	Year Ended December 31,		
	2020	**2019**	**2018**
License revenue	$ 8,249	$ 40,560	$ —
Operating expenses:			
Cost of license revenue	—	2,500	—
Research and development	337,047	209,947	140,073
General and administrative	145,684	94,353	43,587
Total operating expenses	482,731	306,800	183,660
Loss from operations	(474,482)	(266,240)	(183,660)
Other income (expense), net:			
Interest income	4,015	8,915	2,004
Interest expense	(36,655)	(8,765)	(2,547)
Gain on deconsolidation of PellePharm	—	—	19,327
Share in net loss of equity method investments	—	(20,869)	(275)
Other income (expense)	1,634	(1,626)	(4,300)
Total other income (expense), net	(31,006)	(22,345)	14,209
Net loss	(505,488)	(288,585)	(169,451)
Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	56,764	27,998	38,702
Net loss attributable to common stockholders of BridgeBio	$ (448,724)	$ (260,587)	$ (130,749)
Net loss per share, basic and diluted	$ (3.80)	$ (2.48)	$ (2.12)
Weighted-average shares used in computing net loss per share, basic and diluted	117,995,457	105,099,089	61,767,414

The accompanying notes are an integral part of these consolidated financial statements.

BRIDGEBIO PHARMA, INC.

Consolidated Statements of Comprehensive Loss
(in thousands)

	Year Ended December 31,		
	2020	**2019**	**2018**
Net loss	$ (505,488)	$ (288,585)	$ (169,451)
Other comprehensive income (loss):			
Unrealized gain (loss) on available-for-sale securities	(62)	254	—
Comprehensive loss	(505,550)	(288,331)	(169,451)
Comprehensive loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	56,764	27,998	38,702
Comprehensive loss attributable to common stockholders of BridgeBio	$ (448,786)	$ (260,333)	$ (130,749)

The accompanying notes are an integral part of these consolidated financial statements.

BRIDGEBIO PHARMA, INC.
Consolidated Statements of Redeemable Convertible Noncontrolling Interests and Stockholders' Equity
(in thousands, except shares and per share amounts)

	Redeemable Convertible Noncontrolling Interests	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total BridgeBio Stockholders' Equity	Noncontro-lling Interests	Total Stockholders' Equity
		Shares	Amount	Shares	Amount						
Balances as of December 31, 2017	$ 833	51,314,794	$ 51	—	$ —	$ 134,495	$ —	$ (48,695)	$ 85,851	$ 2,498	$ 88,349
Issuance of shares under equity compensation plans	—	1,827,623	2	—	—	—	—	—	2	—	2
Stock-based compensation	—	—	—	—	—	3,181	—	—	3,181	—	3,181
Issuance of common stock at $4.29 per share, net of issuance costs of $0	—	8,455,861	8	—	0	36,291	—	—	36,299	—	36,299
Issuance of common stock at $9.82 per share, net of issuance costs of $541	—	30,459,426	31	—	0	298,668	—	—	298,699	—	298,699
Issuance (repurchase) of noncontrolling interest	62,363	—	—	—	—	—	—	—	—	55,245	55,245
Transfers from (to) noncontrolling interest	(51,698)	—	—	—	—	21,596	—	—	21,596	30,102	51,698
Deconsolidation of PellePharm	1,154	—	—	—	—	—	—	—	—	688	688
Net loss	(12,530)	—	—	—	—	—	—	(130,749)	(130,749)	(26,172)	(156,921)
Balances as of December 31, 2018	122	92,057,704	92	—	—	494,231	—	(179,444)	314,879	62,361	377,240
Issuance of shares under equity compensation plans	—	7,961,866	8	—	—	—	—	—	8	—	8
Stock-based compensation	—	—	—	—	—	15,198	—	—	15,198	—	15,198
Repayment of nonrecourse notes	—	—	—	—	—	179	—	—	179	—	179
Issuance of common stock at $17.00 per share in connection with the initial public offering, net of underwriter discounts and issuance costs of $34,538	—	23,575,000	24	—	—	366,213	—	—	366,237	—	366,237
Issuance of common stock under employee stock purchase plan ("ESPP")	—	63,717	—	—	—	921	—	—	921	—	921
Unrealized gains on available-for-sale securities	—	—	—	—	—	—	254	—	254	—	254
Issuance (repurchase) of noncontrolling interest	3,196	—	—	—	—	—	—	—	—	1,206	1,206
Transfers from (to) noncontrolling interest	1,803	—	—	—	—	(28,635)	—	—	(28,635)	26,832	(1,803)
Net loss	(2,878)	—	—	—	—	—	—	(260,587)	(260,587)	(25,120)	(285,707)
Balances as of December 31, 2019	2,243	123,658,287	124	—	—	848,107	254	(440,031)	408,454	65,279	473,733
Issuance of shares under equity compensation plans	—	919,502	—	—	—	3,711	—	—	3,711	—	3,711
Issuance of shares under the 2020 Stock and Equity Award Exchange Program	—	655,719	1	—	—	1,673	—	—	1,674	(1,674)	—
Stock-based compensation	—	—	—	—	—	36,530	—	—	36,530	—	36,530
Equity component of 2027 Notes, net of issuance costs and deferred tax liability	—	—	—	—	—	168,078	—	—	168,078	—	168,078
Purchase of capped calls	—	—	—	—	—	(49,280)	—	—	(49,280)	—	(49,280)
Repurchase of common stock	—	(2,414,681)	—	2,414,681	(75,000)	—	—	—	(75,000)	—	(75,000)
Issuance of common stock under ESPP	—	49,696	—	—	—	1,205	—	—	1,205	—	1,205
Repurchase of common stock to satisfy tax withholding	—	(19,134)	—	—	—	(714)	—	—	(714)	—	(714)
Unrealized loss on available-for-sale securities	—	—	—	—	—	—	(62)	—	(62)	—	(62)
Issuance (repurchase) of noncontrolling interest	2,102	—	—	—	—	—	—	—	—	50,828	50,828
Transfers from (to) noncontrolling interest	1,843	—	—	—	—	12,034	—	—	12,034	(13,877)	(1,843)
Net loss	(4,558)	—	—	—	—	—	—	(448,724)	(448,724)	(52,206)	(500,930)
Balances as of December 31, 2020	$ 1,630	122,849,389	$ 125	2,414,681	$ (75,000)	$ 1,021,344	$ 192	$ (888,755)	$ 57,906	$ 48,350	$ 106,256

The accompanying notes are an integral part of these consolidated financial statements.

BRIDGEBIO PHARMA, INC.

Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
Operating activities:	**2020**	**2019**	**2018**
Net loss	$ (505,488)	$ (288,585)	$ (169,451)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation	58,459	21,374	6,067
Amortization of operating lease right-of-use assets	3,088	—	—
Gain on deconsolidation of PellePharm	—	—	(19,327)
Share in net loss of equity method investments	—	20,869	275
Change in fair value of LianBio Warrants	(3,338)	—	—
Fair value of equity method investment	—	(3,819)	—
Fair value of shares issued under license agreements	6,014	220	190
Accretion of 2027 Notes and term loans	17,737	1,509	783
Acquired in-process research and development assets	4,727	3,560	17,922
LEO call option expense	1,472	1,069	3,009
Change in fair value of Eidos financial instruments	—	—	1,146
Other noncash adjustments	2,681	1,131	252
Changes in operating assets and liabilities:			
Receivable from a related party	2,845	(2,845)	—
Prepaid expenses and other current assets	(7,059)	(10,647)	(6,100)
Other assets	(2,146)	(16,929)	(843)
Accounts payable	(735)	(4,657)	16,700
Accrued compensation and benefits	8,589	9,270	3,396
Accrued research and development liabilities	6,170	11,981	5,785
Accrued professional services	2,407	1,450	454
Operating lease liabilities	(3,472)	—	—
Other accrued and other liabilities	8,335	1,462	3,099
Net cash used in operating activities	(399,714)	(253,587)	(136,643)
Investing activities			
Purchases of marketable securities	(287,852)	(212,899)	—
Maturities of marketable securities	249,137	—	—
Payments of merger transaction costs	(6,907)	—	—
Decrease in cash and cash equivalents resulting from deconsolidation of PellePharm	—	—	(2,858)
Cash paid for in-process research and development assets acquired	—	(2,500)	(16,000)
Cash and cash equivalents acquired in ML Bio asset acquisition	—	784	—
Proceeds from disposal of property and equipment	147	—	—
Purchases of property and equipment	(7,518)	(2,638)	(2,178)
Net cash used in investing activities	(52,993)	(217,253)	(21,036)
Financing activities			
Proceeds from issuance of common stock in connection with the initial public offering of BridgeBio in 2019 and Eidos in 2018, net of underwriting discounts and commissions	—	366,237	95,536
Proceeds from issuance of 2027 Notes	550,000	—	—
Issuance costs and discounts associated with issuance of 2027 Notes	(13,039)	—	—
Purchase of capped calls	(49,280)	—	—
Repurchase of common stock	(75,000)	—	—
Proceeds from issuance of noncontrolling interest to Alexion	—	23,309	—
Proceeds from issuance of promissory notes	—	—	1,000
Proceeds from repayment of nonrecourse notes	—	179	—
Proceeds from term loans, net of issuance costs	—	36,939	56,438
Proceeds from at-the-market issuance of noncontrolling interest by Eidos	24,094	23,927	—
Proceeds from the issuance of redeemable convertible preferred units, net of issuance costs	—	—	334,998
Proceeds from issuance of redeemable convertible noncontrolling interests to third-party investors	2,000	1,500	58,430
Proceeds from repayment of the loans received by noncontrolling interest shareholder	—	—	37
MyoKardia distributions	—	(997)	—
Repurchase of noncontrolling interest	(5,000)	(55,011)	(44,234)
Repayment of term loans	—	—	(1,097)
Proceeds from BridgeBio common stock issuances under ESPP	1,205	921	—
Repurchase of shares to satisfy tax withholding	(714)	—	—
Proceeds from stock option exercises, net of repurchases	12,923	1,788	440
Net cash provided by financing activities	447,189	398,792	501,548
Net (decrease) increase in cash, cash equivalents and restricted cash	(5,518)	(72,048)	343,869
Cash, cash equivalents and restricted cash at beginning of period	364,197	436,245	92,376
Cash, cash equivalents and restricted cash at end of period	$ 358,679	$ 364,197	$ 436,245
Supplemental Disclosures of Cash Flow Information:			
Cash paid for interest	$ 15,322	$ 6,092	$ 1,574
Supplemental Disclosures of Non-Cash Investing and Financing Information:			
Deferred merger transaction costs included in accounts payable and accrued professional services	$ 1,842	$ —	$ —
Tenant improvement paid by landlord	$ —	$ 2,097	$ —
Transfers (from) to noncontrolling interest (Note 6)	$ 12,034	$ (28,635)	$ 21,596
Recognition of property and equipment previously classified in other assets	$ 10,000	$ —	$ —
Non-cash contribution by a noncontrolling interest	$ 4,727	$ —	$ —
Unpaid property and equipment	$ 1,101	$ —	$ —
Build-to-suit funding liability accrual (Note 13)	$ —	$ 8,000	$ —
Fair value of success fee derivative at issuance of Eidos Term Loan	$ —	$ 1,148	$ —
Conversion of redeemable noncontrolling interest into noncontrolling interest	$ —	$ —	$ 12,252
Conversion of promissory note into redeemable convertible noncontrolling interest	$ —	$ —	$ 1,005
Fair value of redeemable convertible noncontrolling interest issued for acquired in-process research and development assets	$ —	$ —	$ 1,922

The accompanying notes are an integral part of these consolidated financial statements.

1. Organization and Description of Business

BridgeBio Pharma, Inc. ("BridgeBio") was established to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. BridgeBio's pipeline of programs spans early discovery to late-stage development.

On July 1, 2019, BridgeBio completed the 2019 Reorganization, whereby all unitholders of BridgeBio Pharma LLC ("BBP LLC") exchanged their units for shares of common stock of BridgeBio, and BBP LLC became a wholly-owned subsidiary of BridgeBio, and closed the Initial Public Offering ("IPO") of its common stock. Since inception, BridgeBio has either created wholly-owned subsidiaries or has made investments in certain controlled entities, including partially-owned subsidiaries for which BridgeBio has a majority voting interest, and variable interest entities ("VIEs") for which BridgeBio is the primary beneficiary (collectively, "we", "our", "us"). Our consolidated financial statements include the accounts of our majority-owned subsidiary, Eidos Therapeutics, Inc. ("Eidos"), which completed an IPO in June 2018 and became our wholly-owned subsidiary in January 2021. BridgeBio is headquartered in Palo Alto, California.

The results of operations and cash flows prior to the IPO closing on July 1, 2019 relate to BBP LLC, its subsidiaries and controlled entities. Subsequent to the IPO closing, the information relates to BridgeBio, its subsidiaries and controlled entities. All share and per share amounts in these consolidated financial statements and related notes have been retroactively adjusted, where applicable, for the comparable periods presented to give effect to the exchange ratio applied in connection with the 2019 Reorganization.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements include the accounts of BridgeBio Pharma, Inc., its wholly-owned subsidiaries and controlled entities, all of which are denominated in U.S. dollars. All intercompany balances and transactions have been eliminated in consolidation. For consolidated entities where we own or are exposed to less than 100% of the economics, we record net loss attributable to noncontrolling interests in our consolidated statements of operations equal to the percentage of the economic or ownership interests retained in such entities by the respective noncontrolling parties.

In determining whether an entity is considered a controlled entity, we applied the VIE and Voting Interest Entity ("VOE") models. We assess whether we are the primary beneficiary of a VIE based on our power to direct the activities of the VIE that most significantly impact the VIE's economic performance and our obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. Entities that do not qualify as a VIE are assessed for consolidation under the VOE model. Under the VOE model, BridgeBio consolidates the entity if it determines that it has a controlling financial interest in the entity through its ownership of greater than 50% of the outstanding voting shares of the entity and that other equity holders do not have substantive voting, participating or liquidation rights. We assess whether we are the primary beneficiary of a VIE or whether we have a majority voting interest for entities consolidated under the VOE model at the inception of the arrangement and at each reporting date. Refer to Note 5.

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of our financial position, our results of operations and comprehensive loss, and our cash flows for the periods presented. The results of operations for the years ended December 31, 2020, 2019 and 2018 are not necessarily indicative of the results to be expected for the year ending December 31, 2021 or for any other future annual or interim period.

Presentation Reclassifications

Certain reclassifications have been made to the consolidated balance sheet as of December 31, 2019. These reclassifications had no effect on net loss or cash flows as previously reported.

Variable Interest Entities and Voting Interest Entities

BridgeBio consolidates those entities in which it has a direct or indirect controlling financial interest based on either the VIE model or the VOE model.

VIEs are entities that, by design, either (i) lack sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties; or (ii) have equity investors that do not have the ability to make significant decisions relating to the entity's operations through voting rights, or do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity.

The primary beneficiary of a VIE is required to consolidate the assets and liabilities of the VIE. The primary beneficiary is the party that has both (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance; and (ii) the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE through its interest in the VIE.

To assess whether BridgeBio has the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, BridgeBio considers all the facts and circumstances, including its role in establishing the VIE and its ongoing rights and responsibilities. This assessment includes identifying the activities that most significantly impact the VIE's economic performance and identifying which party, if any, has power over those activities. In general, the parties that make the most significant decisions affecting the VIE (management and representation on the Board of Directors) and have the right to unilaterally remove those decision-makers are deemed to have the power to direct the activities of a VIE.

To assess whether BridgeBio has the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE, BridgeBio considers all of its economic interests, which primarily include equity investments in preferred and common stock and issuance of notes that are convertible into preferred stock, that are deemed to be variable interests in the VIE. This assessment requires BridgeBio to apply judgment in determining whether these interests, in the aggregate, are considered potentially significant to the VIE. Factors considered in assessing the significance include: the design of the VIE, including its capitalization structure; subordination of interests; payment priority; relative share of interests held across various classes within the VIE's capital structure; and the reasons why the interests are held by BridgeBio.

At the VIE's inception, BridgeBio determines whether it is the primary beneficiary and if the VIE should be consolidated based on the facts and circumstances. We have determined that the consolidated VIEs, in which BridgeBio is the primary beneficiary, individually meets the definition of a business. There are no significant restrictions on the assets and liabilities of BridgeBio's consolidated VIEs. BridgeBio then performs on-going reassessments of the VIE based on reconsideration events and reevaluates whether a change to the consolidation and disclosure conclusions are required each reporting period.

Entities that do not qualify as a VIE are assessed for consolidation under the VOE model. Under the VOE model, BridgeBio consolidates the entity if it determines that it, directly or indirectly, has greater than 50% of the voting shares and that other equity holders do not have substantive voting, participating or liquidation rights. Refer to Note 5.

Equity Method and Other Investments in Equity Method Investees

We utilize the equity method to account for investments when we possess the ability to exercise significant influence, but not control, over the operating and financial decisions of the investee. Generally, the ability to exercise significant influence is presumed when the investor possesses more than 20% of the voting interests of the investee. This presumption may be overcome based on specific facts and circumstances that demonstrate that the ability to exercise significant influence is restricted. We apply the equity method to investments in common stock and to other investments in entities that have risk and reward characteristics that are substantially similar to an investment in the investee's common stock.

In applying the equity method, we record the investment at cost unless the initial recognition is the result of the deconsolidation of a subsidiary, in which case it is recorded at fair value. We subsequently increase or decrease the carrying amount of the investment by our proportionate share of the net earnings or losses and other comprehensive income of the investee based on our percentage of common stock ownership during the respective reporting period. Payments to investees such as additional investments, loans and expenses incurred on behalf of investees, as well as payments from investees such as dividends, distributions and repayments of loans are recorded as adjustments to the carrying value of the investment. In the event that net losses of the investee reduce the carrying amount to zero, additional net losses may be recorded if we have other investment in the investee not accounted for under the equity method, have guaranteed obligations of the investee, or we are otherwise committed to provide further financial support for the investee.

We account for investments at fair value when we do not have significant influence over the investee. In the absence of readily available fair value, we measure the investment at cost less impairment plus or minus observable price changes, if any. We recognize income for any dividends declared from the distribution of the investee's earnings.

As of December 31, 2020 and 2019, we have an equity method and equity security investments in PellePharm. The equity security investments in PellePharm are without a readily determinable fair value and are carried at cost less impairment plus or minus observable price changes. Refer to Note 7 for further discussion on the PellePharm investment. We have an equity method investment in LianBio for ordinary shares representing 6% and 10% of LianBio's fully-diluted equity as of December 31, 2020 and 2019, respectively (see Note 7).

Under the equity method of accounting, our investments are reviewed for indicators of impairment at each reporting period and are written down to fair value if there is evidence of a loss in value that is other-than-temporary. Factors that may be indicative of an impairment include a series of operating losses of an investee, the absence of an ability to recover the carrying amount of the investment, the inability of the investee to sustain an earnings capacity and a current fair value of an investment that is less than its carrying amount. Indicators that a decline in value may be other-than-temporary include the length of time and the extent to which the estimated fair value or market value has been below the carrying value, the financial condition and the near-term prospects of the investee, the intent and our ability to retain our investment in the investee for a period of time sufficient to allow for any anticipated recovery in market value and general market conditions. The estimation of fair value and whether an other-than-temporary impairment has occurred requires the application of significant judgment and future results may vary from current assumptions. No impairment charge was recognized during the years ended December 31, 2020, 2019 and 2018 related to our equity method investments.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that subject us to significant concentrations of credit risk consist primarily of cash, cash equivalents and restricted cash. Our cash, cash equivalents and restricted cash are held in financial institutions in the United States. Amounts on deposit may at times exceed federally insured limits. Management believes that the financial institutions are financially sound and, accordingly, minimal credit risk exists with respect to the financial institutions.

We are subject to certain risks and uncertainties and we believe that changes in any of the following areas could have a material adverse effect on future financial position or results of operations: ability to obtain future financing; regulatory approval and market acceptance of, and reimbursement for, product candidates; performance of third-party contract research organizations and manufacturers upon which we rely; development of sales channels; protection of our intellectual property; litigation or claims against us based on intellectual property, patent, product, regulatory or other factors; and our ability to attract and retain employees necessary to support our growth.

We are dependent on third-party manufacturers to supply products for research and development activities in our programs. In particular, we rely and expects to continue to rely on a small number of manufacturers to supply us with our requirements for the active pharmaceutical ingredients and formulated drugs related to these programs. These programs could be adversely affected by a significant interruption in the supply of active pharmaceutical ingredients and formulated drugs.

In light of recent developments relating to the coronavirus ("COVID-19") global pandemic, the focus of healthcare providers and hospitals on fighting the virus, and consistent with the U.S. Food and Drug Administration's updated industry guidance for conducting clinical trials issued on March 18, 2020, we have experienced delays in or temporary suspension of the enrollment of patients in our subsidiaries' ongoing clinical trials. We additionally may experience delays in certain ongoing key program activities, including commencement of planned clinical trials, as well as non-clinical experiments and investigational new drug application-enabling good laboratory practice toxicology studies. The exact timing of delays and their overall impact on our business are currently unknown, and we are monitoring the COVID-19 outbreak as it continues to rapidly evolve. We are continuing to actively monitor the situation and may take further precautionary and preemptive actions as may be required by federal, state or local authorities or that we determine are in the best interests of public health and safety and that of our patient community, employees, partners, suppliers and stockholders. We cannot predict the effects that such actions, or the impact of COVID-19 on global business operations and economic conditions, may have on our business or strategy, including the effects on our ongoing and planned clinical development activities and prospects, or on our financial and operating results.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported amounts of expenses during the reporting period. Significant estimates and assumptions made in the accompanying consolidated financial statements include, but are not limited to, fair value of the liability component of our 2.50% convertible senior notes due 2027 (the "2027 Notes", see Note 10), the fair value of the LEO call option liability (see Note 7), the fair value of the LianBio Warrants (see Note 11), the fair value of Eidos' derivative liability (see Note 10), the present value of lease payments of our leases on the respective lease commencement dates, the valuation of our stock-based awards, accounting for stock-based award modifications, accruals for performance-based milestone compensation arrangements, accruals for research and development activities and accruals for contingent intellectual property, clinical, regulatory and sales milestones payments in our in-licensing agreements. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable. Actual results may differ from those estimates or assumptions.

Restricted Cash

Under certain lease agreements and letters of credit, we have pledged cash and cash equivalents as collateral. As of December 31, 2020 and 2019, restricted cash related to such agreements was $2.6 million and $0.4 million, respectively.

Cash, Cash Equivalents and Investments

We consider all highly liquid investments purchased with original maturities of 90 days or less from the purchase date to be cash equivalents. Cash equivalents consist primarily of amounts invested in money market instruments, such as money market funds and repurchase agreements collateralized with securities issued by the U.S. government or its agencies.

We invest in marketable securities, primarily corporate notes, government, government agency, and municipal bonds. We classify our marketable securities as available-for-sale securities and report them at fair value in cash equivalents or marketable securities on the consolidated balance sheets with related unrealized gains and losses included as a component of shareholders' equity. We classify our marketable securities as either short-term or long-term based on each instrument's underlying contractual maturity date. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the consolidated statements of operations. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income.

Our cash, cash equivalents, investments are exposed to credit risk in the event of default by the third parties that hold or issue such assets. Our cash, cash equivalents, investments are held by financial institutions that management believes are of high credit quality. Our investment policy limits investments to fixed income securities denominated and payable in U.S. dollars such as corporate bonds, corporate commercial paper, U.S. government obligations, and money market funds and places restrictions on maturities and concentrations by type and issuer.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets that sum to the total of the amounts shown in the consolidated statements of cash flows:

	December 31,		
	2020	2019	2018
	(in thousands)		
Cash and cash equivalents	$ 356,082	$ 363,773	$ 436,086
Restricted cash — Included in "Prepaid expenses and other current assets"	139	—	—
Restricted cash — Included in "Other assets"	2,458	424	159
Total cash, cash equivalents and restricted cash shown in the consolidated statements of cash flows	$ 358,679	$ 364,197	$ 436,245

Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active; and

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment we exercise in determining fair value is greatest for instruments categorized in Level 3. A financial instrument’s level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The carrying amounts reflected in the accompanying consolidated balance sheets for cash and cash equivalents, restricted cash, prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values, due to their short-term nature.

Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation and amortization of property and equipment are calculated using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repairs that do not improve or extend the life of the assets are expensed when incurred. Upon sale or retirement of assets, the cost and accumulated depreciation and amortization are removed from the consolidated balance sheet and any resulting gain or loss is reflected in the consolidated statement of operations in the period realized.

The estimated useful lives of our property and equipment are as follows:

Furniture and office equipment	3 - 5 years
Laboratory and machinery equipment	3 - 15 years
Leasehold improvements	Shorter of remaining lease term or estimated useful life of the related asset

Depreciation and amortization expense were not material during the periods presented.

Leases

Our lease portfolio includes leases for our headquarters, office spaces and laboratory facility. We determine if an arrangement is a lease at the inception of the contract. The asset component of our operating leases is recorded as “Operating lease right-of-use assets”, and the liability component is recorded as “Operating lease liabilities, current portion” and “Operating lease liabilities, net of current portion” in our consolidated balance sheet. The asset component of our finance leases are included in “Property and equipment, net”; and current and noncurrent finance lease liabilities are presented as part of “Other accrued liabilities” and “Other liabilities”, respectively, in our consolidated balance sheet. Assets under finance leases are depreciated in a manner similar to other property and equipment.

Right-of-use assets and lease liabilities are recognized based on the present value of lease payments over the lease term at the lease commencement date. The present value of lease payments is determined by using the interest rate implicit in the lease, if that rate is readily determinable; otherwise, we use an incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments. Right-of-use assets are adjusted for incentives expected to be received. On the lease commencement date, we estimate and include in our lease payments any lease incentive amounts based on future events when (1) the events are within our control and (2) the event triggering the right to receive the incentive is deemed reasonably certain to occur. If the lease incentive received is greater or less than the amount recognized at lease commencement, we recognize the difference as an adjustment to right-of-use asset and/or lease liability, as applicable.

Right-of-use assets and lease liabilities are remeasured upon certain modifications to leases using the present value of remaining lease payments and estimated incremental borrowing rate upon lease modification. Operating lease cost is recognized on a straight-line basis over the lease term, and includes amounts related to short-term leases. For finance leases, we record interest expense on the lease liability in addition to amortizing the right-of-use asset, which is generally straight-line, over the shorter of the lease term or the useful life of the right-of-use asset. We recognize variable lease payments as operating expenses in the period in which the obligation for those payments is incurred. Variable lease payments primarily include common area maintenance, utilities, real estate taxes, insurance, and other operating costs that are passed on from the lessor in proportion to the space we lease.

Asset Acquisitions

We measure and recognize asset acquisitions that are not deemed to be business combinations based on the cost to acquire the assets, which includes transaction costs. Goodwill is not recognized in asset acquisitions. In an asset acquisition, the cost allocated to acquire in-process research and development (“IPR&D”) with no alternative future use is charged to research and development expense at the acquisition date.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount of an asset group to the future net undiscounted cash flows that the assets are expected to generate. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset group exceeds the fair value of the asset group. There was no impairment of long-lived assets for any of the periods presented.

Segments

We determined that we are a single operating and reportable segment, which is the business of identifying and advancing transformative medicines to treat patients. We operate in one segment because our business offerings have similar economics and other characteristics, including the nature of products and manufacturing processes, types of customers, distribution methods and regulatory environment. We are comprehensively managed as one business segment by the Chief Operating Decision Maker, which is our Chief Executive Officer. Substantially all of our capitalized property and equipment is located in the United States. Revenue from license and collaborative arrangements are attributed to regions based on the headquarters of the partner. For the year ended December 31, 2020, approximately 97% of our revenue is from LianBio with headquarters located in Shanghai, China. For the year ended December 31, 2019, approximately 66% of our revenue is from Alexion Pharmaceuticals with headquarters located in the United States and 34% with LianBio. We had no revenues for the year ended December 31, 2018.

Capped Call Transactions

In March 2020, in connection with the issuance of the 2027 Notes (see Note 10), BridgeBio entered into certain capped call transactions (the "Capped Call Transactions"). The Capped Call Transactions are expected generally to reduce the potential dilution to the holders of BridgeBio's common stock upon any conversion of the 2027 Notes and/or offset any cash payments BridgeBio is required to make in excess of the principal amount of converted 2027 Notes, with such reduction and/or offset subject to a cap based on the cap price (see Note 10). The capped calls meet the conditions outlined in Accounting Standards Codification ("ASC") 815-40, *Derivatives and Hedging*, to be classified in stockholders' equity as a reduction to additional paid-in capital and are not subsequently remeasured as long as the conditions for equity classification continue to be met.

Debt Issuance Costs

Debt issuance costs are amortized to interest expense over the estimated life of the related debt based on the effective interest method. In accordance with ASC 835, *Interest*, we present debt issuance costs on the consolidated balance sheets as a direct deduction from the associated debt. A portion of debt issuance costs incurred in connection with the 2027 Notes issued in March 2020 was deemed to relate to the equity component and was recorded as a reduction to additional paid in capital and is not amortized to interest expense over the estimated life of the related debt. The 2027 Notes are more fully described in Note 10.

Treasury Stock

Repurchased treasury stock is recorded at cost, including any commissions and fees.

License Arrangements and Multiple-Element Arrangements

Revenue from non-refundable, up-front license or technology access payments under license arrangements that are not dependent on any future performance by us is recognized when such amounts are earned. If we have continuing obligations to perform under the arrangement, such fees are recognized over the estimated period of continuing performance obligation.

When we enter into license agreements, we assess whether the arrangements fall within the scope of ASC 808, *Collaborative Arrangements* (ASC 808) based on whether the arrangements 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, we assess whether the payments between us and our partner fall within the scope of other accounting literature. If we conclude that payments from the partner to us represent consideration from a customer, such as license fees and contract research and development activities, we account for those payments within the scope of ASC 606, Revenue from Contracts with Customers. However, if we conclude that our partner is not a customer for certain activities and associated payments, such as for certain collaborative research, development, manufacturing and commercial activities, we present such payments as a reduction of research and development expense or general and administrative expense, based on where we present the underlying expense.

Revenue Recognition

For elements of those arrangements that we determine should be accounted for under ASC 606, 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 our performance obligation. We 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 transfers to the customer.

At inception of the arrangement, once it is determined to be within the scope of ASC 606, we assess the goods or services promised within each contract and then identify the performance obligations and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation, on a relative standalone selling price basis, when (or as) the performance obligation is satisfied. As part of the accounting for these arrangements, we develop assumptions that require judgment to determine the standalone selling price for each performance obligation identified in the contract. These key assumptions may include forecasted revenue or costs, development timelines, discount rates and probabilities of clinical and regulatory success.

License Fees: For arrangements that include a grant of a license to our intellectual property, we consider whether the license grant is distinct from the other performance obligations included in the arrangement. Generally, we would conclude that the license is distinct if the customer is able to benefit from the license with the resources available to it. For licenses that are distinct, we recognize revenues from nonrefundable, upfront license fees and other consideration allocated to the license when the license term has begun and we have provided all necessary information regarding the underlying intellectual property to the customer, which generally occurs at or near the inception of the arrangement. For licenses that are bundled with other promises, we determine whether the combined performance obligation is satisfied over time or at a point in time. If the combined performance obligation is satisfied over time, we use judgment in determining the appropriate method of measuring progress for purposes of recognizing revenue from the up-front license fees. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Development and Regulatory Milestone Payments: At the inception of each arrangement that includes development and regulatory milestone payments, we evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method. We include these milestone payments when they are achieved because there is considerable uncertainty in the research and development processes that trigger these payments under our agreements. Similarly, we include approval milestone payments in the transaction price once the product is approved by the applicable regulatory agency. At the end of each subsequent reporting period, we re-evaluate the probability of achieving such development and regulatory milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis.

Sales-based Milestone Payments and Royalties: For arrangements that include sales-based royalties, including milestone payments based on the volume of sales, we will determine whether the license is deemed to be the predominant item to which the royalties or sales-based milestones relate and if such is the case, we 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).

Product supply services: Arrangements that include a promise for the future supply of drug product for either clinical development or commercial supply at the licensee's discretion are generally considered as options. We will assess if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations and recognized when the future goods or services related to the option are provided or the option expires.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist of salaries, benefits and other personnel related costs including stock-based compensation expense, laboratory supplies, preclinical studies, clinical trials and related clinical manufacturing costs, costs related to manufacturing

preparations, fees paid to other entities to conduct certain research and development activities on our behalf and allocated facility and other related costs. Non-refundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses until the related goods are delivered or services are performed.

Accrued Research and Development Liabilities

We record accruals for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and include these costs in accrued research and development liabilities in the consolidated balance sheet and within research and development expense in the consolidated statements of operations. These costs are a significant component of our research and development expenses.

Examples of estimated research and development expenses that we accrue include:

- fees paid to CROs in connection with preclinical and toxicology studies and clinical trials;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to CMOs in connection with the production of product and clinical trial materials; and
- professional service fees for consulting and related services.

We base our expense accruals related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on our behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors, such as the successful enrollment of patients and the completion of clinical trial milestones. Our service providers generally invoice us monthly in arrears for services performed. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. We record advance payments to service providers as prepaid assets.

We record accruals for the estimated costs of our contract manufacturing activities performed by third parties. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts include upfront payments and milestone payments, which depend on factors such as the achievement of the completion of certain stages of the manufacturing process. For purposes of recognizing expense, we assess whether we consider the production process sufficiently defined to be considered the delivery of a good or the delivery of a service, where processes and yields are developing and less certain. If we consider the process to be the delivery of a good, we recognize expense when the drug product is delivered, or we otherwise bear risk of loss. If we consider the process to be the delivery of a service, we recognize expense based on our best estimates of the contract manufacturer's progress towards completion of the stages in the contract. We base our estimates on the best information available at the time. However, additional information may become available to us which may allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain. Any increases or decreases in cost are generally considered to be changes in estimates and will be reflected in research and development expenses in the period identified.

Stock-Based Compensation

Stock-based compensation arrangements include stock option grants, restricted stock awards ("RSA") and restricted stock units ("RSU") awards under our equity incentive plans, as well as shares issued under our Employee Stock Purchase Plan ("ESPP"), through which employees may purchase our common stock at a discount to the market price.

We use the Black-Scholes-Merton option pricing model to estimate the fair value of options granted under our equity incentive plans and rights to acquire shares granted under our ESPP. The Black-Scholes-Merton option valuation model requires the use of assumptions, including the expected term of the award and the expected share price volatility. We use the "simplified" method to estimate the expected option term.

Stock-based compensation is measured at the grant date for all stock-based awards made to employees and non-employees based on the fair value of the awards. Compensation expense for purchases under the ESPP is recognized based on the fair value of the award on the date of offering. Stock-based compensation is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period.

The estimated fair value of equity awards that contain performance conditions is expensed using an accelerated method over the term of the award once we have determined that it is probable that performance milestones will be achieved. Compensation expense for equity-classified awards that contain performance conditions is measured based on the grant date fair value of the award. Compensation expense for liability-classified awards that contain performance conditions is initially measured based on the grant date fair value of the award and is remeasured at fair value at each reporting date until the date of settlement. Compensation expense is recorded over the requisite service period based on management's best estimate as to whether it is probable that the shares awarded are expected to vest. We assess the probability of the performance milestones being met on a continuous basis. The grant date fair value of awards with a market condition is determined using a Monte Carlo valuation model and the compensation expense is recognized over the implied service period.

We have elected to recognize the actual forfeitures by reducing the stock-based compensation in the same period as the forfeitures occur.

BBP LLC had granted Management Incentive Units and Common Units to employees and non-employees. These awards generally had only a service condition and vest over a period of up to five years. The awards had accelerated vesting upon a fundamental transaction (a "Fundamental Transaction") which is defined as (i) a merger, recapitalization or other business combination, (ii) a sale, transfer, exclusive license or disposition of BBP LLC or (iii) a final liquidation, dissolution, winding-up or termination of BBP LLC. The unvested outstanding management incentive units and common units of BBP LLC were exchanged for shares of BridgeBio's unvested restricted stock, subject to the same time-based vesting conditions as the original management incentive units and common units terms and conditions (see Note 14).

Stock-based compensation is recorded in research and development expense, and general and administrative expense based on the function of the applicable employee and non-employee.

Accrued Milestone Compensation Arrangements

We have performance-based milestone compensation arrangements with certain employees and consultants, whose vesting is contingent upon meeting various regulatory and development milestones, with fixed monetary amounts known at inception that can be settled in the form of (1) cash, (2) equity of BridgeBio, or (3) cash or equity of BridgeBio at our sole election, upon achievement of each contingent milestone. For arrangements that involve settlement by cash or equity of BridgeBio at our sole election, we will classify the milestone compensation arrangements as liability-classified awards when it is probable of achievement because of the possible fixed monetary amounts settlement outcomes. The arrangements would also result in settlement with a variable number of shares based on the then-current stock price at achievement date of each contingent milestone should we elect to settle in equity.

We record accruals for the compensation expense arising from each development milestone when the specific contingent development milestone is probable of achievement and such accruals are measured at each reporting period. We estimate the probability of achieving such milestones based on the progression and expected outcome of the related clinical programs. We base our estimates on the best available information at that time. However, additional information may become available to us which may allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to milestone compensation expenses in future periods. Any increases or decreases in such expenses are generally considered to be changes in estimates and will be reflected in the period identified.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax base and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are determined based upon the difference between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

For U.S. federal income tax purposes, we are required to file a consolidated U.S. federal income tax return for the consolidated entities which meet the requirements as prescribed by the consolidated regulations. Those entities that do not meet the threshold to be included in the consolidated filing continue to file separate U.S. federal income tax returns. We are required to assess stand-alone valuation allowances separately in each entity even though we consolidate their financial results in the consolidated financial statements. We continue to file combined state tax returns in most jurisdictions. As a result, we continue to assess the state portion of valuation allowance for those jurisdictions on a consolidated basis.

We evaluate our deferred tax assets regularly to determine whether adjustments to the valuation allowance are appropriate due to changes in facts or circumstances, such as changes in expected future pre-tax earnings, tax law, interactions with taxing authorities and developments in case law. In making this evaluation, we rely on our recent history of pre-tax earnings. Our material assumptions are our forecasts of future pre-tax earnings and the nature and timing of future deductions and income represented by the deferred tax assets and liabilities, all of which involve the exercise of significant judgment. Although we believe our estimates are reasonable, we are required to use significant judgment in determining the appropriate amount of valuation allowance recorded against deferred tax assets.

We recognize uncertain income tax positions at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. Changes in recognition or measurement are reflected in the period in which judgment occurs. Our policy is to recognize interest and penalties related to the underpayment of income taxes as a component of the provision for income taxes. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

LEO Call Option Liability

We have accounted for LEO Call Option as a current liability as we have the obligation to sell our PellePharm shares to LEO at a pre-determined price if the option is exercised. The LEO Call Option was recorded at fair value upon execution of the LEO Agreement. The LEO Call Option is subject to remeasurement to fair value at each balance sheet date until the LEO Call Option is either exercised or expires as it does not qualify for equity classification. Any change in the fair value of the LEO Call Option is recognized as a component of “Other income (expense), net” in the consolidated statements of operations. Refer to Notes 3 and 7 for further discussion.

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares of BridgeBio’s common stock outstanding for the period, without consideration for potential dilutive shares of common stock, such as such as stock options, unvested restricted stock units and awards and performance-based milestone compensation awards, shares issuable under the employee stock purchase plan and assumed conversion of our 2027 Notes. The common stock equivalents of performance-based milestone compensation arrangements are included as potentially dilutive shares only if the performance condition has been met as of the end of the reporting period. Shares of common stock subject to repurchase are excluded from the weighted-average shares. Since we were in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share since the effects of potentially dilutive securities are antidilutive.

No adjustment for cumulative returns on BBP LLC's redeemable convertible preferred units has been applied to the calculation of basic and diluted net loss per share, since such units were retroactively adjusted as if the Reorganization occurred at the beginning of the earliest period to be presented in our financial statements. See Note 14 to for additional details.

Emerging Growth Company (EGC) Status

We have ceased to be an EGC on December 31, 2020 because our aggregate worldwide market value of the voting and non-voting common equity held by non-affiliates as of June 30, 2020, our most recently completed second fiscal quarter, was greater than $700 million. Effective January 1, 2021, we will no longer be able to use the exemptions from certain reporting requirements available to EGCs.

Recently Adopted Accounting Pronouncements

ASU 2016-02 Leases (Topic 842). In February 2016, the FASB issued *ASU 2016-02, Leases (Topic 842) ("ASU 2016-02" or "ASC 842")*, which requires the lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The guidance also requires a lessee to recognize single lease costs under operating leases, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. In July 2018, the FASB issued *ASU 2018-10, Codification Improvements to Topic 842, Leases*. Additionally, the FASB issued *ASU 2018-11, Leases (Topic 842): Targeted Improvements*, which offers a practical expedient for transitioning at the adoption date. *ASU 2019-10, Financial Instruments — Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates*, issued in November 2019, delayed the effective date of Topic 842 for non-public business entities to January 1, 2021 but early adoption is still permitted.

Effective January 1, 2020, we adopted ASC 842 using the optional transition method and applied the standard only to leases that existed at that date. Under the optional transition method, we do not need to restate the comparative periods in transition and will continue to present financial information and disclosures for periods before January 1, 2020 in accordance with ASC 840. As part of the ASC 842 adoption, we elected certain practical expedients outlined in the guidance. We have also chosen to apply the package of practical expedients for existing leases, which provides relief from reassessing: (i) whether a contract is or contains a lease, (ii) lease classification, and (iii) whether initial direct costs can be capitalized. Upon transition, we also elected to use hindsight with respect to determining the lease term and in assessing any impairment of right-of-use assets for existing leases. We have also made some accounting policy elections for post-transition to: (i) account for leases at the portfolio level, where applicable, (ii) allow us not to separate nonlease components from lease components, and instead to account for those as a single lease component for the asset class of operating lease right-of-use real estate assets, and (iii) elect not to recognize a right-of-use asset and a lease liability for all of our leases with a term of 12 months or less ("short-term leases").

The adjustments due to the adoption of ASC 842 primarily related to the recognition of right-of-use assets of $9.2 million and lease liabilities of $11.5 million at January 1, 2020 for our operating leases. The lease liabilities were determined based on the present value of the remaining minimum lease payments. The right-of-use assets were determined based on the value of the lease liabilities, adjusted for the deferred rent balances of approximately $2.3 million. Upon adoption of ASC 842, we also (i) derecognized the build-to-suit lease asset of $10.0 million previously presented in other assets as of December 31, 2019, and recognized a construction-in-progress asset for the same amount, and (ii) derecognized the build-to-suit lease liability of $8.0 million as of December 31, 2019 and recognized a liability presented in other accrued liabilities (see Note 13). The adoption did not have a material impact on our accumulated deficit and on our consolidated statements of operations and cash flows.

ASU 2016-13 Financial Instruments - Credit Losses. In June 2016, the FASB issued *ASU 2016-13, Financial Instruments - Credit Losses.* This update requires immediate recognition of management's estimates of current expected credit losses. Under the prior model, losses were recognized only as they were incurred. The new model is applicable to most financial assets and certain other instruments that are not measured at fair value through net income. The standard is effective for fiscal years beginning after December 15, 2019 for public entities. Early adoption is permitted. The delay in effective date for certain entities of *ASU 2016-13* by the issuance of *ASU 2019-10* in November 2019 does not apply to filers with the SEC that are not smaller reporting companies. The adoption of this guidance did not materially impact our consolidated financial statements.

ASU 2018-13 Fair Value Measurement – Disclosure Framework (Topic 820). In August 2018, the FASB issued *ASU 2018-13, Fair Value Measurement - Disclosure Framework (Topic 820) ("ASU 2018-13").* The updated guidance improves the disclosure requirements on fair value measurements and is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The adoption of this guidance did not significantly impact our financial statement disclosures.

ASU 2018-15 – Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement. In August 2018, the FASB issued *ASU 2018-15 – Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement*. The guidance amends *ASC 350-40, Intangibles - Goodwill and Other - Internal-Use Software*. The ASU requires implementation costs incurred by customers in cloud computing arrangements to be deferred and recognized over the term of the arrangement, if these costs were capitalized by the customer in a software licensing arrangement. This guidance is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted. We adopted this guidance effective January 1, 2020. The adoption of this guidance did not materially impact our consolidated financial statements.

ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes. In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. We early adopted ASU 2019-12 effective January 1, 2020 and the adoption did not materially impact our financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

ASU 2020-01, Investments – Equity Securities (Topic 321), Investments – Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815) – Clarifying the Interactions between Topic 321, Topic 323, and Topic 815. In January 2020, the FASB issued *ASU 2020-01, Investments – Equity Securities (Topic 321), Investments – Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815) – Clarifying the Interactions between Topic 321, Topic 323, and Topic 81*5. The guidance is based on a consensus of the Emerging Issues Task Force and is expected to increase comparability in accounting for these transactions. ASU 2020-01 amends ASU 2016-01, which made targeted improvements to accounting for financial instruments, including providing an entity the ability to measure certain equity securities without a readily determinable fair value at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. Among other topics, the amendments in ASU 2020-01 clarify that an entity should consider observable transactions that require it to either apply or discontinue the equity method of accounting. For public business entities, the amendments in the ASU are effective for fiscal years beginning after December 31, 2020, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. Early adoption is permitted. We are currently assessing the impact of this update on our consolidated financial statements.

ASU 2020-06, Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. In August 2020, the FASB issued *ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*. The guidance simplifies the complexity associated with applying U.S. GAAP for certain financial instruments with characteristics of liabilities and equity. This ASU (1) simplifies the accounting for convertible debt instruments and convertible preferred stock by removing the existing guidance in ASC 470-20, *Debt: Debt with Conversion and Other Options*, that requires entities to account for beneficial conversion features and cash conversion features in equity, separately from the host convertible debt or preferred stock; (2) revises the scope exception from derivative accounting in ASC 815-40 for freestanding financial instruments and embedded features that are both indexed to the issuer's own stock and classified in stockholders' equity, by removing certain criteria required for equity classification; and (3) revises the guidance in ASC 260, *Earnings Per Share*, to require entities to calculate diluted earnings per share for convertible instruments by using the if-converted method. ASU 2020-06 is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier

than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Adoption is either a modified retrospective method or a fully retrospective method of transition. We plan to early adopt ASU 2020-06 effective January 1, 2021, specifically with respect to the accounting for our 2027 Notes. We are currently in the process of determining the effect that the adoption will have on our consolidated financial statements.

ASU 2020-10, Codification Improvements. In October 2020, the FASB issued *ASU 2020-10, Codification Improvements*. The guidance contains improvements to the Codification by ensuring that all guidance that requires or provides an option for an entity to provide information in the notes to financial statements is codified in the Disclosure Section of the Codification. The guidance also contains Codifications that are varied in nature and may affect the application of the guidance in cases in which the original guidance may have been unclear. For public business entities, the amendments in the ASU are effective for fiscal years beginning after December 15, 2020. For all other entities, the amendments are effective for annual periods beginning after December 15, 2021, and interim periods within annual periods beginning after December 15, 2022. Early adoption is permitted. We do not expect the adoption of ASU 2020-10 to have a material impact on our consolidated financial statements.

3. Fair Value Measurements

The following table presents information about our financial assets and liabilities that are measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation:

	December 31, 2020			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets				
Cash equivalents:				
Money market funds	$ 266,437	$ 266,437	$ —	$ —
Short-term marketable securities:				
U.S. treasury bills	14,999	—	14,999	—
U.S. treasury notes	45,391	—	45,391	—
Commercial paper	144,851	—	144,851	
Corporate debt securities	45,770	—	45,770	—
Total short-term marketable securities	251,011	—	251,011	—
LianBio Warrants	3,338	—	—	3,338
Total financial assets	$ 520,786	$ 266,437	$ 251,011	$ 3,338
Liabilities:				
LEO call option liability	$ 5,550	$ —	$ —	5,550
Embedded derivative	1,340	—	—	1,340
Total financial liabilities	$ 6,890	$ —	$ —	$ 6,890

	December 31, 2019			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets				
Cash equivalents:				
Money market funds	$ 248,736	$ 248,736	$ —	$ —
Repurchase agreements	59,000	59,000	—	—
Total cash equivalents	307,736	307,736	—	—
Short-term marketable securities:				
U.S. treasury notes	45,280	—	45,280	—
Commercial paper	65,626	—	65,626	—
Corporate debt securities	71,314	—	71,314	—
Total short-term marketable securities	182,220	—	182,220	—
Long-term marketable securities:				
U.S. treasury notes	15,307	—	15,307	—
Corporate debt securities	15,837	—	15,837	—
Total long-term marketable securities	31,144	—	31,144	—
Total cash equivalents and marketable securities	$ 521,100	$ 307,736	$ 213,364	$ —
Liabilities:				
LEO call option liability	$ 4,078	$ —	$ —	4,078
Embedded derivative	1,165	—	—	1,165
Total financial liabilities	$ 5,243	$ —	$ —	$ 5,243

There were no transfers between Level 1, Level 2 or Level 3 during the periods presented.

There are uncertainties on the fair value measurement of the instruments classified under Level 3 due to the use of unobservable inputs and interrelationships between these unobservable inputs, which could result in higher or lower fair value measurements.

Marketable Securities

The fair value of our marketable securities classified within Level 2 is based upon observable inputs that may include benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers and reference data including market research publications.

LEO Call Option Liability

The valuation of the LEO Call Option (see Note 7) contains unobservable inputs that reflect management's own assumptions for which there is little, if any, market activity at the measurement date. Accordingly, the LEO Call Option liability is remeasured to fair value on a recurring basis using unobservable inputs that are classified as Level 3 inputs.

We estimated the fair value of the LEO Call Option by estimating the fair value of various clinical, regulatory, and sales milestones based on the estimated risk and probability of achievement of each milestone, and allocated the value using a Black-Scholes option pricing model with the following assumptions:

	December 31,	
	2020	2019
Probability of milestone achievement	12.0%-84.0%	12.0%-84.0%
Discount rate	0.1%-14.3%	1.6%-13.1%
Expected term (in years)	1.25-6.25	0.67-5.25
Expected volatility	80.0%-95.0%	60.0%-68.0%
Risk-free interest rate	1.16%-1.53%	2.34%-2.46%
Dividend yield	—	—

The following table sets forth a summary of the changes in the estimated fair value of the LEO Call Option:

	Total (in thousands)
Balance as of January 1, 2018	$ —
Initial fair value upon execution of the LEO Agreement in November 2018	1,879
Change in fair value upon remeasurement recognized as other expense	1,130
Balance as of December 31, 2018	3,009
Change in fair value upon remeasurement recognized as other expense	1,069
Balance as of December 31, 2019	4,078
Change in fair value upon remeasurement recognized as other expense	1,472
Balance as of December 31, 2020	$ 5,550

2027 Notes

The fair value of the 2027 Notes (see Note 10), which differs from its carrying value, is determined by prices for the 2027 Notes observed in market trading. The market for trading of the 2027 Notes is not considered to be an active market and therefore the estimate of fair value is based on Level 2 inputs. As of December 31, 2020, the estimated fair value of the 2027 Notes, which have an aggregate face value of $550.0 million, was $997.9 million based on the market price on the last trading day for the period.

Term Loans

The fair value of our outstanding term loans (see Note 10) is estimated using the net present value of the payments, discounted at an interest rate that is consistent with a market interest rate, which is a Level 2 input. The estimated fair value of our outstanding term loans approximates the carrying amount, as the term loan bears a floating rate that approximates the market interest rate.

4. Cash Equivalents and Marketable Securities

We invest in certain money market funds and repurchase agreements, classified as cash equivalents, which are collateralized by deposits in the form of U.S. treasury securities for an amount no less than 102% of their value. We do not record an asset or liability for the collateral as we do not intend to sell or re-pledge the collateral. The collateral has the prevailing credit rating of at least the U.S. government treasuries and agencies. We utilize a third-party custodian to manage the exchange of funds and ensure that collateral received is maintained at 102% of the value of the reverse repurchase agreements on a daily basis.

Cash equivalents and marketable securities classified as available-for-sale consisted of the following:

	December 31, 2020			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value
	(in thousands)			
Cash equivalents:				
Money market funds	$ 266,437	$ —	$ —	$ 266,437
Short-term marketable securities:				
U.S. treasury bills	14,996	3	—	14,999
U.S. treasury notes	45,292	100	(1)	45,391
Commercial paper	144,851	—	—	144,851
Corporate debt securities	45,680	93	(3)	45,770
Total short-term marketable securities	250,819	196	(4)	251,011
Total cash equivalents and marketable securities	$ 517,256	$ 196	$ (4)	$ 517,448

	December 31, 2019			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Cash equivalents:				
Money market funds	$ 248,736	$ —	$ —	$ 248,736
Repurchase agreements	59,000	—	—	59,000
Total cash equivalents	307,736	—	—	307,736
Short-term marketable securities:				
U.S. treasury notes	45,224	56	—	45,280
Commercial paper	65,626	—	—	65,626
Corporate debt securities	71,231	83	—	71,314
Total short-term marketable securities	182,081	139	—	182,220
Long-term marketable securities:				
U.S. treasury notes	15,248	59	—	15,307
Corporate debt securities	15,781	56	—	15,837
Total long-term marketable securities	31,029	115	—	31,144
Total cash equivalents and marketable securities	$ 520,846	$ 254	$ —	$ 521,100

There have been no significant realized gains or losses on available-for-sale securities for the periods presented. As of December 31, 2020, our short-term marketable securities have average contractual maturities of approximately five months. As of December 31, 2019, our short-term and long-term marketable securities have average contractual maturities of approximately eight months and 16 months, respectively. We do not intend to sell our marketable securities and it is not more likely than not that we will be required to sell these securities before recovery of their amortized cost bases.

5. Voting Interest Model - Eidos

Eidos is a clinical-stage biopharmaceutical company focused on the development of acoramidis (formerly AG10 or BBP-265) to address the large and growing unmet need in diseases caused by transthyretin amyloidosis. In April 2016, we initially invested $1.0 million and determined that our investment in Eidos represented a variable interest. At that time, Eidos did not have sufficient resources to carry out its principal activities without additional financial support. BridgeBio was determined to be the primary beneficiary of Eidos as it controlled the activities that most significantly impacted Eidos' economic performance, controlled the most significant decisions affecting Eidos through its representation within management and Eidos' Board of Directors, and BridgeBio had a majority ownership interest.

In February 2018, BridgeBio entered into a note and warrant purchase agreement with Eidos, pursuant to which Eidos issued a convertible promissory note (the "Eidos Note") with the principal amount of $10.0 million and a warrant to purchase a number of shares of preferred stock equal to $4.0 million at the price paid by investors in the

next equity financing (the “Eidos Warrant”). In March 2018, BridgeBio transferred 10% or $1.0 million of its interests in the Eidos Note and the Eidos Warrant to the minority stockholder of Eidos. In March 2018, the Eidos Note was redeemed into shares of Series B redeemable convertible preferred stock of Eidos at a 30% discount to the price paid by other investors.

In March 2018, Eidos entered into the Eidos Series B Preferred Stock Purchase Agreement for issuance of shares of Eidos Series B redeemable convertible preferred stock in two closings. As part of the March 2018 closing, Eidos also issued a freestanding tranche liability related to the obligation of Eidos to issue additional shares and the right to request investors to purchase additional shares. The tranche liability was recorded at fair value and remeasured through the settlement date in May 2018. In May 2018, BridgeBio contributed $11.2 million into Eidos in exchange for shares of Series B redeemable convertible preferred stock.

In June 2018, Eidos completed its initial public offering. All redeemable convertible preferred stock of Eidos was converted into common stock at the closing of the Eidos IPO. As part of the Eidos IPO, BridgeBio purchased common stock of $17.0 million. The Eidos Warrant was also net exercised upon the completion of the Eidos IPO.

From the date of BridgeBio’s initial investment until June 22, 2018, the Eidos IPO closing date, Eidos was determined to be a VIE and BridgeBio consolidated Eidos as the primary beneficiary. Subsequent to the Eidos IPO, BridgeBio determined that Eidos was no longer a VIE due to it having sufficient equity at risk to finance its activities without additional subordinated financial support. From June 22, 2018 through December 31, 2020, BridgeBio determined that it held greater than 50% of the voting shares of Eidos and there were no other parties with substantive participating, liquidation or kick-out rights. BridgeBio consolidated Eidos under the VOE model as of December 31, 2020, 2019 and 2018 and during the years then ended.

In May 2019, BridgeBio purchased 1,103,848 shares of Eidos common stock from an existing Eidos stockholder for $28.6 million in a private purchase transaction. In July 2019, BridgeBio purchased 882,353 shares of Eidos common stock from an existing Eidos investor for $26.4 million in a private purchase transaction. In September 2019, Eidos issued 556,173 shares of Eidos common stock to a third-party, which is further described in Note 11.

Eidos Shelf Registration

On August 2, 2019, Eidos filed a shelf registration statement on Form S-3 (the “2019 Shelf”) with the SEC in relation to the registration of common stock, preferred stock, warrants and units of any combination thereof. Eidos also simultaneously entered into an Open Market Sale Agreement (the “2019 Sales Agreement”) with the sales agents named therein (the “Sales Agents”), to provide for the offering, issuance and sale by Eidos of up to an aggregate offering price of $100.0 million of its common stock from time to time in “at-the-market” offerings under the 2019 Shelf and subject to the limitations thereof. Eidos will pay to the Sales Agents cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the 2019 Sales Agreement. Eidos has issued 385,613 shares under this offering and received $23.9 million of net proceeds as of December 31, 2019. Eidos issued 448,755 shares under this offering and received $24.1 million of net proceeds in February 2020. As a result of the completion of the Merger Transactions with Eidos on January 26, 2021, Eidos’ common stock ceased to trade on the Nasdaq Global Select Market prior to the opening of business on January 26, 2021, the 2019 Sales Agreement was terminated and the 2019 Shelf was deregistered with the SEC (see Note 18).

Merger Agreement with Eidos

On October 5, 2020, we entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Eidos, Globe Merger Sub I, Inc. (“Merger Sub”) and Globe Merger Sub II, Inc. (“Merger Sub II”) (the two latter companies being our indirect wholly-owned subsidiaries), providing for, in a series of merger transactions (the “Merger Transactions”), the acquisition by us of all of the outstanding shares of common stock of Eidos (the “Eidos Common Stock”) other than shares of Eidos Common Stock that (i) are owned by Eidos as treasury stock, (ii) are owned by us and our subsidiaries and, in each case, not owned on behalf of third parties and (iii) are subject to an Eidos Restricted Share Award (as defined below). Under the Merger Agreement, the stockholders of Eidos will have the right to receive, at their election, either 1.85 shares of our common stock or $73.26 in cash per Eidos share in the transaction, subject to proration as necessary to ensure that the aggregate amount of cash consideration is no greater

than $175.0 million. In addition, immediately prior to the effective time of the merger of Merger Sub with and into Eidos (the "Effective Time"), (i) each option to purchase Eidos Common Stock (an "Eidos Option") will be converted into an option, on the same terms and conditions applicable to such Eidos Option immediately prior to the Effective Time, to purchase a specified number of shares of BridgeBio common stock, calculated pursuant to the terms of the Merger Agreement, and (ii) each outstanding award of shares of Eidos Common Stock that is subject to forfeiture conditions (subject to certain exceptions) (each, an "Eidos Restricted Share Award") will be converted into an award, on the same terms and conditions applicable to such Eidos Restricted Share Award immediately prior to the Effective Time, covering a number of whole restricted shares of BridgeBio common stock, calculated pursuant to the terms of the Merger Agreement, with any fractional shares being paid out to the holder of such Eidos Restricted Share Award in cash.

The Merger Transactions were subject to various closing conditions, including, but not limited to: (i) approval of the majority of the outstanding shares of Eidos Common Stock, (ii) approval of a majority of the shares of Eidos Common Stock held by stockholders other than (A) us and any person or entity controlling, controlled by or under common control with us (any such person, an "Affiliate") (including Merger Sub and Merger Sub II), (B) any of our directors or officers or our Affiliates' directors or officers (including Merger Sub and Merger Sub II) and (C) any director or officer of Eidos (other than members of the special committee of independent directors of Eidos (the "Eidos Special Committee")); (iii) approval of at least 66 and 2/3% of the aggregate voting stock (as defined in Section 203 of the Delaware General Corporation Law (the "DGCL")) of Eidos that is not owned (as defined in Section 203 of the DGCL) by BridgeBio, Merger Sub, Merger Sub II or any of their respective affiliates or associates (as such terms are defined in Section 203 of the DGCL); (iv) approval of the issuance of our common stock in connection with the Merger Transactions by at least a majority of the votes cast by the holders of shares of our common stock voting on the matter; (v) the absence of any statute, rule, order, decree or regulation prohibiting the Mergers; (vi) the approval for listing of the common stock issuable to the holders of Eidos Common Stock on Nasdaq; (vii) the SEC having declared effective our Form S-4 registration statement, which would contain our joint proxy statement/prospectus with Eidos in connection with the Merger Transactions; and (viii) subject to certain materiality exceptions, the accuracy of certain representations and warranties by us and Eidos contained in the Merger Agreement and the compliance by each party with the covenants contained in the Merger Agreement. In connection with the execution of the Merger Agreement, Eidos entered into voting agreements with members of our Board of Directors and KKR Genetic Disorder L.P., collectively owning approximately 36% of our outstanding common stock, pursuant to which they agreed, among other things, to vote their shares in favor of the issuance of our common stock in connection with the Merger Transactions.

The Merger Agreement included customary representations, warranties and covenants, including, but not limited to, covenants by us and Eidos to conduct our businesses in the ordinary course during the period between the execution of the Merger Agreement and consummation of the Merger Transactions and to refrain from taking certain actions specified in the Merger Agreement.

The Merger Agreement may be terminated, among other circumstances, (i) by either party if the Merger Transactions are not consummated by June 4, 2021, (ii) by Eidos if our Board of Directors changes its recommendation with respect to the issuance of shares of our common stock in connection with the Merger Transactions or (iii) by us if the Eidos board of directors or the Eidos Special Committee changes its recommendation with respect to the Merger Transactions. The Merger Agreement further provides that upon termination of the Merger Agreement under certain circumstances, Eidos must pay us a termination fee of $35.0 million, and upon termination of the Merger Agreement under certain circumstances, we must pay Eidos a termination fee of $100.0 million.

On January 26, 2021, we closed and completed the Merger Transactions (see Note 18).

6. Noncontrolling Interests

As of December 31, 2020 and 2019, we had both redeemable convertible noncontrolling interests and noncontrolling interests in consolidated partially-owned entities, for which BridgeBio has a majority voting interest under the VOE model and for which BridgeBio is the primary beneficiary under the VIE model. These balances are reported as separate components outside stockholders' equity in "Redeemable convertible noncontrolling interests" and as part of stockholders' equity in "Noncontrolling interests" in the consolidated balance sheets.

We adjust the carrying value of noncontrolling interests to reflect the book value attributable to noncontrolling shareholders of consolidated partially-owned entities when there is a change in the ownership during the respective reporting period. During the years ended December 31, 2020, 2019 and 2018, such adjustments in the aggregate amounts of $(12.0) million, $28.6 million and $(21.6) million, respectively, are recorded to additional paid-in capital. All such adjustments are disclosed within the "Transfers from (to) noncontrolling interest" line item in the consolidated statements of redeemable convertible noncontrolling interests and stockholders' equity.

Upon the Eidos IPO in June 2018, all outstanding shares of Eidos' redeemable convertible preferred stock were converted into shares of common stock of Eidos. This transaction is reflected as conversion of redeemable noncontrolling interest into noncontrolling interest. The net exercise of the Eidos Warrants upon the Eidos IPO is presented as the issuance of noncontrolling interest in the consolidated statements of redeemable convertible noncontrolling interests and stockholders' equity.

As of December 31, 2020 and 2019, the significant components of the noncontrolling interest balances pertain mainly to Eidos. Upon closing and completion of the Merger Transactions with Eidos on January 26, 2021 (see Note 18), Eidos became our wholly-owned subsidiary and the balance of the noncontrolling interest in Eidos was reduced to zero.

7. Equity Method and Other Investments in Equity Method Investees

LianBio

LianBio, a related party, is a clinical-stage biopharmaceutical company founded by Perceptive Advisors. LianBio is focused on sourcing the best opportunities and creating new therapeutic paradigms for first-in-class programs to bring the world's leading science to China and major Asian markets. In October 2019, BBP LLC entered into an exclusivity agreement with LianBio, pursuant to which BBP LLC received equity in LianBio representing a 10% ownership interest, valued at approximately $3.8 million at the time of the transaction and recognized as license revenue for the year ended December 31, 2019 (see Note 11). The equity interest was issued in consideration for certain rights of first negotiation and rights of first offer granted by BBP LLC to LianBio with respect to specified transactions covering intellectual property rights owned or controlled by BBP LLC or its affiliates in certain territories outside the United States. The amount of our 10% ownership interest was reduced to zero as of December 31, 2019 after recognizing our equity share in the net losses of LianBio for the year ended December 31, 2019. The carrying amount of the investment in LianBio in the consolidated balance sheets represents our maximum loss exposure related to its investment in LianBio. There have been no impairments related to the LianBio investment.

PellePharm

PellePharm is a clinical-stage biopharmaceutical company developing BBP-009, a topical gel formulation of patidegib, a hedgehog inhibitor, for the treatment of Gorlin Syndrome and High-Frequency Basal Cell Carcinoma. In July 2015, BridgeBio made an initial investment of $4.5 million in PellePharm and in a series of transactions through December 2016, we increased our ownership interest to greater than 50%. BridgeBio determined that its initial investment in PellePharm represented a variable interest, but that BridgeBio was not the primary beneficiary until December 2016.

On November 19, 2018, PellePharm entered into the LEO Agreement, pursuant to which LEO was granted an exclusive, irrevocable option to acquire PellePharm. The LEO Call Option is exercisable by LEO on or before the occurrence of certain events relating to PellePharm's clinical development programs and no later than July 30, 2021.

We account for the LEO Call Option as a current liability in our consolidated financial statements because BridgeBio is obligated to sell its shares in PellePharm to LEO at a pre-determined price, if the option is exercised. We remeasure the LEO Call Option to fair value at each subsequent balance sheet date until the LEO Call Option is either exercised or expires.

The date the LEO Agreement was entered into was determined to be a VIE reconsideration event. Based on our assessment, BridgeBio concluded that PellePharm remains a VIE after the reconsideration event as it does not have sufficient equity at risk to finance its activities without additional subordinated financial support. However, based on changes to PellePharm's governance structure and Board of Directors composition as a result of the LEO Agreement, BridgeBio is no longer the primary beneficiary as it no longer has the power over the key decisions that most significantly impact PellePharm's economic performance. Accordingly, BridgeBio deconsolidated PellePharm on November 19, 2018. After the deconsolidation in November 2018, PellePharm is considered a related party of BridgeBio.

As a result of the deconsolidation of PellePharm in November 2018, BridgeBio recorded a gain of $19.3 million primarily related to the remeasurement of its common stock and preferred stock investment in PellePharm to its estimated fair value of $17.3 million. The gain is included in the accompanying consolidated statement of operations for the year ended December 31, 2018. We concluded that the deconsolidation of PellePharm did not qualify for presentation as discontinued operations.

The valuation technique used to measure the fair value of the retained investment in the PellePharm's common stock and preferred stock is the PWERM, which was based on the expected proceeds from either the acquisition of PellePharm by LEO or LEO not exercising its option to acquire PellePharm during the option period. As of the deconsolidation date, BridgeBio holds 8.0% of the outstanding PellePharm common stock and 61.9% of the outstanding PellePharm preferred stock. BridgeBio also has continuing involvement and significant influence in PellePharm through its participation on the PellePharm Board of Directors. The carrying amount of BridgeBio's investment in PellePharm in the consolidated balance sheets represents its maximum loss exposure related to its VIE investment in PellePharm.

As of the deconsolidation date, BridgeBio's investment in PellePharm had a fair value of $17.3 million, which is comprised of $0.5 million in PellePharm common stock that is accounted for as an equity method investment and $16.8 million in PellePharm preferred stock that was accounted for as a cost method investment. Subsequent to the adoption of ASU No. 2016-01, we accounted for the investment in PellePharm preferred stock as an equity security without a readily determinable fair value.

The following represents the amounts related to the PellePharm deconsolidation accounting:

	Amount (in thousands)
Working capital (1) (excluding cash and cash equivalents)	$ 6,134
Term loan	1,359
Property and equipment, net	(791)
Carrying value of noncontrolling interest	(688)
Carrying value of redeemable convertible noncontrolling interest	(1,154)
Fair value of interest retained by BridgeBio	17,325
Gain on deconsolidation of PellePharm	(19,327)
Decrease in cash and cash equivalents resulting from the deconsolidation of PellePharm	$ 2,858

(1) Working capital is defined as current assets less current liabilities.

After the deconsolidation of PellePharm in November 2018, BridgeBio accounted for its retained common stock investment as an equity method investment. BridgeBio's common stock investment valued at $0.5 million

upon deconsolidation was compared to BridgeBio's percentage of underlying equity in net assets of PellePharm. BridgeBio concluded that there was no material basis difference.

For the year ended December 31, 2019 and for the period November 20 through December 31, 2018, BridgeBio's share of PellePharm's net losses amounted to $0.2 million and $0.3 million, respectively, based on its percentage of common stock ownership in PellePharm. As of December 31, 2019 and 2018, the aggregate carrying amount of our equity method investment in PellePharm is zero and $0.2 million, respectively. As of December 31, 2019 and 2018, the aggregate carrying amount of the equity security investment in PellePharm is zero and $16.8 million, respectively. After the equity method investment was reduced to zero during the three months ended March 31, 2019, BridgeBio has subsequently recorded its percentage of net losses consistent with its preferred stock ownership percentage of 61.9% until the equity security investment was also reduced to zero during the remaining period of 2019. The carrying amount of BridgeBio's investment in PellePharm in the consolidated balance sheets represents its maximum loss exposure related to its VIE investment in PellePharm. We did not recognize an impairment related to our PellePharm investment during the years ended December 31, 2020, 2019 and 2018.

8. Asset Acquisitions

Origin Asset Acquisition

In June 2018, Origin entered into an Asset Purchase Agreement with Alexion Pharma Holding Unlimited Company ("Alexion") to acquire intellectually property rights, including patent rights, know-how, and contracts, related to the ALXN1101 molecule. As consideration, Origin made an upfront cash payment of $1.0 million. There were no material direct transaction costs related to the transaction.

Origin accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was $1.0 million and was charged to research and development expense for the year ended December 31, 2018 as it had no alternative future use at the time of the acquisition. If certain substantive milestones are met in the future, Origin could be required to pay up to $18.8 million if Origin receives a priority review voucher from the Food and Drug Administration, $3.0 million in regulatory milestone payments, $17.0 million in sales milestone payments, and pay royalties of up to low double-digit percentages on future net sales, if any.

QED Asset Acquisition

In January 2018, QED entered into a License Agreement with Novartis International Pharmaceutical, Inc. ("Novartis"), pursuant to which QED acquired certain intellectual property rights, including patents and know-how, related to BBP-831 for the treatment of patients with FGFR-driven diseases. As consideration for the License Agreement, QED made an upfront cash payment of $15.0 million and issued 2,941,176 shares of QED Series A Preferred Stock to Novartis. There were no material direct transaction costs related to the transaction. The fair value of the QED Series A Preferred Stock was valued by a third-party specialist at $0.59 per share or a total fair value of shares issued of $1.7 million.

QED accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was $16.7 million and was charged to research and development expense for the year ended December 31, 2018 as it had no alternative future use at the time of the acquisition. If certain substantive milestones are met in the future, QED could be required to pay up to $60.0 million in regulatory milestone payments, $35.0 million in sales milestone payments, and pay royalties of up to low double-digit percentages on future net sales, if any.

9. Commitments and Contingencies

Milestone Compensation Arrangements

We have performance-based milestone compensation arrangements with certain employees and consultants, whose vesting is contingent upon meeting various regulatory and development milestones, with fixed monetary amounts known at inception that can be settled in the form of cash or equity as shown in the table below, upon achievement of each contingent milestone. We accrue such contingent compensation when the related milestone is probable of achievement and record in "Accrued compensation and benefits" for the current portion and in "Other liabilities" for the noncurrent portion in the consolidated balance sheet. The table below shows our commitment for the potential milestone amounts of up to $267.4 million and the accruals as of December 31, 2020 for milestones deemed probable of achievement. There were no such accruals as of December 31, 2019.

Settlement Type	Fixed Monetary Amount	Accrued Amount (1)
	(in thousands)	
Cash	$ 15,006	$ 367
Stock (2)	168,407	9,571
Cash or stock at our sole discretion	84,030	634
Total	$ 267,443	$ 10,572

(1) Amount recorded for performance-based milestone awards that are probable of achievement.

(2) Includes the performance-based milestone awards that were granted as part of the 2020 Stock and Equity Award Exchange Program (the "Exchange Program") further discussed in Note 15.

Other Research and Development Agreements

We may also enter into contracts in the normal course of business with clinical research organizations for clinical trials, with contract manufacturing organizations for clinical supplies and with other vendors for preclinical studies, supplies and other services and products for operating purposes. These contracts generally provide for termination on notice with potential termination charges. As of December 31, 2020 and 2019, there were no amounts accrued related to termination charges.

Indemnification

In the ordinary course of business, we may provide indemnifications of varying scope and terms to vendors, lessors, business partners, board members, officers and other parties with respect to certain matters, including, but not limited to, losses arising out of breach of such agreements, services to be provided by us, our negligence or willful misconduct, violations of law, or intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with directors and certain officers and employees that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. No material demands have been made upon us to provide indemnification under such agreements, and thus, there are no claims that we are aware of that could have a material effect on our consolidated balance sheets, statements of operations and comprehensive loss, or statements of cash flows.

We also maintain director and officer insurance, which may cover certain liabilities arising from our obligation to indemnify our directors. To date, we have not incurred any material costs and have not accrued any liabilities in the consolidated financial statements as a result of these provisions.

Contingencies

From time to time, we may become involved in legal proceedings arising in the ordinary course of business. We are not currently a party to any material legal proceedings.

10. Debt

2027 Notes

On March 9, 2020, BridgeBio issued an aggregate principal amount of $550.0 million of its 2.50% Convertible Senior Notes due 2027 (the "2027 Notes"), pursuant to an Indenture dated March 9, 2020 (the "Indenture"), between BridgeBio and U.S. Bank National Association, as trustee (the "Trustee"), in a private offering to qualified institutional buyers (the "2020 Note Offering") pursuant to Rule 144A under the Securities Act. The 2027 Notes issued in the 2020 Note Offering include $75.0 million in aggregate principal amount of 2027 Notes sold to the initial purchasers (the "Initial Purchasers") resulting from the exercise in full of their option to purchase additional 2027 Notes.

The 2027 Notes are senior, unsecured obligations of BridgeBio and will accrue interest payable semiannually in arrears on March 15 and September 15 of each year, beginning on September 15, 2020, at a rate of 2.50% per year. The 2027 Notes will mature on March 15, 2027, unless earlier converted or repurchased. Upon conversion, the 2027 Notes are convertible into cash, shares of BridgeBio's common stock or a combination of cash and shares of BridgeBio's common stock, at BridgeBio's election.

BridgeBio received net proceeds from the 2020 Note Offering of approximately $537.0 million, after deducting the Initial Purchasers' discount and offering expenses. BridgeBio used approximately $49.3 million of the net proceeds from the 2020 Note Offering to pay for the cost of the Capped Call Transactions described below, and approximately $75.0 million to pay for the repurchase of shares of its common stock described below. BridgeBio intends to use the remainder of the net proceeds from the 2020 Note Offering for working capital and other general corporate purposes, including for its commercial organization and launch preparations. BridgeBio may also use any remaining net proceeds to fund possible acquisitions of, or investments in, complementary businesses, products, services and technologies.

A holder of 2027 Notes may convert all or any portion of its 2027 Notes at its option at any time prior to the close of business on the business day immediately preceding December 15, 2026 in multiples of $1,000 only under the following circumstances:

- During any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of BridgeBio's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- During the five business day period after any five consecutive trading day period (the "measurement period") in which the "trading price" (as defined in the Indenture) per $1,000 principal amount of 2027 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of BridgeBio's common stock and the conversion rate on each such trading day; or,
- Upon the occurrence of specified corporate events.

On or after December 15, 2026 until the close of business on the second scheduled trading day immediately preceding the maturity date, a holder may convert all or any portion of its 2027 Notes at any time, regardless of the foregoing.

The conversion rate will initially be 23.4151 shares of BridgeBio's common stock per $1,000 principal amount of 2027 Notes (equivalent to an initial conversion price of approximately $42.71 per share of BridgeBio's common stock, for a total of approximately 12,878,305 shares). Based on the closing price of our common stock on December 31, 2020, the if-converted value of the 2027 Notes exceeded its principal amount by approximately $365.8 million.

The conversion rate is subject to adjustment in some events, but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that occur prior to the maturity date, BridgeBio will, in certain circumstances, increase the conversion rate for a holder who elects to convert its 2027 Notes in connection with such a corporate event. The maximum number of shares issuable should there be an increase in the conversion rate is 17,707,635 shares of BridgeBio's common stock.

BridgeBio may not redeem the 2027 Notes prior to the maturity date, and no sinking fund is provided for the 2027 Notes. If BridgeBio undergoes a fundamental change (as defined in the Indenture), holders may require BridgeBio to repurchase for cash all or any portion of their 2027 Notes at a fundamental change repurchase price equal to 100% of the principal amount of the 2027 Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. The Indenture contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the Trustee or the holders of not less than 25% in aggregate principal amount of the 2027 Notes then outstanding may declare the entire principal amount of all the Notes plus accrued special interest, if any, to be immediately due and payable. The 2027 Notes are BridgeBio's general unsecured obligations and rank senior in right of payment to all of BridgeBio's indebtedness that is expressly subordinated in right of payment to the 2027 Notes; equal in right of payment with all of BridgeBio's liabilities that are not so subordinated; effectively junior to any of BridgeBio's secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of BridgeBio's subsidiaries.

In accounting for the issuance of the 2027 Notes, we separately accounted for the liability and equity components of the 2027 Notes by allocating the proceeds between the liability component and the embedded conversion options, or equity component, due to BridgeBio's ability to settle the 2027 Notes in cash, its common stock, or a combination of cash and common stock at BridgeBio's option. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected BridgeBio's non-convertible debt borrowing rate for similar debt. The equity component of the 2027 Notes was recognized as a debt discount and represents the difference between the gross proceeds from the issuance of the 2027 Notes and the fair value of the liability of the 2027 Notes on the date of issuance. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

The outstanding 2027 Notes balances consisted of the following as of December 31, 2020:

	Amount (in thousands)
Liability component	
Principal	$ 550,000
Unamortized debt discount	(158,404)
Unamortized debt issuance costs	(8,160)
Net carrying amount	$ 383,436
Equity component, net of issuance costs	$ 169,173

In connection with the issuance of the 2027 Notes, BridgeBio incurred approximately $13.0 million of debt issuance costs, which primarily consisted of initial purchasers' discounts and legal and other professional fees. We allocated these costs to the liability and equity components based on the allocation of the proceeds. The portion of these costs allocated to the equity component totaling approximately $4.1 million was recorded as a reduction to additional paid-in capital. The portion of these costs allocated to the liability component totaling approximately $8.9 million was recorded as a reduction in the carrying value of the debt on the consolidated balance sheet and is amortized to interest expense using the effective interest method over the expected life of the 2027 Notes or approximately their seven-year term. The effective interest rate on the liability component of the 2027 Notes for the period from the date of issuance through December 31, 2020 was 8.8%.

The following table sets forth the total interest expense recognized related to the 2027 Notes for the year ended December 31, 2020:

	Amount (in thousands)
Contractual interest expense	$ 11,153
Amortization of debt discount	14,877
Amortization of debt issuance costs	772
Total interest and amortization expense	$ 26,802

Future minimum payments under the 2027 Notes as of December 31, 2020, are as follows:

	Amount (in thousands)
Year ending December 31:	
2021	$ 13,750
2022	13,750
2023	13,750
2024	13,750
2025	13,750
Thereafter	570,625
Total future payments	639,375
Less amounts representing interest	(89,375)
Total principal amount	$ 550,000

Capped Call and Share Repurchase Transactions with Respect to the 2027 Notes

On March 4, 2020, concurrently with the pricing of the 2027 Notes, we entered into privately negotiated capped call transactions (the "Capped Call Transactions") with certain financial institutions (the "Capped Call Counterparties"). We used approximately $49.3 million of the net proceeds from the 2020 Note Offering to pay for the cost of the Capped Call Transactions. The Capped Call Transactions are expected generally to reduce the potential dilution to BridgeBio's common stock upon any conversion of 2027 Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap initially equal to $62.12 (which represents a premium of 100% over the last reported sale price of BridgeBio's common stock on March 4, 2020) and is subject to certain adjustments under the terms of the Capped Call Transactions. The Capped Calls cover 12,878,305 shares of our common stock (subject to anti-dilution and certain other adjustments), which is the same number of shares of common stock that initially underlie the 2027 Notes. The Capped Calls have an initial strike price of approximately $42.71 per share, which corresponds to the initial conversion price of the 2027 Notes. The Capped Call Transactions are separate transactions, entered into by us with the Capped Call Counterparties, and are not part of the terms of the 2027 Notes.

These Capped Call instruments meet the conditions outlined in ASC 815-40 to be classified in stockholders' equity and are not subsequently remeasured as long as the conditions for equity classification continue to be met. We recorded a reduction to additional paid-in capital of approximately $49.3 million related to the premium payments for the Capped Call Transactions.

Additionally, we used approximately $75.0 million of the net proceeds from the 2020 Note Offering to repurchase 2,414,681 shares of our common stock concurrently with the closing of the 2020 Note Offering from certain of the Initial Purchasers in privately negotiated transactions. The agreed to purchase price per share of common stock in the Repurchases is equal to $31.06, which was the last reported sale price per share of our common stock on The Nasdaq Global Select Market ("Nasdaq") on March 4, 2020. The shares repurchased are recorded as treasury stock.

Hercules Loan and Security Agreement

In June 2018, we executed a Loan and Security Agreement with Hercules Capital, Inc. ("Hercules"), under which we borrowed $35.0 million ("Tranche I"). The term of the loan was approximately 42 months, with a maturity date of January 1, 2022 (the "Maturity Date"). No principal payments were due during an interest-only period, commencing on the initial borrowing date and continuing through July 1, 2020 (the "Amortization Date"). The outstanding balance of the loan was to be repaid monthly beginning on the Amortization Date and extending through the Maturity Date. The term loan bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 4.35% and (ii) 9.35% (9.85% as of December 31, 2018 based on the prime rate as of that date), payable monthly.

In December 2018, we executed the First Amendment to the Loan and Security Agreement, whereby we borrowed an additional $20.0 million ("Tranche II") to increase the total principal balance outstanding to $55.0 million. Upon draw of the additional $20.0 million, the interest-only period on the entire facility was extended until January 1, 2021 and the maturity date for the entire facility was July 1, 2022. The additional $20.0 million loan bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.35% and (ii) 9.10% (9.10% as of December 31, 2018), payable monthly.

On the earliest to occur of (i) the maturity date, (ii) the date we prepay the outstanding principal amount of the Amended Hercules Term Loan or (iii) the date the outstanding principal amount of the Amended Hercules Term Loan otherwise becomes due, we will owe Hercules an end of term charge equal to 6.35% of the principal amount of the original $35.0 million term loan, or $2.2 million, and 5.75% of the principal amount of the incremental $20.0 million term loan, or $1.2 million. These amounts will be accrued over the term of the loan using the effective-interest method.

In May 2019, we executed the Second Amendment to the Loan and Security Agreement whereby we borrowed an additional $20.0 million ("Tranche III") to increase the total principal balance outstanding to $75.0 million.

In July 2019, the completion of BridgeBio's IPO triggered certain provisions of the Second Amendment to the Loan and Security Agreement. BridgeBio received an option to pay up to 1.5% of scheduled cash pay interest on the entire facility as payment in kind, or PIK Interest, with such cash pay interest paid as PIK Interest at a 1:1.2 ratio. The interest-only period will continue through July 1, 2021 (the "Modified Amortization Date") and the entire facility received a maturity date of January 1, 2023 (the "Modified Maturity Date"). The outstanding balance of the Amended Hercules Term Loan was to be repaid by BridgeBio monthly beginning on the Modified Amortization Date and extending through the Modified Maturity Date.

Under the Second Amendment to the Loan and Security Agreement, the interest rate for the Hercules Term Loan was established as follows: (1) Tranche I bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.85% and (ii) 8.85% (8.85% as of December 31, 2019 based on the prime rate as of that date), payable monthly; (2) Tranche II bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 2.85% and (ii) 8.60% (8.60% as of December 31, 2019), payable monthly; and (3) Tranche III bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.10% and (ii) 9.10% (9.10% as of December 31, 2019), payable monthly.

In March 2020, we executed the Third Amendment to the Loan and Security Agreement primarily to allow us to issue our 2027 Notes and to enter into the Capped Call and Share Repurchase Transactions.

In April 2020, we entered into the Fourth Amendment to the Loan and Security Agreement (the "Amended Hercules Term Loan"), which among other things:

(1) extended the interest-only period under the Loan and Security Agreement to July 1, 2022 (the "Amended Amortization Date" which may be further extended to January 1, 2023 and July 1, 2023, in each case, subject to certain conditions set forth in the Amended Hercules Term Loan);

(2) extended the maturity date for the term loans under the Loan and Security Agreement to November 1, 2023 (the "Amended Maturity Date", which may be further extended to May 1, 2024, subject to certain conditions set forth in the Amended Hercules Term Loan);

(3) provided for an interest rate on the Tranche I equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.85% and (y) 8.75% (8.75% as of December 31, 2020), payable monthly;

(4) provided for an interest rate on the Tranche II equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 2.85% and (y) 8.60% (8.60% as of December 31, 2020), payable monthly;

(5) provided for an interest rate on the Tranche III equal to the greater of (x) a floating interest rate linked to the prime rate as reported in the Wall Street Journal plus 3.10% and (y) 8.85% (8.85% as of December 31, 2020), payable monthly; and

(6) provided for, subject to Hercules' approval in its sole and absolute discretion, an additional increase in available loan facilities aggregating to $125.0 million as follows: (a) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2020, (b) an additional incremental loan in the amount of $25.0 million, available no later than December 15, 2021, (c) an additional incremental loan following the achievement of certain performance milestones in the amount of $25.0 million, available no later than December 15, 2021 and (d) an additional $50.0 million discretionary incremental tranche, available no later than December 15, 2022.

The Amended Hercules Term Loan also provides us with more flexibility to consummate acquisitions and investments, incur additional debt, dispose of assets and repurchase and/or redeem stock, each subject to certain conditions set forth in the Amended Hercules Term Loan. There were no gains or losses arising from the amendment, which is considered a debt modification.

We did not draw the incremental loan of $25.0 million that was available until December 15, 2020. There have not been any additional draws on the $100.0 million additional available facilities as of December 31, 2020.

The Amended Hercules Term Loan contains customary representations and warranties, events of default, and affirmative and negative covenants for a term loan facility of this size and type. However, Hercules imposes no significant liquidity covenants on us and Hercules cannot limit or restrict our ability to dispose of assets, make investments, or make acquisitions. As pledged collateral for our obligations under the Amended Hercules Term Loan, we granted Hercules a security interest in all our assets or personal property, including all equity interests owned or hereafter acquired by us. Further, at Hercules' sole discretion we must make a mandatory prepayment equal to 75% of net cash proceeds received from the sale or licensing of any pledged or collateral assets, including intellectual property, of a consolidated entity owned by us, or the repurchase or redemption of any pledged collateral by certain specified operating companies. None of our consolidated entities are a party to, nor provide any credit support or other security in connection with the Amended Hercules Term Loan.

In January 2021, we executed the Fifth Amendment to the Loan and Security Agreement primarily to allow us to issue our 2029 Notes and to enter into the related capped call and share repurchase transactions, as discussed in Note 18.

During the years ended December 31, 2020, 2019 and 2018, we recognized interest expense related to the Amended Hercules Term Loan of $7.9 million, $8.3 million and $2.4 million, respectively, of which $1.3 million, $1.4 million and $0.5 million, respectively, relates to amortization of debt discount.

The term loans balance is as follows:

	December 31,	
	2020	2019
	(in thousands)	
Principal value of term loans	$ 75,000	$ 75,000
Debt issuance costs and debt accretion	1,936	679
Term loans, noncurrent	$ 76,936	$ 75,679

Future minimum payments of principal and estimated payments of interest on our outstanding variable rate borrowings as of December 31, 2020 are as follows:

	Amount (in thousands)
Year Ending December 31:	
2021	$ 6,644
2022	40,216
2023	47,146
Total future payments	94,006
Less amounts representing interest	(14,483)
Less final end of term payment	(4,523)
Total principal amount of term loan payments	$ 75,000

Silicon Valley Bank and Hercules Loan Agreement

On November 13, 2019, Eidos entered into a Loan and Security Agreement with Silicon Valley Bank and Hercules Capital, Inc. (the "SVB and Hercules Loan Agreement"). The SVB and Hercules Loan Agreement provides for up to $55.0 million in term loans to be drawn in three tranches as follows: (i) Tranche A loan of $17.5 million, (ii) Tranche B loan of up to $22.5 million which is available to be drawn until October 31, 2020, and (iii) Tranche C loan of up to $15.0 million available to be drawn upon the achievement of a clinical data milestone. The Tranche C loan is available to be drawn until September 30, 2021. The Tranche A loan of $17.5 million was drawn on November 13, 2019. There have not been any additional draws on the other tranches as of December 31, 2020, including the available Tranche B loan of up to $22.5 million that was available to be drawn until October 31, 2020.

The Tranche A loan bears interest at a fixed rate equal to the greater of either (i) 8.50% or (ii) 3.25% plus the prime rate as reported in The Wall Street Journal (8.50% as of December 31, 2020). The Tranche A loan repayment schedule provides for interest only payments until November 1, 2021, followed by consecutive equal monthly payments of principal and interest commencing on this date continuing through the maturity date of October 2, 2023.

The Tranche A loan also provides for a $0.3 million commitment fee that was paid at closing and a final payment charge equal to 5.95% multiplied by the amount funded to be paid when the loan becomes due or upon prepayment of the facility. If Eidos elects to prepay the Tranche A loan, there is also a prepayment fee of between 0.75% and 2.50% of the principal amount being prepaid depending on the timing and circumstances of prepayment. The Tranche A loan is secured by substantially all of Eidos' assets, except Eidos' intellectual property, which is the subject of a negative pledge.

In January 2021, Eidos entered into an amendment to the SVB and Hercules Loan Agreement primarily to allow Eidos to enter into the Merger Transactions (see Note 18). The amendment also requires Eidos to maintain a certain amount of cash and cash equivalents with SVB.

Embedded derivatives and debt discounts

On issuance, the net carrying value of the Tranche A loan was $16.1 million after deducting for various discounts on issuance of $2.5 million. The discounts relate to the recognition of a bifurcated compound embedded derivative liability of $1.1 million, the final payment charge of $1.0 million due on maturity, the $0.3 million commitment fee paid at closing and $0.1 million in other debt issuance costs. The debt discounts are being amortized to interest expense over the life of the Tranche A loan using the effective interest rate method.

Eidos determined that the requirement in its SVB and Hercules Loan Agreement to pay a Success Fee in certain events is an embedded derivative liability requiring bifurcation from the Tranche A loan proceeds and separate accounting. The Success Fee amount is $1.0 million if conditions are met prior to November 13, 2021 and $2.0 million if conditions are met after November 13, 2021. Eidos also determined that certain events of default provisions resulting in the prepayment of the loan or a change in the default rate of interest should also be recorded

as an embedded derivative liability but were deemed immaterial for this reporting period due to the triggers being deemed unlikely. Eidos recorded a compound embedded derivative liability of $1.1 million on issuance, which was recorded as a derivative liability in other liabilities on the balance sheet and as a corresponding debt discount.

Eidos calculated the fair values of the derivative liability on issuance and as of December 31, 2020 and 2019 based on a probability weighted valuation of certain event outcomes and discounted to the present value. The key valuation assumptions used as of December 31, 2020 and 2019 consist of the discount rate of 12.6% and 11.6%, respectively, and the probability of an underlying event triggering the Success Fee payment and the timing of such events. The derivative liability is being remeasured at each financial reporting period with any changes in fair value being recognized as a component of other income (expense), net. The fair value of the derivative liability was approximately $1.3 million and $1.2 million as of December 31, 2020 and 2019 and was classified as part of “Other liabilities” on the consolidated balance sheets. There was immaterial change in the fair value of the derivative liability for the years ended December 31, 2020 and 2019.

The facility fee, fair value of the bifurcated embedded derivative liability on issuance, and other debt issuance costs have been treated as debt discounts on our consolidated balance sheet and together with the final payment charge are being amortized to interest expense throughout the life of the Tranche A loan using the effective interest rate method.

As of December 31, 2020 and 2019, the net carrying value of the Tranche A loan was $16.9 million and $16.1 million, respectively. As of December 31, 2020 and 2019, there are unamortized debt discounts of $1.6 million and $2.4 million, respectively. Eidos recorded interest expense and amortization of the debt discount in the amount of $2.3 million and $0.3 million on the Tranche A loan for the years ended December 31, 2020 and 2019, respectively.

Future minimum payments

The following table presents future payments of principal, interest and final payment charge on the Eidos Tranche A loan as of December 31, 2020:

	Amount (in thousands)
Year Ending December 31:	
2021	$ 2,961
2022	9,787
2023	8,622
Total future payments	21,370
Less amounts representing interest	(3,870)
Total principal amount of term loan payments	$ 17,500

11. Out-licensing Agreements

License Agreement Between QED and LianBio

In October 2019, our subsidiary, QED entered into an exclusive license agreement with a related party, LianBio (the “QED-LianBio License Agreement”). Pursuant to the QED-LianBio License Agreement, QED granted to LianBio an exclusive, sublicensable license under the licensed patent rights and know-how to develop, manufacture and commercialize infigratinib for any and all human prophylactic and therapeutic uses in all cancer indications (including in combination with other therapies) in certain territories outside the United States. Under the QED-LianBio License Agreement, QED received a nonrefundable upfront payment of $10.0 million and is entitled to receive development and sales milestones payments of up to $132.5 million and tiered royalties on net sales ranging from the low to mid-teens. In addition, QED also received warrants which entitles QED to purchase 10% of the then-fully diluted shares of one of the subsidiaries of LianBio upon achievement of certain contingent development milestones (the “LianBio Warrants”).

We accounted for the QED-LianBio License Agreement and the LianBio Exclusivity Agreement (see Note 7) as a single transaction under ASC 606 and identified the exclusive license as a distinct performance obligation since LianBio can benefit from the license on its own by developing and commercializing the underlying product using its own resources. In addition, we will enter into clinical and commercial supply agreements for the licensed territory. We determined that the LianBio's optional right to future products under these supply agreements is not considered to represent a material right.

During the year ended December 31, 2019, we recognized $13.8 million in license revenue comprising of $10.0 million in upfront payment received and the fair value of the ordinary shares received valued at approximately $3.8 million. We determined that the license was a right to use the intellectual property of QED and as of December 31, 2019, we had provided all necessary information to LianBio to benefit from the license and the license term. As of December 31, 2019, we also determined the contingent development milestones related to our ability to exercise the LianBio Warrants are not probable. As a result, we did not recognize any fair value of the LianBio Warrants, which we considered to be immaterial, as license revenue or record as an asset. For the year ended December 31, 2020, certain contingent development milestones related to our ability to exercise the LianBio Warrants were achieved, and, as a result, we recognized changes in the fair value of the warrants of approximately $3.3 million in "Other income (expense)".

We consider the future potential development milestone as well as the sales-based royalties to be variable consideration. The future potential milestone payments were not included in the transaction price as they were all determined to be fully constrained under ASC 606. We determined that the achievements of such development milestones are contingent upon success in future clinical trials and regulatory approvals, which are not within our control and are uncertain at this stage. We expect that the royalty arrangements and sales-based milestones will be recognized when the sales occur or the milestones are achieved pursuant to the sales-based royalty exception under ASC 606-10-55-65 because the license is the predominant item to which the royalties or sales-based milestones relate. We will re-evaluate the transaction price at each reporting period and as uncertain events are resolved or other changes in circumstances occur.

During the year ended December 31, 2020, we received reimbursements for research and development expenses incurred in 2019 amounting to $2.8 million from LianBio, in connection with the QED-LianBio License Agreement. This amount was recorded as reduction in research and development expenses for the year ended December 31, 2019.

License Agreement Between Navire and LianBio

In August 2020, our subsidiary, Navire Pharma, Inc. ("Navire") entered into an exclusive license agreement with LianBio (the "Navire-LianBio License Agreement"). Pursuant to the Navire-LianBio License Agreement, Navire granted to LianBio an exclusive, sublicensable license under the licensed patent rights and know-how to develop, manufacture and commercialize SHP2 inhibitor BBP-398 ("BBP-398"), for tumors driven by RAS and receptor tyrosine kinase mutations. Under the terms of the Navire-LianBio License Agreement, LianBio will receive commercial rights in China and selected Asian markets and participate in clinical development activities for BBP-398. In consideration for the rights granted to LianBio, we received a nonrefundable $8.0 million upfront payment. We will also receive future development and sales milestone payments of up to $382.1 million, and tiered royalty payments from single-digit to low-teens on net sales of the product in licensed territories.

We accounted for the Navire-LianBio License Agreement under ASC 606 and identified the exclusive license as a distinct performance obligation since LianBio can benefit from the license on its own by developing and commercializing the underlying product using its own resources. In addition, we will enter into clinical and commercial supply agreements for the licensed territory. We determined that the optional right to future products under these supply agreements is not considered to represent a material right.

During the year ended December 31, 2020, we recognized $8.0 million in license revenue which comprised of the upfront payment. We determined that the license was a right to use the intellectual property of Navire and as of December 31, 2020, we had provided all necessary information to LianBio to benefit from the license and the license term.

We consider the future potential development milestone as well as the sales-based royalties to be variable consideration. The future potential milestone payments were not included in the transaction price as they were all determined to be fully constrained under ASC 606. We determined that the achievements of such development milestones are contingent upon success in future clinical trials and regulatory approvals, which are not within our control and are uncertain at this stage. We expect that the royalty arrangements and sales-based milestones will be recognized when the sales occur or the milestones are achieved pursuant to the sales-based royalty exception under ASC 606-10-55-65 because the license is the predominant item to which the royalties or sales-based milestones relate. We will re-evaluate the transaction price at each reporting period and as uncertain events are resolved or other changes in circumstances occur.

License Agreements Between Eidos and Alexion

In September 2019, our subsidiary, Eidos, entered into an exclusive license agreement with Alexion Pharma International Operations Unlimited Company, a subsidiary of Alexion Pharmaceuticals, Inc. (together, "Alexion") to develop, manufacture and commercialize in Japan the compound known as acoramidis (previously known as BBP-265 or AG10) and any of its various chemical forms and any pharmaceutical products containing acoramidis (the "Eidos-Alexion License Agreement"). Under the agreement, Eidos received an upfront nonrefundable payment of $25.0 million.

Eidos also entered into a stock purchase agreement with Alexion, under which Eidos sold to Alexion 556,173 shares of Eidos common stock at a price per share of $44.95, for an aggregate purchase price of approximately $25.0 million. The excess of the purchase price over the value of the Eidos shares, determined based on the closing price of a share of Eidos' common stock of $41.91 as reported on Nasdaq as of the date of execution, was $1.7 million and recognized in revenue as part of the upfront payment as discussed below.

Eidos is also eligible to receive $30.0 million in regulatory milestone payments subject to the achievement of regulatory milestones. Eidos will also receive royalty payments in the low-teens based on net sales of acoramidis in Japan. The royalty rate is subject to reduction if Alexion is required to obtain intellectual property rights from third parties to develop, manufacture or commercialize acoramidis in Japan, or upon the introduction of generic competition into market.

Eidos accounted for the license agreement under ASC 606 and identified the exclusive license as a distinct performance obligation since Alexion can benefit from the license on its own by developing and commercializing the underlying product using its own resources. In addition, Eidos entered into a clinical supply agreement and will enter into a commercial supply agreement for the licensed territory. Eidos determined that the optional right to future products under these supply agreements is not considered to represent a material right. Eidos recognized the $25.0 million upfront fee and $1.7 million premium paid for Eidos' stock for a total upfront payment of $26.7 million in license revenue upon the effective date of the license agreement in September 2019. Eidos determined that the license was a right to use its intellectual property and as of the effective date, it had provided all necessary information to Alexion to benefit from the license and the license term had begun.

Eidos considers the future potential regulatory milestones of up to approximately $30.0 million and the sales-based royalties to be variable consideration. Eidos excluded the regulatory milestones from the transaction price because it determined such payments to be fully constrained under ASC 606 due to the inherent uncertainty in the achievement of such milestone payments and are highly susceptible to factors outside of Eidos' control. As the sales-based royalties are all related to the license of the intellectual property rights, Eidos will recognize revenue in the period when subsequent sales are made pursuant to the sales-based royalty exception under ASC 606-10-55-65. Eidos will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Eidos finalized the clinical supply agreement with Alexion on July 10, 2020, which was determined to be a separate performance obligation from the license. Eidos has billed $0.2 million to Alexion for the year ended December 31, 2020 and recognized such amount as license revenue from the clinical supply agreement. Direct costs for the year ended December 31, 2020 were immaterial.

12. In-licensing Agreements

Stanford License Agreement

In April 2016, Eidos entered into a license agreement with the Board of Trustees of the Leland Stanford Junior University ("Stanford University") relating to Eidos' drug discovery and development initiatives. Under this agreement, Eidos has been granted certain worldwide exclusive licenses to make, use and sell products that are covered by licensed patent rights. In March 2017, Eidos paid a license fee of $10,000, which was recorded as research and development expense during the year ended December 31, 2017, as the acquired assets did not have any alternative future use. Eidos may also be required to make future payments of up to approximately $1.0 million to Stanford University upon achievement of specific intellectual property, clinical and regulatory milestone events, and pay royalties of up to low single-digit percentages on future net sales, if any. In addition, Eidos is obligated to pay Stanford University a percentage of non-royalty revenue received by Eidos from its sublicensees, with the amount owed decreasing annually for three years based on when the applicable sublicense agreement is executed. During the years ended December 31, 2020, 2019 and 2018, Eidos recognized research and development expense of zero, $0.2 million and $0.3 million, respectively, in connection with this agreement.

Additionally, under the license agreement with Stanford University, we will pay Stanford University a portion of all nonroyalty sublicensing consideration attributable to the sublicense of the licensed compounds. The license agreement states that if this event occurred in the third year, 10% is payable to Stanford University. During the year ended in December 31, 2019, we recognized $2.5 million as a cost of license revenue upon execution of the Eidos-Alexion License Agreement (see Note 11).

The Regents of the University of California License Agreement

In September 2016, TheRas entered into a license agreement with The Regents of the University of California ("UCSF") relating to TheRas' drug discovery and development initiatives. Under this agreement, TheRas has been granted certain worldwide exclusive licenses to use the licensed compounds (the "UCSF License"). In connection with the UCSF License and subsequent amendments, we paid issuance fees totaling $0.3 million. In addition, under the terms of the UCSF License, we are required to pay to UCSF certain annual license maintenance fees unless we are selling or otherwise exploiting licensed products or services and paying royalties to UCSF on net sales for such licensed products or services. With respect to such royalty obligations, we agreed to pay UCSF low single-digit tiered royalties on annual net sales of licensed products and services, with a minimum royalty requirement of $0.1 million. Our obligation to pay royalties continues on a country-by-country basis until the expiration of all licensed patent rights covering licensed products in such country. In addition, we are obligated to make contingent milestone payments totaling up to $22.4 million upon the achievement of certain clinical or regulatory milestones. In the event that we sublicense the patent rights, UCSF is also entitled to receive a percentage of the sublicensing income received by us. During the years ended December 31, 2020, 2019 and 2018, TheRas recognized research and development expense of $0.1 million, $0.4 million and $0.1 million, respectively, in connection with this agreement.

Leidos Biomedical Research License and Cooperative Research and Development Agreements

In March 2017, TheRas entered into a cooperative research and development agreement ("Leidos CRADA") with Leidos Biomedical Research, Inc. ("Leidos"). In December 2018, TheRas and Leidos entered into a license agreement ("Leidos License," and together with the Leidos CRADA, the "Leidos Agreements") under which TheRas has been granted certain worldwide exclusive licenses to use the licensed compounds. The Leidos Agreements are related to TheRas' drug discovery and development initiatives. During the years ended December 31, 2020, 2019 and 2018, TheRas recognized research and development expenses of $2.3 million, $1.9 million and $0.9 million, respectively, in connection with the Leidos Agreements.

Foundation Medicine Diagnostics Agreement

In November 2018, QED and Foundation Medicine, Inc. entered into a diagnostics agreement relating to QED's drug discovery and development initiatives. During the years ended December 31, 2020, 2019 and 2018, QED recognized research and development expenses of $4.8 million, $1.6 million and zero, respectively, in connection with this agreement.

Other License and Collaboration Agreements

In addition to the agreements described above, we have also entered into other license and collaboration agreements with various institutions and business entities on terms similar to those described above, none of which are material individually or in the aggregate.

13. Leases

We have operating leases for our corporate headquarters, office spaces and a laboratory facility.

One of our office space leases has a finance lease component representing lessor provided furniture and office equipment wherein we have assessed that we have the right to obtain substantially all of the economic benefits from use of these assets throughout the term of the lease. The assets acquired under this finance lease included in “Property and equipment, net” in the consolidated balance sheet was immaterial as of December 31, 2020.

Certain leases include renewal options at our discretion and we include the extension options when we determine the lease term for our operating and finance leases, if we are reasonably certain that the extension option would be exercised. The lease liabilities were measured using a weighted average discount rate based on the most recent borrowing rate as of the calculation of the respective lease liability, adjusted for the remaining lease term and aggregate amount of the lease.

The components of lease cost for the year ended December 31, 2020 are as follows:

	Amount (in thousands)
Straight line operating lease costs	$ 3,786
Interest on finance lease liability	9
Variable lease costs	832
Total lease cost	$ 4,627

Supplemental cash flow information related to leases are as follows:

	Amount (in thousands)
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows for operating leases	$ 4,169
Operating cash flows for finance lease — cash paid for interest	9
Financing cash flows for finance lease — cash paid for principal	25
Right-of-use assets obtained in exchange of lease obligations	
Operating leases	19,595
Finance lease	1,726

Supplemental information related to the remaining lease term and discount rate are as follows:

	Amount (in thousands)
Weighted-average remaining lease term (in years)	
Operating leases	5.1
Finance lease	5.1
Weighted-average discount rate	
Operating leases	6.24%
Finance lease	6.62%

As of December 31, 2020, future minimum lease payments for our noncancelable operating and finance leases under ASC 842 are as follows:

	Operating Leases	Finance Lease
	(in thousands)	
Year ending December 31:		
2021	$ 4,825	$ 238
2022	4,291	420
2023	3,434	432
2024	3,231	445
2025	3,430	459
Thereafter	2,608	37
Total future minimum lease payments	21,819	2,031
Imputed interest	(3,347)	(330)
Total	$ 18,472	$ 1,701
Reported as of December 31, 2020		
Operating lease liabilities, current portion	$ 3,795	
Operating lease liabilities, net of current portion	14,677	
Total operating lease liabilities	$ 18,472	
Finance lease liability, current portion — Included in "Other accrued liabilities"		$ 128
Finance lease liability, net of current portion — Included in "Other liabilities"		1,573
Total finance lease liability		$ 1,701

As of December 31, 2020, we have operating leases for facilities that have not yet commenced, since we have not obtained the right to control the assets while the lessors perform the construction of necessary improvements, with aggregated undiscounted future payments of $6.0 million. These operating leases will commence throughout fiscal year 2021 and have lease terms ranging from five to twelve years and, therefore, we did not reflect these on the consolidated balance sheet as of December 31, 2020 and the tables above.

As of December 31, 2019, future minimum lease payments for our noncancelable operating leases under ASC 840 were as follows:

	Amount
	(in thousands)
Year Ending December 31:	
2020	$ 2,811
2021	2,515
2022	1,812
2023	1,485
2024	1,272
Thereafter	1,816
Total future minimum lease payments	$ 11,711

Total rent expense under ASC 840 for the years ending December 31, 2019 and 2018 was $2.8 million and $1.5 million, respectively.

Manufacturing Agreement

In December 2019, we entered into a manufacturing agreement to secure clinical and commercial scale manufacturing capacity for the manufacture of batches of active pharmaceutical ingredients for product candidates of certain subsidiaries of BridgeBio. Unless terminated as allowed within the manufacturing agreement, the agreement will expire five years from when qualified operations begin. Under the terms of the agreement, we are assigned a dedicated manufacturing suite for certain months in each calendar year for a one-time fee of $10.0 million, which will be applied to the buildout, commissioning, qualification, validation, equipping and exclusive use of the dedicated manufacturing suite.

Prior to the adoption of ASC 842, we were deemed to be the owner, for accounting purposes, during the construction phase of the dedicated manufacturing suite because of our exposure to substantially all of the construction period risks and our other commitments under the arrangement. As of December 31, 2019, we recorded the $10.0 million one-time fee as a non-current asset and the remaining build-to-suit lease liability of $8.0 million within our consolidated balance sheets.

As of January 1, 2020, upon adoption of ASC 842, we derecognized the build-to-suit lease asset of $10.0 million as we do not control the dedicated manufacturing suite during the construction phase. Under the new lease guidance, we recorded a construction-in-progress asset of $10.0 million for the payments directly associated with the dedicated manufacturing suite as these payments are deemed to represent a non-lease component. The construction phase and readiness determination of the dedicated manufacturing suite is expected to be completed in early 2021. The remaining $4.0 million payable related to the dedicated manufacturing suite is recorded as part of “Other accrued liabilities” as of December 31, 2020.

14. 2019 Reorganization and IPO and 2020 Shelf Registration

2019 Reorganization and IPO

On June 13, 2019, BridgeBio formed BridgeBio Pharma Merger Sub LLC (“Merger Sub LLC”), a Delaware limited liability company and direct wholly-owned subsidiary. The 2019 Reorganization was executed on July 1, 2019, immediately prior to completion of the IPO of BridgeBio’s common stock. As part of the 2019 Reorganization, the existing ownership interest in BBP LLC held by all BBP LLC unitholders was transferred to Merger Sub LLC, and all outstanding units of BBP LLC were cancelled and exchanged for shares of common stock of BridgeBio. Merger Sub LLC was then merged with and into BBP LLC, the surviving entity, which became a wholly-owned subsidiary of BridgeBio. Subsequent to the 2019 Reorganization, as the sole managing member, BridgeBio operates and controls all of BBP LLC’s businesses and affairs.

The number of shares of BridgeBio’s common stock issued to BBP LLC unitholders in the Reorganization is shown in the below table by unit class:

BBP LLC unit class	Number of BridgeBio's Shares Issued
Series D Preferred Units	30,459,426
Series C Preferred Units	31,992,709
Series B Preferred Units	17,794,455
Series A Preferred Units	4,918,881
Founder Units	2,252,916
Common Units	1,794,823
Management Incentive Units	10,786,757
Total shares issued	99,999,967

Included in the amounts above, the unvested outstanding management incentive units and common units of BBP LLC were exchanged for 6,819,455 shares of BridgeBio’s unvested restricted stock, subject to the same time-based vesting conditions as the original management incentive units and common units terms and conditions. See Note 15 for additional details. At the conclusion of the 2019 Reorganization, BridgeBio became the reporting entity.

The 2019 Reorganization was accounted for as a reverse acquisition and recapitalization for financial reporting purposes. The assets and liabilities of BridgeBio, the legal acquirer, were nominal and there were no material pre-combination activities. Therefore, BBP LLC, the legal acquiree, was determined to be the accounting acquirer. Accordingly, the historical financial statements of BBP LLC became BridgeBio's historical financial statements, including the comparative prior periods. All share and per share amounts in these consolidated financial statements and related notes had been retroactively adjusted, where applicable, for all periods presented. The shares of BridgeBio's common stock for periods prior to July 1, 2019 represent the outstanding BBP LLC units recalculated to give effect to the exchange ratio applied in connection with the 2019 Reorganization.

All BBP LLC units that were previously reported as temporary equity and were converted to common stock of BridgeBio upon the completion of the 2019 Reorganization have been reclassified to equity for all periods presented, as if the Reorganization occurred at the beginning of the earliest period presented in our financial statements. At that the time of the 2019 Reorganization, the consolidation assessment on all consolidated entities was updated on behalf of BridgeBio resulting in no change in the treatment of the consolidated entities.

On July 1, 2019, BridgeBio closed the IPO of its common stock. As part of the IPO, BridgeBio issued and sold 23,575,000 shares of its common stock, which included 3,075,000 shares sold pursuant to the exercise of the underwriters' over-allotment option, at a public offering price of $17.00 per share. BridgeBio received net proceeds of approximately $366.2 million from the IPO, after deducting underwriters' discounts and commissions of $28.1 million and offering costs of $6.5 million.

2020 Shelf Registration

On July 7, 2020, we filed a shelf registration statement on Form S-3 (the "2020 Shelf") with the SEC in relation to the registration of common stock, preferred stock, debt securities, warrants and units or any combination thereof. We also simultaneously entered into an Open Market Sale Agreement with Jefferies LLC and SVB Leerink LLC (collectively, the "Sales Agents"), to provide for the offering, issuance and sale by us of up to an aggregate of $350.0 million of our common stock from time to time in "at-the-market" offerings under the 2020 Shelf and subject to the limitations thereof (the "2020 Sales Agreement"). We will pay to the applicable Sales Agents cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the 2020 Sales Agreement. We have not issued any shares or received any proceeds from this offering as of December 31, 2020.

15. Stock-Based Compensation

Under each of the legal entity's equity plans, we recorded stock-based compensation in the following expense categories in our consolidated statements of operations for employees and non-employees:

	Year Ended December 31, 2020			
	BridgeBio Equity Plan	Eidos Equity Plan	Other Subsidiaries Equity Plan	Total
	(in thousands)			
Research and development	$ 16,316	$ 5,743	$ 626	$ 22,685
General and administrative	30,285	5,159	330	35,774
Total stock-based compensation	$ 46,601	$ 10,902	$ 956	$ 58,459

	Year Ended December 31, 2019			
	BridgeBio Equity Plan	Eidos Equity Plan	Other Subsidiaries Equity Plan	Total
	(in thousands)			
Research and development	$ 986	$ 2,313	$ 366	$ 3,665
General and administrative	14,204	3,060	445	17,709
Total stock-based compensation	$ 15,190	$ 5,373	$ 811	$ 21,374

	Year Ended December 31, 2018			
	BridgeBio Equity Plan	Eidos Equity Plan	Other Subsidiaries Equity Plan	Total
	(in thousands)			
Research and development	$ —	$ 1,325	$ 186	$ 1,511
General and administrative	3,183	1,201	172	4,556
Total stock-based compensation	$ 3,183	$ 2,526	$ 358	$ 6,067

Stock-Based Awards of BridgeBio

On June 22, 2019, we adopted the 2019 Stock Option and Incentive Plan (the "2019 Plan"), which became effective on June 25, 2019. The 2019 Plan provides for the grant of stock-based incentive awards, including common stock options and other stock-based awards. We were authorized to issue 11,500,000 shares of common stock for issuance of awards under the 2019 Plan, which may be allocated among stock options, awards of restricted common stock, restricted common units and other stock-based awards. On June 2, 2020, our stockholders approved an amendment and restatement of the 2019 Plan (the "A&R 2019 Plan") to, among other things, increase the number of shares of common stock reserved for issuance thereunder by 2,500,000 shares.

The 2019 Plan provides that the number of shares reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2020, by 5% of the issued and outstanding number of shares of common stock on the immediately preceding December 31, or such lesser number of shares as determined by the Compensation Committee of the Board of Directors.

On November 13, 2019, we adopted the 2019 Inducement Equity Plan (the "2019 Inducement Plan"). The 2019 Inducement Plan provides for the grant of stock-based awards to induce highly-qualified prospective officers and employees who are not currently employed by BridgeBio or its Subsidiaries to accept employment and to provide them with a proprietary interest in BridgeBio, including common stock options and other stock-based awards. We were authorized to issue 1,000,000 shares of common stock for inducement awards under the 2019 Inducement Plan, which may be allocated among stock options, awards of restricted common stock, restricted common units and other stock-based awards.

As of December 31, 2020, 3,820,622 shares and 204,664 shares were reserved for future issuances under the 2019 Plan and 2019 Inducement Plan, respectively.

2020 Stock and Equity Award Exchange Program (Exchange Program)

On April 22, 2020, we completed our 2020 Stock and Equity Award Exchange Program (the "Exchange Program") for certain subsidiaries, which was an opportunity for eligible controlled entities' employees and consultants to exchange their subsidiary equity (including common stock, vested and unvested stock options and restricted stock awards (RSAs)) for BridgeBio equity (including common stock, vested and unvested stock options and RSAs) and/or performance-based milestone awards tied to the achievement of certain development and regulatory milestones. The Exchange Program aligns our incentive compensation structure for employees and consultants across the BridgeBio group of companies to be consistent with the achievement of our overall corporate goals. In connection with the Exchange Program, we issued awards of BridgeBio equity under the 2019 A&R Plan to 149 grantees covering 554,064 shares of common stock, 1,268,110 stock options to purchase common stock, 50,145 shares of RSAs and 22,611 shares of performance-based RSAs. The exchange also included performance-based milestone awards of up to $183.4 million to be settled in shares of BridgeBio's common stock in the future upon achievement of the milestones (collectively the "New Awards"). In consideration for all the subsidiaries' shares tendered, BridgeBio increased its ownership in controlled entities included in the Exchange Program and the corresponding noncontrolling interest decreased.

On November 18, 2020, we completed a stock and equity award under our Exchange Program for a subsidiary. We issued awards of BridgeBio equity under the 2019 A&R Plan to 16 grantees covering 24,924 shares of common stock, 70,436 stock options to purchase common stock, and 10,772 shares of performance-based stock options to purchase common stock. The exchange also included performance-based milestone awards of up to $11.7 million to be settled in shares of BridgeBio's common stock in the future upon achievement of the milestones.

We evaluated the exchange of the controlled entities' outstanding common stock and equity awards for BridgeBio awards as a modification under ASC 718, *Share Based Payments*. Under ASC 718, a modification is a change in the terms or conditions of a stock-based compensation award. In assessing the accounting treatment, we consider the fair value, vesting conditions and classification as an equity or liability award of the controlled entity equity before the exchange, compared to the BridgeBio equity received as part of the exchange to determine whether modification accounting must be applied. When applying modification accounting, we considered the type of modification to determine the appropriate stock-based compensation cost to be recognized on April 22 and November 18, 2020, (each the "Modification Date"), and subsequent to the Modification Date.

We considered the total shares of common stock and equity awards, whether vested or unvested, held by each participant in each controlled entity as the unit of account. The controlled entity's common stock and equity awards in each unit of account was exchanged for a combination of BridgeBio's common stock, time-based vesting equity awards and/or performance-based milestone awards. Other than the exchange of the controlled entity equity awards for performance-based milestone awards, all other exchanged BridgeBio equity awards retained the original vesting conditions. As a result, there was no incremental stock-based compensation expense resulting from the exchange of time-based equity awards.

At the completion of the Exchange Program on April 22, 2020, we determined $17.4 million of the performance-based milestone awards is probable of achievement and represented the incremental stock-based compensation cost resulting from the modification of time-based equity awards to performance-based milestone awards. These performance-based milestone awards were to be recognized over a period ranging from 0.7 year to 1.7 years. There was no incremental stock-based compensation cost arising from the completion of the Exchange Program on November 18, 2020. Under ASC 718, we account for such performance-based milestone awards as a liability in "Accrued compensation and benefits" and in "Other liabilities" in the consolidated balance sheet due to the fixed milestone amount that will be converted into a variable number of shares of BridgeBio common stock to be granted upon the achievement date.

As of December 31, 2020, we determined that $11.1 million of the $17.4 million incremental stock-based compensation cost above remained probable of achievement and is being recognized over a period ranging from 0.9 year to 2.9 years. For the year ended December 31, 2020, we recognized $9.6 million of stock based compensation cost associated with performance based milestone awards that were determined to be probable as of December 31, 2020. We have recognized stock-based compensation expense of $2.0 million for the year ended December 31, 2020 for performance-based milestone awards that were achieved during the year and settled with 73,248 restricted stock awards due to achievement of regulatory milestones related to IND acceptance that were completed during the year ended December 31, 2020. There were no such compensation awards in the comparative periods in 2019.

Stock Option Grants of BridgeBio

The following table summarizes BridgeBio's stock option activity under the Plans for the period through December 31, 2020:

	Options Outstanding	Weighted-Average Exercise Price per Option	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
	(in thousands, except shares and per share amounts)			
Outstanding as of December 31, 2019	4,626,777	$ 20.10	9.6	$ 70,348
Granted	2,575,143	$ 30.56		
Granted — Exchange Program	1,349,318	$ 2.05		
Exercised	(155,968)	$ 18.43		
Exercised — Exchange Program	(481,837)	$ 1.74		
Cancelled	(267,840)	$ 27.33		
Cancelled — Exchange Program	(12,632)	$ 2.81		
Outstanding as of December 31, 2020	6,778,112	$ 23.83	8.8	$ 320,473
Outstanding as of December 31, 2020 — Exchange Program	854,849	$ 2.22	8.2	$ 58,891
Exercisable as of December 31, 2020	1,736,585	$ 21.22	8.4	$ 86,644
Exercisable as of December 31, 2020 — Exchange Program	667,553	$ 1.75	8.1	$ 46,304

The options granted to employees and consultants are exercisable at the price of the BridgeBio's common stock at the respective grant dates. The options granted have a service condition and generally vest over a period of four years.

The aggregate intrinsic value of options outstanding and exercisable as of December 31 2020 and 2019 is calculated based on the difference between the exercise price and the current fair value the BridgeBio's common stock.

During the year ended December 31, 2020 and 2019, we recognized stock-based compensation expense of $15.6 million and $3.9 million, respectively, related to stock options under the Plans. As of December 31, 2020, there was $43.8 million of total unrecognized compensation cost related to stock options under the Plans that is expected to be recognized over a weighted-average period of 2.6 years.

Restricted Stock Units (RSUs) of BridgeBio

The following table summarizes BridgeBio's RSU activity under the Plans for the year ended December 31, 2020:

	Unvested Shares of RSUs Outstanding	Weighted-Average Grant Date Fair Value
Balance at December 31, 2019	362,163	$ 31.98
Granted	1,054,676	$ 34.18
Vested	(123,321)	$ 33.35
Cancelled	(239,680)	$ 31.16
Balance at December 31, 2020	1,053,838	$ 34.21

The RSUs have a service condition and generally vest over a period of four years.

During the years ended December 31, 2020 and 2019, we recognized stock-based compensation expense of $7.4 million and $0.2 million, respectively, related to shares of RSUs under the Plans. As of December 31, 2020, there was $32.8 million of total unrecognized compensation cost related to RSUs under the Plans that is expected to be recognized over a weighted-average period of 3.2 years.

Restricted Stock Awards (RSAs) of BridgeBio

As disclosed in Note 14, upon the Reorganization, all unvested outstanding management incentive units and common units of BBP LLC were cancelled and converted into shares of BridgeBio's RSAs.

The following table summarizes our RSA activity under the Plans for the year ended December 31, 2020:

	Unvested Shares of RSAs Outstanding	Weighted-Average Grant Date Fair Value
Balance at December 31, 2019	5,603,452	$ 3.63
Granted — Exchange Program	50,145	$ 0.18
Granted — Performance-based milestone awards	73,248	$ 27.27
Vested	(2,362,479)	$ 3.09
Balance at December 31, 2020	3,364,366	$ 4.47

During the years ended December 31, 2020 and 2019, we recognized stock-based compensation expense of $10.7 million and $4.2 million, respectively, related to RSAs under the Plans. As of December 31, 2020, there was $16.5 million of total unrecognized compensation cost related to RSAs under the Plans that is expected to be recognized over a weighted-average period of 2.8 years. The 3,364,366 and 5,603,452 unvested RSAs as of December 31, 2020 and 2019, respectively, are included as outstanding shares disclosed in the consolidated balance sheet as of December 31, 2020 and 2019 as the shares were actually issued but are subject to forfeiture per the terms of the awards.

Market-Based RSUs of BridgeBio

During the year ended December 31, 2019, the Board of Directors approved and granted market-based RSUs that were subject to continuous employment at the time of achievement of the market conditions. One such market-based RSU award includes a market condition based on the Total Shareholders' Return (TSR) of BridgeBio's common stock as compared to the TSR of the Nasdaq Biotechnology Index and the vesting percentage of the award is calculated based on the three-year performance period from vesting commencement date. In connection with the separation of the grantee from BridgeBio in 2020, this particular market-based RSU representing 53,234 shares was forfeited and the previously recognized stock-based compensation expense, which was not material, was reversed. The other market-based RSU award includes a market condition based on BridgeBio's market capitalization reaching $5.0 billion and vests immediately at 100% upon achievement of said market capitalization.

The respective grant date fair values of these awards, which aggregate to $3.8 million for the year December 31, 2019, were determined using a Monte Carlo valuation model and are recognized as compensation expense over the implied service period of the awards.

The following table summarizes our market-based RSU activity under the Plans for the year ended December 31, 2020:

	Unvested Shares of Market-based RSUs Outstanding	Weighted-Average Grant Date Fair Value
Balance at December 31, 2019	129,871	$ 28.98
Granted	2,380	$ 34.81
Vested	(76,637)	$ 41.54
Cancelled	(53,234)	$ 10.90
Balance at December 31, 2020	2,380	$ 34.81

For the year ended December 31, 2020 and 2019, we recognized stock-based compensation expense of $1.0 million and $2.3 million, respectively, related to market-based RSU awards. As of December 31, 2020, unrecognized compensation cost related to market-based RSUs under the Plans was immaterial.

2019 Employee Stock Purchase Plan (ESPP) of BridgeBio

On June 22, 2019, we adopted the 2019 ESPP, which became effective on June 25, 2019 and was amended and restated effective as of December 12, 2019. The ESPP initially reserves and authorizes the issuance of up to a total of 2,000,000 shares of common stock to participating employees. The ESPP provides that the number of shares reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2020, by the lower of: i) 1% of the outstanding number of shares of common stock on the immediately preceding December 31, ii) 2,000,000 shares or iii) such lesser number of shares as determined by the Compensation Committee.

Under the ESPP, eligible employees may purchase shares of BridgeBio common stock through payroll deductions at a price equal to 85% of the lower of the fair market values of the stock as of the beginning or the end of six-month offering periods. An employee's payroll deductions under the ESPP are limited to 15% of the employee's compensation and employees may not purchase more than 3,500 of shares of BridgeBio common stock during any offering period.

During the year ended December 31, 2020 and 2019, we recognized stock-based compensation expense of $1.0 million and $0.4 million, respectively, related to the ESPP. As of December 31, 2020, 3,123,169 shares were reserved for future issuance under the ESPP.

Valuation Assumptions

We used the Black-Scholes model to estimate the fair value of stock options and stock purchase rights under ESPP. For the year ended December 31, 2020, we used the following weighted-average assumptions in the Black-Scholes calculations:

	Year Ended December 31,			
	2020		2019	
	Stock Options	ESPP	Stock Options	ESPP
Expected term (in years)	5.00-6.08	0.40-0.65	5.00-6.08	0.40
Expected volatility	36.3%-46.4%	32.5%-47.6%	36.4%-37.5%	43.4%
Risk-free interest rate	0.31%-1.50%	0.13%-1.57%	1.69%-1.86%	2.12%
Dividend yield	—	—	—	—
Weighted-average fair value of stock-based awards granted	$ 11.29	$ 10.48	$ 7.81	$ 5.51

Equity-Based Awards of BBP LLC

Up until the reorganization, BBP LLC issued management incentive units and common units (collectively, "BBP LLC equity-based awards"). BBP LLC's Second Amended and Restated Limited Liability Company Agreement, Third Amended and Restated Limited Liability Company Agreement and LLC Agreement provided for the issuance of Management Incentive Units and Common Units to employees and consultants. During 2019 and 2018, BBP LLC issued Management Incentive Units and Common Units based on the approval of the board of BBP LLC for each grant date.

Under the terms of the Management Incentive Units' agreements, the vesting schedule is typically 1/60th of the total number of Management Incentive Units, which vest on each monthly anniversary of the vesting commencement date, subject to continued service to BridgeBio. If a Fundamental Transaction takes place, the remaining vesting related to the Management Incentive Units and Common Units will accelerate. Under the terms of the Common Units' agreements, the vesting schedule is typically between two and five years with vesting taking place on each monthly anniversary of the vesting commencement date, subject to continued service to BBP LLC through the applicable vesting date.

No distributions can be made to the holders of Management Incentive Units until the aggregate distributions made to other members (Preferred Unit, Founder Unit and Common Unit members) exceed the Management Incentive Units' participation threshold. BridgeBio has determined that the underlying terms and intended purpose of the Management Incentive Units and Common Units are more akin to an equity-based compensation for employees and consultants than a performance bonus or profit-sharing arrangement.

As described in Note 14, BBP LLC equity-based awards were cancelled and exchanged for shares of BridgeBio restricted common stock. For the years ended December 31, 2019 and 2018, equity-based compensation from BBP LLC equity-based awards was $3.4 million and $3.2 million, respectively.

The following table summarizes authorized BBP LLC equity-based awards activity as if the Management Incentive Units and Common Units were converted to restricted common stock of BridgeBio at the earliest period presented:

	Equivalent Shares of the Corporation's Restricted Common Stock
Balance as of December 31, 2017	9,445,069
Granted	550,677
Cancelled	(1,263)
Balance as of December 31, 2018	9,994,483
Authorized and granted	2,587,939
Cancelled	(842)
Converted into common stock of BridgeBio	(5,762,125)
Converted into unvested restricted common stock of BridgeBio	(6,819,455)
Balance as of December 31, 2019	—

The following table summarizes vested BBP LLC equity-based awards activity as if the Management Incentive Units and Common Units were converted to restricted common stock of BridgeBio at the earliest period presented:

	Equivalent Shares of the Corporation's Restricted Common Stock	Weighted-Average Grant Date Fair Value
Balance at December 31, 2017	2,811,694	$ 0.34
Vested	1,827,623	$ 0.62
Balance at December 31, 2018	4,639,317	$ 0.45
Vested	1,122,808	$ 2.10
Converted into common stock of BridgeBio	(5,762,125)	$ 0.72
Balance at December 31, 2019	—	$ —

The estimated grant-date fair value of each Common Unit and Management Incentive Unit award was calculated using the Black-Scholes option pricing model, based on assumptions as follows:

	Year Ended December 31,	
	2019	2018
Expected term (in years)	1.50	0.75-1.50
Expected volatility	48.0%-49.0%	40.0%-49.0%
Risk-free interest rate	2.34%-2.56%	1.70%-2.56%
Dividend yield	—	—

The fair value of each Common Unit and Management Incentive Unit award was determined using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgement and estimation.

Fair value of Management Incentive Units and Common Units —Because there was no public market for BBP LLC's units as BBP LLC was a private company, BBP LLC's board determined the fair value of Common Units and Management Incentive Units by considering a number of objective and subjective factors, including having contemporaneous and retrospective valuations of its equity performed by a third-party valuation specialist, valuations of comparable peer public companies, sales of BBP LLC's redeemable convertible preferred units, operating and financial performance, the lack of liquidity of BBP LLC's units and general and industry-specific economic outlook.

Expected term —The expected term was based on BBP LLC's expectations with regard to an exit strategy such as an IPO or liquidation event.

Expected volatility — BBP LLC was a private company and lacks company-specific historical and implied volatility information. Therefore, it estimated its expected share volatility based on the historical volatility of a set of publicly traded peer companies and expected to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded share price.

Risk-free interest rate —The risk-free interest rate was determined by reference to the United States Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.

Expected dividend —The dividend yield was assumed to be immaterial based on future distribution expectations throughout the expected term.

Each of the above inputs was subjective and generally required significant judgement and estimation.

Equity Awards of Eidos

Eidos 2016 Equity Incentive Plan

In April 2016, Eidos established its 2016 Equity Incentive Plan (the "Eidos 2016 Plan"), which provides for the granting of equity awards to employees and consultants of Eidos. Awards granted under the Eidos 2016 Plan may be either incentive stock options ("ISOs"), nonqualified stock options ("NSOs") or restricted stock awards. ISOs may be granted only to Eidos employees (including officers and directors who are also employees). NSOs may be granted to Eidos employees and consultants. The exercise price of an ISO and NSO shall not be less than 100% of the estimated fair value of the shares on the date of grant, as determined by the Eidos Board of Directors. The exercise price of an ISO granted to an employee who at the time of grant is a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant, as determined by the Eidos Board of Directors. To date, ISOs and NSOs have a term of ten years and generally vest over a four-year period with annual cliff vesting and the balance monthly over 36 months. Upon completion of the Eidos IPO, the remaining shares available for issuance under the Eidos 2016 Plan were retired.

Eidos Amended and Restated 2018 Stock Option and Incentive Plan

In May 2018, the Eidos Board of Directors and stockholders approved the Amended and Restated 2018 Stock Option and Incentive Plan (the "Eidos 2018 Plan"), to replace the Eidos 2016 Plan. The Eidos 2018 Plan became effective upon the Eidos IPO and is administered by the Eidos Board of Directors or an appointed committee, which determines the types of awards to be granted, including the number of shares subject to the awards, the exercise price and the vesting schedule. Under the Eidos 2018 Plan, 598,000 shares of Eidos' common stock have been initially reserved for the issuance of stock options, restricted stock units and other awards to employees, directors and consultants. Options granted under the Eidos 2018 Plan expire no later than 10 years from the date of grant. The exercise price of each option may not be less than 100% of the fair market value of the common stock at the date of grant. Options may be granted to stockholders possessing more than 10% of the total combined voting power of all classes of stocks of Eidos at an exercise price at least 110% of the fair value of the common stock at the date of grant and the options are not exercisable after the expiration of 10 years from the date of grant. Employee stock options generally vest 25% upon one year of continued service to Eidos, with the remainder in monthly increments over three additional years. Upon adoption of the Eidos 2018 Plan, no additional stock awards will be issued under the Eidos 2016 Plan. Options granted under the Eidos 2016 Plan that were outstanding on the date the Eidos 2018 Plan became effective remain subject to the terms of the Eidos 2016 Plan. In December 2018, the Eidos Board of Directors approved an increase in the number of shares reserved under the Eidos 2018 Plan by 700,000 shares, and this increase was approved by Eidos' stockholders in June 2019. In December 2019, Eidos' Board of Directors approved an additional increase in the number of shares reserved under the 2018 Plan by 1,500,000 shares. As of December 31, 2020, Eidos has reserved 2,798,000 shares of common stock for issuance under the 2018 Plan.

Eidos Employee Stock Purchase Plan

In May 2018, Eidos Board of Directors and stockholders approved the 2018 Employee Stock Purchase Plan, or the 2018 ESPP, which became effective upon the IPO. The 2018 ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended, and is administered by Eidos' Board of Directors and the Compensation Committee of the Board of Directors. Under the 2018 ESPP, 143,520 shares of Eidos' common stock have been initially reserved for employee purchases of Eidos' common stock. The 2018 ESPP allows eligible employees to purchase shares of Eidos common stock at a discount through payroll deductions of up to 20% of their eligible compensation. At the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of Eidos' common stock at the beginning of the offering period or at the end of each applicable purchase period. The first purchase period commenced upon the completion of Eidos' IPO and ended on November 30, 2018. In connection with the Merger Agreement further discussed in Note 5, Eidos did not commence a new offering period on December 1, 2020.

The fair value of the rights granted under the Eidos 2018 ESPP was calculated using the Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,		
	2020	2019	2018
Expected term (in years)	0.50	0.50	0.48
Expected volatility	75.46%	63.06%	70.40%
Risk-free interest rate	0.84%	2.32%	1.50%
Dividend yield	—	—	—

Eidos Stock Options

Activity under the Eidos equity incentive plans is set forth below:

	Options Available for Grant	Options Outstanding	Weighted-Average Exercise Option	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
	(in thousands, except shares and per share amounts)				
Outstanding as of December 31, 2019	1,935,054	1,335,755	$ 16.91	8.77	$ 54,071
Options granted	(685,017)	685,017	$ 46.39		
Options exercised	—	(461,732)	$ 17.96		
Options cancelled	23,762	(23,762)	$ 19.45		
Outstanding as of December 31, 2020	1,273,799	1,535,278	$ 29.71	8.46	$ 156,399
Options exercisable as of December 31, 2020		371,768	$ 18.73	7.86	$ 41,954
Options vested and expected to vest as of December 31, 2020		1,535,278	$ 29.71	8.46	$ 156,399

Aggregate intrinsic value represents the difference between Eidos' estimated fair value of its common stock and the exercise price of outstanding in–the–money options. The total intrinsic value of options exercised was $28.0 million, $12.3 million and $0.9 million for the years ended December 31, 2020, 2019 and 2018, respectively.

The total fair value of Eidos shares vested during the years ended December 31, 2020, 2019 and 2018 was $11.7 million, $5.2 million and $2.5 million, respectively.

Eidos Stock Options Valuation

Prior to the completion of Eidos' IPO, the fair value of Eidos shares of common stock underlying its stock options had historically been determined by Eidos Board of Directors. Because there had been no public market for the Eidos common stock prior to June 2018, Eidos Board of Directors had determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including important developments in the Eidos operations, valuations performed by an independent third party, sales of redeemable convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of Eidos common stock, among other factors. For stock options granted after the completion of the IPO, Eidos determines the fair value of each share of underlying common stock based on the closing price of Eidos common stock as reported on the date of grant.

The fair value of employee of Eidos stock option awards was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,		
	2020	2019	2018
Expected term (in years)	6.06	6.07	6.08
Expected volatility	72.1%	72.4%	72.0%
Risk-free interest rate	0.52%	1.95%	2.87%
Dividend yield	—	—	—

The weighted average fair value of stock-based awards granted to employees during the years ended December 31, 2020, 2019 and 2018 was $28.95 per share, $22.86 per share and $8.46 per share, respectively.

Eidos Restricted Stock

In December 2017, Eidos issued 390,546 shares of common stock for no consideration to the founders pursuant to Eidos' Series Seed Preferred Stock Purchase Agreement and license agreement in connection with certain anti-dilution rights held by these parties. If the shares issued under the license agreement represent less than 1% of the shares issued and outstanding of common stock on an as-converted basis, Eidos will issue additional common stock to the founders and Stanford University. Eidos has the right to repurchase the common stock at the fair value per share on the date of repurchase; this repurchase right lapses as the shares vest. The shares cliff vest 25% after one year and vest monthly thereafter over 36 months. As of December 31, 2020 and 2019, 73,230 shares and 170,866 shares remain subject to repurchase.

Eidos recognizes stock-based compensation expense upon the approval of these awards by the Eidos Board of Directors in September 2017 as vesting provisions are not considered substantive due to the fair value repurchase right. Stock-based compensation expense related to the restricted stock is recognized based on the fair value of the stock on the approval date using the Black-Scholes pricing model. During the years ended December 31, 2020, 2019 and 2018, Eidos recognized zero expense related to these awards.

Eidos Stock-Based Compensation

As of December 31, 2020, there was $24.9 million of total unrecognized compensation cost related to unvested stock-based compensation arrangements under the Eidos 2016 and 2018 Plans. The unrecognized stock-based compensation cost is expected to be recognized over a weighted-average period 2.8 years.

16. Income Taxes

Upon the 2019 Reorganization, BridgeBio is subject to U.S. federal and state income taxes as a corporation. Prior to the 2019 Reorganization, which was tax-free reorganization, BBP LLC was treated as a pass-through entity for U.S. federal income tax purposes, and as such, was generally not subject to U.S. federal income tax at the entity level. Rather, the tax liability with respect to its taxable income was passed through to its unitholders.

The following table presents the components of net loss before income taxes:

	Year ended December 31,		
	2020	2019	2018
	(in thousands)		
Domestic	$ 505,488	$ 288,585	$ 169,451
Foreign	—	—	—
Total loss before income taxes	$ 505,488	$ 288,585	$ 169,451

There was no current or deferred income tax expense or benefit (domestic and foreign) for the years ended December 31, 2020, 2019 and 2018.

The following table presents a reconciliation of the statutory federal rate and our effective tax rate:

	Year ended December 31,		
	2020	2019	2018
Tax at statutory federal rate	21.0 %	21.0 %	21.0 %
Change in valuation allowance	(25.0)	(25.3)	(20.2)
Research and development credits	3.3	4.1	1.6
Stock-based compensation	1.0	—	—
Change in entity status	—	1.7	—
Nontaxable partnership income	—	(1.4)	(1.2)
Other	(0.3)	(0.1)	(1.2)
Effective income tax rate	— %	— %	— %

Significant components of our deferred tax assets and liabilities are as follows:

	December 31,	
	2020	2019
	(in thousands)	
Deferred tax assets:		
Net operating loss carry-forwards	$ 191,308	$ 94,335
Amortization	7,427	5,196
Accruals and reserves	5,707	1,917
Stock-based compensation	5,471	1,820
Tax credits	37,964	18,443
Equity method investment	7,608	7,297
Lease liabilities	3,932	—
Other	613	210
Gross deferred tax assets	260,030	129,218
Less valuation allowance	(224,452)	(128,928)
Deferred tax assets, net of valuation allowance	35,578	290
Deferred tax liabilities:		
Fixed assets	(221)	(290)
Right-of-use assets	(3,514)	—
Debt	(32,938)	—
Deferred tax liabilities	(36,673)	(290)
Net deferred tax assets (liabilities)	$ (1,095)	$ —

As of December 31, 2020, we have net operating loss carryforwards available to reduce future taxable income, if any, for federal and state income tax purposes of approximately $852.5 million and $177.9 million, respectively. The federal net operating losses generated prior to 2018 amounting to $31.8 million will begin to expire in 2036, losses generated after 2018 amounting to $820.7 million will carry over indefinitely and would be subject to an 80% taxable income limitation in the year utilized. State net operating losses will generally begin to expire in 2036.

As of December 31, 2020, we had federal research and development and orphan drug credit carryforwards of $41.0 million, which will expire beginning in 2037 if not utilized. As of December 31, 2020, we have California and other state research and development tax credit carryforwards of $6.3 million. The state research and development tax credits will expire at various dates while the California research and development tax credits will carry over indefinitely.

A valuation allowance is provided for deferred tax assets where the recoverability of the assets is uncertain. The determination to provide a valuation allowance is dependent upon the assessment of whether it is more likely than not that sufficient future taxable income will be generated to utilize the deferred tax assets. Based on the weight of the available evidence, which includes our historical operating losses and forecast of future losses, we provided a full valuation allowance against the deferred tax assets resulting from the tax loss and credits carried forward. As a

result of the issuance of our 2027 Notes in 2020, it was determined that our existing deferred tax assets do not fully offset the deferred tax liabilities when reviewing the reversals of temporary differences. This resulted in a deferred tax liability of $1.1 million that was recognized for the year ended December 31, 2020. The valuation allowance increased by $95.5 million and $79.2 million for the years ended December 31, 2020 and 2019, respectively.

Utilization of the net operating loss and credit carryforwards may be subject to a substantial annual limitation due to an ownership change limitation as provided by section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. In the event that we had a change of ownership, utilization of the net operating loss and tax credit carryforwards may be restricted.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	December 31,	
	2020	2019
	(in thousands)	
Balance at the beginning of the year	$ 7,604	$ 1,182
Additions (reductions) of prior year positions	(224)	2,913
Additions based on tax positions related to current year	5,144	3,509
Balance at the end of the year	$ 12,524	$ 7,604

As of December 31, 2020 and 2019, we have not recorded interest and penalties associated with our unrecognized tax benefits. Our policy is to recognize interest and penalties related to income tax matters in income tax expense.

Our unrecognized gross tax benefits would not reduce the annual effective tax rate if recognized because we have recorded a valuation allowance on our deferred tax assets.

We file federal and various income tax returns. We currently have no federal or state tax examinations in progress. All years are open for examination by federal and state authorities.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act (the “CARES Act”) was signed into law. The CARES Act includes income tax provisions relating to 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. The CARES Act also allowed for the deferral of employer payroll taxes, which we have done and the liability is accounted for in our consolidated financial statement. The provisions of the CARES Act did not have a material impact on our financial statements.

On June 29, 2020, the Governor of California signed Assembly Bill (“AB”) 85 suspending California net operating loss (“NOL”) utilization and imposing a cap on the amount of business incentive tax credits that companies can utilize, effective for tax years 2020, 2021 and 2022. AB 85 will not impact our income tax provisions as we are in taxable loss position.

On December 27, 2020, the Consolidated Appropriations Act of 2021 (“CAA”), a tax, funding and spending bill was signed into law. We have reviewed the legislation and we do not believe the CAA will materially impact our 2020 income tax provision.

17. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding. Diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding, plus all additional common shares that would have been outstanding, assuming dilutive potential common shares had been issued for other dilutive securities. For the years ended December 31, 2020, 2019 and 2018, diluted and basic net loss per common share was identical since potential common shares were excluded from the calculation, as their effect was anti-dilutive.

The following common stock equivalents were excluded from the computation of diluted net loss per share, because including them would have been antidilutive:

	As of December 31,		
	2020	2019	2018
Unvested RSAs	3,364,366	5,603,452	5,355,166
Unvested RSUs	1,053,838	362,163	—
Unvested market-based RSUs	2,380	129,871	—
Unvested performance-based RSUs	73,304	—	—
Unvested performance-based RSAs	22,611	—	—
Common stock options issued and outstanding	7,632,961	4,626,777	—
Estimated shares issuable under performance-based milestone compensation arrangements	4,161,970	—	—
Estimated shares issuable under the ESPP	50,584	—	—
Assumed conversion of 2027 Notes	12,878,305	—	—
	29,240,319	10,722,263	5,355,166

Our 2027 Notes issued in March 2020 are convertible, based on the applicable conversion rate, into cash, shares of our common stock or a combination thereof, at our election. The impact of the assumed conversion to diluted net income per share would be computed using the treasury stock method.

As discussed in Notes 9 and 15, we have performance-based milestone compensation arrangements, whose vesting is contingent upon meeting various regulatory and development milestones, with fixed monetary amounts known at inception that can be settled in the form of cash or equity at our sole election, upon achievement of each contingent milestone. The common stock equivalents of such arrangements were estimated assuming the contingent milestones were achieved as of the reporting date and the arrangements were all settled in equity.

18. Subsequent Events

Closing and Completion of Merger Transactions with Eidos

On January 19, 2021, the stockholders of each of BridgeBio and Eidos voted to approve all proposals related to the Merger Transactions and on January 26, 2021, we closed and completed the Merger Transactions. The acquisition of the Eidos Common Stock was settled through cash payments of $21.3 million and issuance of approximately 26.1 million of our common stock. We also issued 2,776,672 stock options to purchase common stock of BridgeBio and 25,972 shares of BridgeBio RSUs to certain employees of Eidos in exchange for their then outstanding common stock options and RSUs under the Eidos 2016 Plan and the Eidos 2018 Plan.

Upon closing and completion of the Merger Transactions with Eidos, Eidos became our wholly-owned subsidiary. Eidos' common stock ceased to trade on the Nasdaq Global Select Market prior to the opening of business on January 26, 2021 and Eidos' Certification and Notice of Termination of Registration under Section 12(g) of the Exchange Act was filed with the SEC on February 5, 2021.

We have incurred $8.7 million of deferred merger transaction costs that are included in "Other current assets" in our consolidated balance sheet as of December 31, 2020. Through the closing of the Merger Transactions on January 26, 2021, we have incurred estimated transaction costs aggregating to $78.2 million.

Issuance of 2029 Notes

On January 28, 2021, we issued an aggregate of $717.5 million principal amount of our 2.25% Convertible Senior Notes due 2029 (the "2029 Notes"), pursuant to an Indenture dated January 28, 2021 (the "2029 Notes Indenture"), between us and U.S. Bank National Association, as trustee (the "2029 Notes Trustee"), in a private offering to qualified institutional buyers (the "2021 Note Offering") pursuant to Rule 144A under the Securities Act. The 2029 Notes issued in the 2021 Note Offering include $67.5 million aggregate principal amount of 2029 Notes sold to the initial purchasers in (the "2029 Notes Initial Purchasers") pursuant to the exercise in part of the 2029 Notes Initial Purchasers' option to purchase $97.5 million principal amount of additional 2029 Notes. On January 28, 2021, the 2029 Notes Initial Purchasers exercised the remaining portion of their option to purchase $30.0 million principal amount of additional 2029 Notes. The sale of those additional 2029 Notes closed on February 2, 2021.

The 2029 Notes will accrue interest payable semiannually in arrears on February 1 and August 1 of each year, beginning on August 1, 2021, at a rate of 2.25% per year. The 2029 Notes will mature on February 1, 2029, unless earlier converted, redeemed or repurchased. The 2029 Notes are convertible into cash, shares of BridgeBio's common stock or a combination of cash and shares of BridgeBio's common stock, at our election. The Notes are our general unsecured obligations and rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the 2029 Notes; equal in right of payment with all of our liabilities that are not so subordinated, including our 2027 Notes; effectively junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

We received net proceeds from the 2021 Note Offering of approximately $731.7 million, after deducting the 2029 Notes Initial Purchasers' discount and offering expenses. We used approximately $61.3 million of the net proceeds from the 2021 Note Offering to pay for the cost of the capped call transactions and approximately $50.0 million to pay for the repurchase of shares of its common stock in connection with the 2021 Note Offering. We intend to use the remainder of the net proceeds from the 2021 Note Offering for general corporate purposes, which may include research and development and clinical development costs to support the advancement of our drug candidates, including the continued growth of our commercial and medical affairs capabilities, the conduct of clinical trials and preclinical research and development activities; working capital; capital expenditures; repayment of outstanding indebtedness; general and administrative expenses; and other general corporate purposes.

The 2029 Notes Indenture contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the 2029 Notes Trustee or the holders of not less than 25% in aggregate principal amount of the 2029 Notes then outstanding may declare the entire principal amount of all the 2029 Notes plus accrued special interest, if any, to be immediately due and payable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of BridgeBio Pharma, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of BridgeBio Pharma, Inc., its subsidiaries and controlled entities (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, redeemable convertible noncontrolling interests and shareholders' equity, 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 "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

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 Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

2027 Notes — Refer to Note 10 to the financial statements

Critical Audit Matter Description

On March 9, 2020, the Company issued $550 million in aggregate principal amount of 2.50% Convertible Senior Notes due 2027 (the “2027 Notes”) in a private placement offering. As of December 31, 2020, the carrying value of the 2027 Notes was $383.4 million. As the 2027 Notes may be settled in cash upon conversion, the Company determined the 2027 Notes should be separated into liability and equity components. The liability component was calculated by measuring the fair value of a similar liability without an associated conversion feature. The conversion

option was recorded as a component of equity, resulting in a debt discount that represents the difference between the gross proceeds from the issuance of the 2027 Notes and the fair value of the liability component on the date of issuance.

We identified the accounting evaluation and valuation of the 2027 Notes as a critical audit matter, primarily due to significant judgments by management related to: 1) the evaluation of the contractual terms to identify potential embedded derivatives requiring bifurcation from the debt instrument and 2) the estimation of the fair value of the debt component of the convertible notes, which was determined using a discounted cash flow method that is dependent upon significant assumptions related to the Company's implied credit rating and credit spread. Auditing of these accounting and valuation considerations involved challenging and complex auditor judgment, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the accounting evaluation and valuation of the 2027 Notes included, but were not limited to, the following:

- We tested the effectiveness of controls over the Company's accounting for and valuation of the 2027 Notes, including controls addressing the evaluation of embedded derivatives under applicable accounting guidance and estimating the fair value of the standalone liability component.
- We evaluated the Company's accounting analysis of the initial accounting of the 2027 Notes, including the identification of potential embedded derivatives included in the arrangements.
- We evaluated the Company's estimate of the fair value of the liability component of the 2027 Notes by:
    - involving fair value specialists to evaluate the reasonableness of the (1) valuation methodology and (2) valuation assumptions applied including the Company's credit rating and credit spread by developing a developing a range of independent estimates and comparing our estimates to those used by management.
    - testing the source information underlying the significant assumptions and estimates and the mathematical accuracy of the calculation.

Accrued Research and Development Liabilities — *Refer to Notes 2 and 9 to the financial statements*

Critical Audit Matter Description

The Company incurs research and development expenses related to the costs of research and development activities, including third-party service agreements with contract research organizations ("CROs") and contract manufacturing organizations ("CMOs") to provide research and development services related to preclinical studies and clinical trials, which are estimated at each reporting period. As of December 31, 2020, the Company had accrued for $27.3 million of research and development expenses, of which $24.2 million is related to CROs and CMOs. In addition, the Company's total prepaid expenses and other current assets were $35.7 million and other assets were $23.9 million, which included $7.9 million and $14.3 million, respectively, for amounts paid in advance of services incurred to be performed by CROs and CMOs. The Company had incurred $337.0 million of research and development expenses for the year then ended, of which $134.3 million is related to services provided by CROs and CMOs. The Company records these expenses based on estimates of the services and activities completed to date pursuant to the provisions of the signed contracts relative to the amounts invoiced and paid to date, resulting in an accrued liability or prepaid expense balance at period end.

We identified the accrual of these third-party research and development costs as a critical audit matter because of the judgments necessary for management to estimate the cost of services provided but not yet invoiced, the significant volume of transactions and the varied nature of audit evidence obtained from vendor to vendor. The amount of expense recognized and the corresponding accrual and prepaid balances recorded are based on the unique terms and conditions in each arrangement and are often dependent on limited information available from the vendors regarding

the progress of the services through the reporting date. This required extensive audit effort due to the volume and variability in the arrangements and available information from the vendors and required a high degree of auditor judgment when performing audit procedures to audit management's estimates of total expenses, accrued and prepaid balances and evaluating the results of those procedures.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the estimate of research and development expenses and the related accrued and prepaid balances included the following, among others:

- We tested the effectiveness of controls over the Company's research and development expense accrual process, including controls over the estimation of activities completed to date.
- We evaluated publicly available information (e.g., the Company's website, news and press releases, and investor presentations) and board of directors' materials, and corroborated this information gathered with Company personnel responsible for overseeing the clinical trial activities regarding the status of such activities. We then compared this information to the judgements applied in management's estimate of the recorded expenses and corresponding accrual and prepaid balances.
- We evaluated management's ability to accurately estimate accrual of these third-party research and development costs by comparing actual results to management's historical estimates.
- For a sample of contracts, we evaluated the third-party research and development expenses and the corresponding accrued and prepaid expense balances by:
    - inspecting related agreements, including master service agreements, change orders, statements of work, and amendments, and agreeing key provisions of the agreements including timeline, budget, and relevant rates, to the Company's analysis of estimated expenses incurred to date.
    - sending written confirmations directly to contract research organizations or contract manufacturing organizations to confirm completeness of agreements as well as payments received, invoices billed and yet to be billed, and costs incurred to date and inspecting correspondence received directly from them, including status reports, and comparing such information to the amounts used in the Company's estimates.
    - agreeing other third-party information to the inputs used in the Company's analysis and recalculating the Company's estimated expense, accrual, and prepaid balances.
    - performing a lookback analysis by comparing the estimated accrual balance as of December 31, 2020 to the invoices received after year-end to evaluate the Company's ability to estimate the accrual.

/s/ DELOITTE & TOUCHE LLP

San Francisco, California

February 25, 2021

We have served as the Company's auditor since 2018.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

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 periodic and current reports that we file under the Exchange Act of 1934, as amended, with the U.S. Securities and Exchange Commission, or the SEC, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2020 and concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of that date. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Due to the COVID-19 pandemic, in March 2020, certain of our employees began working remotely. We have not identified any material changes in our internal control over financial reporting as a result of these changes to the working environment. We continue to monitor and assess the COVID-19 situation to determine any potential impact on the design and operating effectiveness of our internal controls over financial reporting.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rules 13a-15(f). Our internal control over financial reporting is a process designed under the supervision of our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

As of December 31, 2020, we assessed the effectiveness of our internal control over financial reporting based on the criteria for effective internal control over financial reporting under the 2013 “Internal Control—Integrated Framework,” issued by the Committee of Sponsoring Organizations, or COSO, of the Treadway Commission, under the supervision of, and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer. Based on that assessment, our management concluded that we maintained effective internal control over financial reporting as of December 31, 2020.

Deloitte & Touche LLP, an independent registered public accounting firm, audited the effectiveness of our internal control over financial reporting as of December 31, 2020, as stated in their attestation report, which is included elsewhere herein.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Except as set forth below, the information required by this Item is incorporated by reference from our definitive proxy statement for our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2020.

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions. A current copy of the code is posted on the Corporate Governance section of our website, which is located at https://bridgebio.com. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions, or any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from our definitive proxy statement for our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2020.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated by reference from our definitive proxy statement for our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2020.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated by reference from our definitive proxy statement for our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2020.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference from our definitive proxy statement for our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2020.

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:

The following financial statements and schedules of the Registrant are contained in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K:

2. Financial Statement Schedules:

All schedules have been omitted because of the absence of conditions under which they are required or because the required information, where material, is shown in the financial statements, financial notes or supplementary financial information.

(b) Exhibits required by Item 601 of Regulation S-K:

The exhibits listed in the accompanying Exhibit Index are filed as part of, or incorporated by reference into, this Annual Report on Form 10 K.

ITEM 16. FORM 10-K SUMMARY

None.

Exhibits

Exhibit Number	Exhibit Title	Form	File No.	Exhibit	Filing Date
2.1	Agreement and Plan of Merger, dated as of October 5, 2020, by and among BridgeBio Pharma, Inc., Eidos Therapeutic, Inc., Globe Merger Sub I, Inc. and Globe Merger Sub II, Inc. (incorporated by reference to Exhibit 2.1 to BridgeBio's Current Report on Form 8-K filed with the SEC on October 6, 2020).	8-K	001-38959	2.1	January 26, 2021
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.	8-K	001-38959	3.1	July 3, 2019
3.2	Amended and Restated Bylaws of the Registrant, as currently in effect.	S-4	333-249944	3.2	November 6, 2020
4.1	Specimen Common Stock Certificate.	S-1	333-231759	4.1	June 24, 2019
4.2	Form of Registration Rights Agreement, among the Registrant and certain of its shareholders, dated June 26, 2019.	S-1	333-231759	4.3	June 24, 2019
4.3	Description of Securities.	—	—	—	Filed herewith
4.4	Indenture, dated as of March 9, 2020, by and between BridgeBio Pharma, Inc. and U.S. Bank National Association, as Trustee.	8-K	001-38959	4.1	March 10, 2020
4.5	Form of Global Note, representing BridgeBio Pharma, Inc.'s 2.50% Convertible Senior Notes due 2027.	8-K	001-38959	4.2	March 10, 2020
4.6	Indenture, dated as of January 28, 2021, by and between BridgeBio Pharma, Inc. and U.S. Bank National Association, as Trustee.	8-K	001-38959	4.1	January 29, 2021
4.7	Form of Global Note, representing BridgeBio Pharma, Inc.'s 2.50% Convertible Senior Notes due 2027.	8-K	001-38959	4.2	January 29, 2021
10.1#	Amended and Restated 2019 Stock Option and Incentive Plan and forms of award agreements thereunder.	S-8	333-239718	99.1	July 7, 2020
10.2#	Amended and Restated 2019 Employee Stock Purchase Plan.	10-Q	001-38959	10.3	November 5, 2020
10.3#	Senior Executive Cash Incentive Bonus Plan.	S-1	333-231759	10.3	June 24, 2019

10.4#	Form of Indemnification Agreement, between the Registrant and each of its directors.	S-1	333-231759	10.4	June 24, 2019
10.5#	Form of Indemnification Agreement, between the Registrant and each of its executive officers.	S-1	333-231759	10.5	June 24, 2019
10.6	Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital, Inc., dated as of June 19, 2018.	S-1	333-231759	10.6	May 24, 2019
10.7	First Amendment to the Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital, Inc., dated as of December 28, 2018.	S-1	333-231759	10.7	May 24, 2019
10.8	Lease Agreement, between BridgeBio Pharma LLC and Michael J. Harbour, dated as of March 23, 2017.	S-1	333-231759	10.8	May 24, 2019
10.9†	Exclusive (Equity) Agreement, by and between Eidos Therapeutics, Inc. and the Board of Trustees of the Leland Stanford Junior University, effective as of April 10, 2016, as amended by Amendment No. 1 effective September 25, 2017.	S-1	333-231759	10.9	May 24, 2019
10.10†	License Agreement, between QED Therapeutics, Inc. and Novartis International Pharmaceutical Ltd., dated as of January 29, 2018.	S-1	333-231759	10.10	May 24, 2019
10.11†	Asset Purchase Agreement, among BridgeBio Pharma LLC, Origin Biosciences, Inc., and Alexion Pharma Holding Unlimited Company, dated as of June 7, 2018.	S-1	333-231759	10.11	May 24, 2019
10.12†	Option Agreement, among PellePharm, Inc., Leo Pharma A/S and Leo Spiny Merger Sub, Inc., dated as of November 19, 2018, as amended on March 13, 2019.	S-1	333-231759	10.12	May 24, 2019
10.13†	Asset Purchase Agreement, among Phoenix Tissue Repair, Inc., Shire Human Genetic Therapies, Inc., and Lotus Tissue Repair, Inc., dated as of July 21, 2017.	S-1	333-231759	10.13	May 24, 2019
10.14†	Exclusive License Agreement, between The Regents of the University of California and TheRas, Inc., dated September 28, 2016, as amended by First Amendment effective January 10, 2017, Second Amendment effective August 10, 2017 and Third Amendment effective September 7, 2018.	S-1	333-231759	10.14	May 24, 2019

10.14A†	Fourth Amendment to the Exclusive License Agreement, between The Regents of the University of California and TheRas, Inc., dated December 16, 2019.	10-K	001-38959	10.14A	March 3, 2020
10.15†	Collaboration and License Agreement, between Navire Pharma, Inc. (formerly known as PTP Pharmaceuticals, Inc.) and the Board of Regents of the University of Texas System and The University of Texas M.D. Anderson Cancer Center, dated March 3, 2017, as amended by Amendment No. 1 dated July 10, 2017.	S-1	333-231759	10.15	May 24, 2019
10.16†	Exclusive Patent License Agreement, between The Frederick National Laboratory for Cancer Research, operated by Leidos Biomedical Research, Inc., under sponsorship from the National Cancer Institute, and TheRas, Inc., dated December 14, 2018.	S-1	333-231759	10.16	May 24, 2019
10.17†	Cell Line License Agreement, by and between Life Technologies Corporation and BridgeBio Services, Inc., effective as of November 15, 2018.	S-1	333-231759	10.17	May 24, 2019
10.18	Second Amendment to the Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital Inc., dated as of May 17, 2019.	S-1	333-231759	10.18	May 24, 2019
10.19#	Offer Letter, between BridgeBio Services, Inc. and Neil Kumar, dated December 14, 2017.	S-1	333-231759	10.19	June 11, 2019
10.20#	Offer Letter, between BridgeBio Services, Inc. and Brian Stephenson, dated October 28, 2018.	S-1	333-231759	10.20	June 11, 2019
10.21#	Offer Letter, between Eidos Therapeutics, Inc. and Uma Sinha, dated June 1, 2016, as amended on May 24, 2018.	S-1	333-231759	10.21	June 11, 2019
10.22#	Offer Letter, between BridgeBio Services, Inc. and Charles Homcy, dated February 20, 2019.	S-1	333-231759	10.22	June 11, 2019
10.23#	Offer Letter, between BridgeBio Services, Inc. and Richard Scheller, dated April 5, 2019.	S-1	333-231759	10.23	June 11, 2019
10.24#	Offer Letter, between BridgeBio Services, Inc. and Michael Henderson, dated March 22, 2016, as amended on May 5, 2017.	S-1	333-231759	10.24	June 11, 2019

10.25#	Offer Letter, between Eidos Therapeutics, Inc. and Cameron Turtle, dated June 13, 2018.	S-1	333-231759	10.26	June 11, 2019
10.26#	Offer Letter, between BridgeBio Pharma, Inc. and Brian Stolz, dated September 19, 2019.	10-Q	000-38959	10.2	November 8, 2019
10.27#	Offer Letter, between and BridgeBio Services, Inc. and Yi Ching Yau, dated September 9, 2019.	10-Q	000-38959	10.3	November 8, 2019
10.28#	Consulting Agreement, between Jennifer E. Cook and the Registrant, effective as of October 14, 2019.	10-K	001-38959	10.28	March 3, 2020
10.29	Loan and Security Agreement, by and between Eidos Therapeutics, Inc., Silicon Valley Bank and Hercules Capital, Inc., dated November 13, 2019.	8-K	000-38959	10.1	November 19, 2019
10.30	Form of Tax Sharing Agreement, between the Registrant and each of its subsidiaries.	S-1	333-231759	10.27	June 24, 2019
10.31	Indemnification Agreement, between BridgeBio Pharma LLC and KKR Genetic Disorder, L.P., dated March 26, 2016.	S-1	333-231759	10.28	June 24, 2019
10.32†	License Agreement, by and between Eidos Therapeutics, Inc. and Alexion Pharma International Operations Unlimited Company, dated September 9, 2019.	10-Q	000-38959	10.1	November 8, 2019
10.33†	Collaboration Agreement, by and between BridgeBio Gene Therapy, LLC and Catalent Maryland, Inc., formerly Paragon Bioservices, Inc., dated December 31, 2019.	10-K	001-38959	10.33	March 3, 2020
10.34#	BridgeBio Pharma, Inc. 2019 Inducement Equity Plan.	S-8	333-234803	99.1	November 20, 2019
10.35#	Form of Restricted Stock Award Agreement under BridgeBio Pharma, Inc. 2019 Inducement Equity Plan.	S-8	333-234803	99.2	November 20, 2019
10.36#	Form of Non-Qualified Stock Option Agreement under BridgeBio Pharma, Inc. 2019 Inducement Equity Plan.	S-8	333-234803	99.3	November 20, 2019
10.37#	Form of Restricted Stock Unit Award Agreement under BridgeBio Pharma, Inc. 2019 Inducement Equity Plan.	S-8	333-234803	99.4	November 20, 2019
10.38#	Offer Letter, between BridgeBio Pharma, Inc. and James C. Momtazee, dated February 23, 2020.	10-K	001-38959	10.38	March 3, 2020

10.39#	Director Compensation Policy.	10-K	001-38959	10.39	March 3, 2020
10.40	Third Amendment to the Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital, Inc., dated as of March 2, 2020.	—	—	—	Filed herewith
10.41†	Fourth Amendment to the Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital, Inc., dated as of April 27, 2020.	10-Q	000-38959	10.1	August 11, 2020
10.42	Open Market Sale Agreement℠, dated as of July 7, 2020.	S-3	333-239734	1.2	July 7, 2020
10.43	Form of Confirmation for Capped Call Transactions.	8-K	001-38959	10.1	March 10, 2020
10.44	Purchase Agreement, dated January 25, 2021, by and among BridgeBio Pharma, Inc. and J.P. Morgan Securities LLC and Mizuho Securities USA LLC, as representatives of the several Initial Purchasers.	8-K	001-38959	10.1	January 26, 2021
10.45	Form of Confirmation for Capped Call Transactions.	8-K	001-38959	10.1	January 29, 2021
10.46	Fifth Amendment to the Loan and Security Agreement, between BridgeBio Pharma LLC and Hercules Capital, Inc., dated as of January 25, 2021.	—	—	—	Filed herewith
21	List of Subsidiaries of the Registrant.	—	—	—	Filed herewith
23.1	Consent of Independent Registered Public Accountant Firm.	—	—	—	Filed herewith
24	Power of Attorney (reference is made to signature page hereto).	—	—	—	Filed herewith
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.	—	—	—	Filed herewith
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.	—	—	—	Filed herewith
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.	—	—	—	Filed herewith

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.	—	—	—	Filed herewith
101.INS	Inline XBRL Instance Document.	—	—	—	Filed herewith
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	—	—	—	Filed herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	Filed herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	—	—	—	Filed herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	—	—	—	Filed herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	—	—	—	Filed herewith
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101).	—	—	—	Filed herewith

***** This certification is deemed to accompany this Annual Report on Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent specifically incorporated by reference into such filing.

# Indicates a management contract or any compensatory plan, contract or arrangement.

† Certain confidential portions (indicated by brackets and asterisks) have been omitted from this exhibit in accordance with the rules of the Securities and Exchange Commission.

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.

BridgeBio Pharma, Inc.

Date: February 25, 2021 By: /s/ Neil Kumar

Neil Kumar, Ph.D.
Chief Executive Officer, Director
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Neil Kumar and Brian Stephenson, as their true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to the Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Neil Kumar Neil Kumar, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	February 25, 2021
/s/ Brian Stephenson Brian Stephenson, Ph.D., CFA	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 25, 2021
/s/ Eric Aguiar Eric Aguiar, M.D.	Director	February 25, 2021
/s/ Jennifer E. Cook Jennifer E. Cook	Director	February 25, 2021
/s/ Ronald J. Daniels Ronald J. Daniels	Director	February 25, 2021
/s/ Charles Homcy Charles Homcy, M.D.	Director	February 25, 2021
/s/ Andrew W. Lo Andrew W. Lo, Ph.D.	Director	February 25, 2021

/s/ James C. Momtazee James C. Momtazee	Director	February 25, 2021
/s/ Ali Satvat Ali Satvat	Director	February 25, 2021
/s/ Brenton L. Saunders Brenton L. Saunders	Director	February 25, 2021
/s/ Randal Scott Randal Scott, Ph.D.	Director	February 25, 2021
/s/ Richard H. Scheller Richard H. Scheller, Ph.D.	Director	February 25, 2021

DESCRIPTION OF CAPITAL STOCK OF BRIDGEBIO PHARMA, INC.

The following description of the capital stock of BridgeBio Pharma, Inc. (the "Company", "we", "us" and "our") is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our amended and restated certificate of incorporation (the "certificate of incorporation") and our amended and restated bylaws (the "bylaws"), each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.3 is a part, and by applicable law. Our common stock, par value $0.001 per share (the "common stock"), is registered pursuant to Section 12(b) of the Securities and Exchange Act of 1934, as amended, and trades on the Nasdaq Global Select Market ("Nasdaq") under the symbol BBIO. We encourage you to read our certificate of incorporation, our bylaws and the applicable provisions of the Delaware General Corporation Law for additional information.

Authorized Capital Stock

Our authorized capital stock consists of 500,000,000 shares of common stock, par value $0.001 per share, and 25,000,000 shares of preferred stock, par value $0.001 per share, all of which are undesignated.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. All of our outstanding shares of common stock are, and all of the shares issuable upon conversion of the notes to be sold in this offering will be, when issued, validly issued, fully paid and non-assessable.

Preferred Stock

Our board of directors or any authorized committee thereof has the authority, without further action by our stockholders, to issue up to 25,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action.

Registration Rights

Holders of 65,121,374 shares of our common stock (the "registrable securities") are entitled to rights with respect to the registration of these securities under the Securities Act of 1933, as amended (the "Securities Act"). These rights are provided under the terms of a registration rights agreement, dated June 26, 2019, among us and certain of our shareholders (the "registration rights agreement"). The registration rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses incurred in connection with registrations under the registration rights agreement will be

borne by us, and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered. On July 28, 2020, we registered the registrable securities for resale pursuant to a registration statement on Form S-3ASR (File No. 333-240147) that became effective automatically upon filing.

Demand Registration Rights

The holders of our registrable securities are entitled to demand registration rights. Under the terms of our registration rights agreement, we will be required, upon the request of a holder of at least 10% of our outstanding registrable securities, to file a registration statement and use reasonable best efforts to effect the registration for public resale of these shares and any additional registrable securities requested to be included in such registration by any other holders of our registrable securities.

Short-Form Registration Rights

The holders of our registrable securities are also entitled to short-form registration rights. Pursuant to our registration rights agreement, if we are eligible to file a registration statement on Form S-3, upon the request of a holder of at least 10% of our outstanding registrable securities, we will be required to use our reasonable best efforts to effect a registration of such shares. We are required to effect up to two registrations in any six-month period pursuant to this provision of the registration rights agreement.

Piggyback Registration Rights

The holders of our registrable securities are entitled to piggyback registration rights. If we register any of our securities either for our own account or for the account of other security holders, the holders of our outstanding registrable securities are entitled to include their shares in the registration. Subject to certain exceptions contained in the registration rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering if the underwriters determine that marketing factors require a limitation of the number of shares to be underwritten.

Indemnification

Our registration rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expenses of Registration

We will pay the registration expenses, subject to certain limited exceptions contained in the registration rights agreement, of the holders of the shares registered pursuant to the demand, short-form and piggyback registration rights described above, including the expenses of one counsel for the selling holders.

Expiration of Registration Rights

The registration rights granted under the registration rights agreement will terminate upon the earliest to occur of: (i) such time after our initial public offering when (x) such holder of registration rights and its affiliates holds less than ten percent (10%) of the outstanding capital stock of the company in the aggregate and are not serving as a director or officer of the company, or such holder can obtain from reputable legal counsel (as reasonably determined by such holder) using commercially reasonable efforts a legal opinion that each of such holder and its affiliates is not an “affiliate” of the company as such term is defined under the Securities and Exchange Commission (“SEC”) Rule 144 and (y) all of such holder’s registrable securities could be sold under Rule 144 of the Securities Act or a similar exemption without limitation during a three-month period without registration; (ii) the consummation of a transaction or series of transactions in which a person, or a group of

persons, acquires from our stockholders, shares representing more than 50% of our outstanding voting stock; and (iii) the consummation of a transaction or series of transactions in which a person, or group of persons, acquires the right to receive the majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of the company.

The foregoing description of the registration rights agreement is a summary. For the complete terms of the registration rights agreement, you should refer to the form of registration rights agreement we have filed with the SEC.

Authorized but Unissued Capital Stock

The Delaware General Corporation Law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply so long as our common stock remains listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Anti-Takeover Effects of Provisions of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of the Delaware General Corporation Law and of our certificate of incorporation and bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation

outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or

- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of Our Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non- negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies.

Our certificate of incorporation provides for the division of our Board into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the shares then entitled to vote at an annual election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No Written Consent of Stockholders.

Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of Stockholders.

Our bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements.

Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our bylaws.

Amendment to Certificate of Incorporation and Bylaws.

As required by the Delaware General Corporation Law, any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock.

Our certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors' broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of Forum

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claim for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of or based on a fiduciary duty owed by any of our current or former directors, officers or employees to us or our stockholders; (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or

our certificate of incorporation or bylaws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws or (5) any action asserting a claim governed by the internal affairs doctrine of the State of Delaware. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Limitations of Liability and Indemnification

Our certificate of incorporation contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in
- Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Each of our certificate of incorporation and bylaws provides that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our bylaws also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

Exhibit 10.40

THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT (this "Amendment"), dated as of March 2, 2020, is entered into by and among BRIDGEBIO PHARMA, INC., a Delaware corporation ("New Parent"), BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), SUB20, INC., a Delaware corporation ("Sub20", and together with New Parent, Parent, Services Company and each other Person party thereto from time to time as borrower, from time to time, collectively, "Borrowers", and each, a "Borrower"), and the several banks and other financial institutions or entities party thereto as Lender, constituting the Required Lenders and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

A. Parent, Services Company, Lender and Agent are parties to that certain Loan and Security Agreement, dated as of June 19, 2018, as amended by that certain First Amendment to Loan and Security Agreement, dated as of December 28, 2018, and further amended by that certain Second Amendment to Loan and Security Agreement, dated as of May 17, 2019 (the "Existing Loan Agreement"; and the Existing Loan Agreement, as amended by this Amendment and as further amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement").

B. Sub20 entered into a Joinder Agreement, dated as of July 27, 2018, to become a Borrower pursuant to the Existing Loan Agreement.

C. New Parent entered into a Joinder Agreement, dated as of July 15, 2019, to become a Borrower pursuant to the Existing Loan Agreement.

D. Borrowers, Lender and Agent desire to modify the terms of the Existing Loan Agreement as set forth in this Amendment.

SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

(b) **Rules of Construction**. The rules of construction that appear in the last paragraph of Section 1.1 of the Loan Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

SECTION 2 Amendments to the Loan Agreement.

(a) Upon satisfaction of the conditions set forth in Section 3 hereof, the Existing Loan Agreement is hereby amended as follows:

(i) Exhibit A attached hereto sets forth a clean copy of the Loan Agreement as amended hereby;

(ii) In Exhibit B hereto, deletions of the text in the Existing Loan Agreement (including, to the extent included in such Exhibit B, each Schedule or Exhibit to the Existing Loan Agreement) are indicated by ~~struck-through text~~, and insertions of text are indicated by **bold, double-underlined text**.

(b) **References Within Existing Loan Agreement**. Each reference in the Existing Loan Agreement to "this Agreement" and the words "hereof," "herein," "hereunder," or words of like import, shall mean and be a reference to the Existing Loan Agreement as amended by this Amendment. This Amendment shall be a Loan Document.

SECTION 3 **Conditions of Effectiveness**. The effectiveness of Section 2 of this Amendment shall be subject to Agent's receipt of this Amendment, executed by Agent, Lender and Borrowers.

SECTION 4 **Representations and Warranties**. To induce Agent and Lender to enter into this Amendment, each Borrower hereby confirms, as of the date hereof, that the representations and warranties made by it in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct in all material respects; *provided*, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof and that any representations and warranties made as of a specific date are only true and correct in all material respects as of such date, and that no Event of Default has occurred and is continuing.

SECTION 5 **Miscellaneous.**

(a) **Loan Documents Otherwise Not Affected; Reaffirmation**. Except as expressly amended pursuant hereto or referenced herein, the Loan Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. Lender's and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. Each Borrower hereby reaffirms the security interest granted pursuant to the Loan Documents and hereby reaffirms that such grant of security in the Collateral as granted as of the Closing Date continues without novation and secures all Secured Obligations under the Loan Agreement and the other Loan Documents.

(b) **Conditions**. For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the date hereof specifying its objection thereto.

(c) **Release**. In consideration of the agreements of Agent and Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lender and all such other persons being hereinafter referred to collectively as the "Releasees" and individually as a "Releasee"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which any Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Each Borrower waives the provisions of California Civil Code section 1542, which states:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

Each Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Each Borrower agrees that no

fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above. The provisions of this section shall survive payment in full of the Secured Obligations, full performance of all the terms of this Amendment and the other Loan Documents.

(d) **No Reliance**. Each Borrower hereby acknowledges and confirms to Agent and Lender that such Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses**. Each Borrower agrees to pay to Agent the date hereof the reasonable out-of-pocket costs and expenses of Agent and Lender party hereto, and the fees and disbursements of counsel to Agent and Lender party hereto in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the date hereof.

(f) **Binding Effect**. This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law.** This Amendment and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions.** Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts**. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment, as of the date first above written.

BORROWERS:

BRIDGEBIO PHARMA, INC.

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: Chief Executive Officer

BRIDGEBIO PHARMA LLC

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: Chief Executive Officer

BRIDGEBIO SERVICES INC.

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: Chief Executive Officer

SUB20, INC.

Signature: /s/ Michael Pettigrew

Print Name: Michael Pettigrew

Title: President

[SIGNATURES CONTINUE ON THE NEXT PAGE]

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

EXHIBIT A

(See Attached)

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of June 19, 2018 and is entered into by and among BRIDGEBIO PHARMA, INC., a Delaware corporation ("New Parent"), BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), SUB20, INC., a Delaware corporation ("Sub20", and together with New Parent, Parent, Services Company and each other Person party hereto from time to time as borrower, from time to time, collectively, "Borrowers", and each, a "Borrower"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

RECITALS

A. Borrowers have requested Lender to make available to Borrowers one or more term loans in an aggregate principal amount of up to $75,000,000; and

B. Lender is willing to make such term loan on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrowers, Agent and Lender agree as follows:

SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

"Account Control Agreement(s)" means any agreement entered into by and among Agent, a Borrower and a third party bank or other institution (including a Securities Intermediary) in which such Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts.

"ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit H.

"Achievement Milestone" means Borrowers shall have provided evidence satisfactory to Agent of (i) positive clinical data from the Part A read-out of the ATTRibute-CM Phase 3 trial, such that the data is sufficient to support a New Drug Application, subject to verification by Agent in its reasonable discretion (including supporting documentation reasonably requested by Agent), or (ii) the acceptance of a New Drug Application submitted by any other Platform Company.

"Advance" means the Term Loan Advance.

"Advance Date" means the funding date of any Advance.

"Advance Request" means a request for Advance submitted by Borrower Representative to Agent in substantially the form of Exhibit A.

"Affiliate" means any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question. As used in the definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise. If not otherwise specified or required by the context, "Affiliate" shall refer to an Affiliate of a Borrower.

"Agent" has the meaning given to such term in the preamble to this Agreement.

"Agreement" means this Loan and Security Agreement, as amended, restated, supplemented or otherwise modified from time to time.

"AIG" means The United States Life Insurance Company in the City of New York, and its Controlled Investment Affiliates.

"Amortization Date" means January 1, 2021, provided that if Parent consummates a Qualified IPO, the Amortization Date shall be extended to July 1, 2021, provided further, that the Amortization Date of the Discretionary Advance will be determined prior to the Advance Date thereof.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to any Borrower or any of its Affiliates from time to time concerning or relating to bribery or corruption, including without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

"Anti-Terrorism Laws" means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Assignee" has the meaning given to it in Section 11.13.

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Board" means, with respect to any Person that is a corporation, its board of directors, with respect to any Person that is a limited liability company, its board of managers, board of members or similar governing body, and with respect to any other Person that is a legal entity, such Person's governing body in accordance with its Organizational Documents.

"Borrower" has the meaning given to such term in the preamble to this Agreement.

"Borrower Representative" means BridgeBio Pharma LLC.

"Business Day" means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

"Cash" means all cash, cash equivalents and liquid funds.

"Cash Interest Reduction Amount" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Cash Payment Conditions" means, with respect to any cash payment made under a Permitted Warrant Transaction as a result of the election of "cash settlement" (or substantially equivalent term) as the "settlement method" (or substantially equivalent term) thereunder by New Parent (or its Affiliate) (including in connection with the exercise and/or early unwind or settlement thereof), satisfaction of each of the following events at the time of such payment: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations).

"Cash Settlement Conditions" means, with respect to the settlement by New Parent of any conversion of any Permitted Convertible Debt, satisfaction of each of the following events at the time of the delivery of the conversion consideration: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations).

"Change in Control" means a transaction or series of related transactions (i) pursuant to which, or as a result of which, a single Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (in each case other than any CoC Entity) acquires or holds equity interests of Parent representing (A) a majority of the outstanding voting securities (in each case excluding any unvested voting securities that would not become vested voting securities as a result of such transaction, whether pursuant to the terms of such unvested voting securities, by Board action or otherwise), or (B) the right to receive a majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of Parent, or (ii) resulting in Services Company or any other Subsidiary that is a Borrower ceasing to be a wholly-owned Subsidiary of a Borrower**.** Notwithstanding the foregoing, a "Change in Control" shall not include (a) an initial public offering of Parent's Equity Interests, provided that following such offering, such Equity Interests shall be listed on an established national or international exchange, (b) an SPAC Transaction; (c) any Permitted Transfer, (d) a bona fide private equity or venture capital round of financing in the ordinary course of business, or (e) a Permitted Reorganization.

"Charter" means, with respect to any Person, such Person's formation documents, as in effect from time to time.

"Claims" has the meaning given to it in Section 11.10.

"Closing Date" means the date of this Agreement.

"CoC Entity" means KKR, Viking and AIG.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"Collateral" means the property described in Section 3.

"Compliance Certificate" means a certificate in the form attached hereto as Exhibit F

"Confidential Information" has the meaning given to it in Section 11.12.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed, without duplication of the primary obligation, to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement. For the avoidance of doubt, no Permitted Bond Hedge Transaction or Permitted Warrant Transaction will be considered a Contingent Obligation of Borrower.

"Controlled Account" means a Deposit Account or account in which Investment Property is maintained that is subject to an Account Control Agreement in favor of Agent in form and substance reasonably satisfactory to Agent.

"Controlled Investment Affiliate" means, as to any Person, any other Person, which directly or indirectly is in control of, is controlled by, or is under common control with such Person.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Discretionary Advance" has the meaning set forth in Section 2.1(a)(iii).

"Due Diligence Fee" means $25,000, which fee has been paid to Agent prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

"Equity Cure Investment" means any Investment by a Borrower in a Platform Company or Subsidiary thereof, whether directly or indirectly through an Affiliate or another Platform Company, if (i) immediately prior to the consummation of such Investment, an event of default has occurred and is continuing pursuant to the terms of any secured loan facility to which such Platform Company or Subsidiary is a party, which could result in the acceleration of Indebtedness of such Platform Company in excess of $500,000 or more, and (ii) immediately after the making of such Investment, such event of default will be cured or waived.

"Equity Documents" means any agreement entered into in connection with an equity financing or otherwise among holders of the Equity Interests of a Person or otherwise binding upon the holders of the Equity Interests of such Person.

"Equity Interests" means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Event of Default" has the meaning given to it in Section 9.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"Excluded Accounts" means Deposit Accounts (i) established in the ordinary course of business and used exclusively as a payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of employees of Borrower, provided that the aggregate balance maintained in such Deposit Accounts shall not exceed the amount to be paid for the following four payroll periods at any time, and (ii) used exclusively as escrow accounts, or trust accounts, (iii) used exclusively to maintain Cash subject to a Lien permitted pursuant to the defined term "Permitted Liens", provided that, in each case, any Excluded Account shall be identified to Agent in writing;

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its

applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof), or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes that are imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Term Commitment pursuant to a law in effect on the date that (i) such Lender acquires such interest in the Loan or Term Commitment or (ii) such Lender changes its lending office, except in each case to the extent, pursuant to Section 2.9, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) any withholding Taxes imposed under FATCA, and (d) Taxes attributable to such Recipient's failure to comply with Section 2.9(d).

"Facility Charge" means, collectively, (i) $350,000, due on the Closing Date (which has been paid prior to the First Amendment Effective Date), (ii) $100,000, due on the First Amendment Effective Date (which has been paid prior to the Second Amendment Effective Date), and (iii) $200,000, due on the Second Amendment Effective Date.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among governmental authorities and implementing such Sections of the Code

"FDA" means the United States Food and Drug Administration.

"Financial Statements" has the meaning given to it in Section 7.1.

"First Amendment Effective Date" means December 28, 2018.

"Foreign Lender" shall mean a Lender that is not a U.S. Person.

"GAAP" means generally accepted accounting principles in the United States of America, as in effect from time to time.

"Indebtedness" means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, as determined under GAAP, and (d) all Contingent Obligations. For the avoidance of doubt no Permitted Warrant Transaction shall be considered Indebtedness of the Parent.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Borrower under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

"Intellectual Property" means all of each Borrower's Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; each Borrower's applications therefor and reissues, extensions, or renewals thereof; and each Borrower's goodwill associated with any of the foregoing, together with each Borrower's rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

"Investment" means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of any material asset or property of another Person.

"Investment Company Act" means the Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder.

"Joinder Agreements" means a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

"KKR" means KKR Genetic Disorder L.P., a Delaware limited partnership (together with its successors and assigns) and its Controlled Investment Affiliates.

"Lender" has the meaning given to such term in the preamble to this Agreement.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests.

"Lien" means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

"Loan" means the Advances made under this Agreement.

"Loan Documents" means this Agreement, the Term Note (if any), the ACH Authorization, the Account Control Agreements, any Joinder Agreements, all UCC Financing Statements, and any other documents executed in connection with the Secured Obligations and the security interest granted in connection therewith, or delivered pursuant to this Agreement or any of the foregoing Loan Documents, in each case, as the same may from time to time be amended, modified, supplemented or restated, but in each case excluding ministerial notices or ordinary course communications.

"Market Capitalization" means, as of any date of determination, the product of (a) the number of shares of Parent's or New Parent's common stock publicly disclosed in the most recent filing of Parent or New Parent with the United States Securities Exchange Commission as outstanding as of such date of determination and (b) the closing price of Parent's or New Parent's common stock (as quoted on Bloomberg L.P.'s page or any successor page thereto of Bloomberg L.P. or if such page is not available, any other commercially available source providing quotations of such closing price as designated by Agent from time to time) on such date of determination.

"Material Adverse Effect" means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrowers and each of its Subsidiaries taken as a whole; or (ii) the ability of Borrowers to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent's Liens on the Collateral or the priority of such Liens.

"Maturity Date" means July 1, 2022, provided that if Parent consummates a Qualified IPO, the Maturity Date shall be January 1, 2023, provided further, that the Maturity Date of the Discretionary Advance will be determined prior to the Advance Date thereof.

"Maximum Rate" shall have the meaning assigned to such term in Section 2.2.

"Net Cash Proceeds" means the amount of all Cash proceeds (including deferred compensation) received (directly or indirectly) by or on behalf of a Borrower (if on behalf, then for the account of such Borrower), or distributable to a Borrower (to the extent such proceeds which are distributable are not distributed at the direction of such Borrower or as a result of such Borrower voting Equity Interests owned in favor of any corporate action that would result in such proceeds not being actually distributed), from time to time, as a result of a Prepayment Event, after deducting therefrom, without duplication, (x) reasonable fees, commissions, expenses and other direct costs related thereto and required to be paid or payable by such Borrower (or the applicable Portfolio Company or its applicable Subsidiary) in connection with such Prepayment Event, and (y) Taxes paid, payable, or determined by such Borrower to be payable or attributable for payment in connection with such transaction to any taxing authorities by such Borrower (or the applicable Portfolio Company or its applicable Subsidiary), to the extent then paid or payable and reasonably attributable to such transaction, and (z) any cash reserves required to be maintained by such Borrower

(or the applicable Portfolio Company or its applicable Subsidiary) in connection with such transaction in accordance with GAAP or applicable law, provided that when any reserve or any portion thereof is no longer required to be maintained such amount shall be considered Net Cash Proceeds then received, and provided further, that Borrowers shall, at Agent's reasonable request, provide such calculations or evidence of costs deducted in arriving at Net Cash Proceeds as Agent may reasonably require to confirm the calculation of Net Cash Proceeds in accordance with the foregoing it being understood and agreed that the following shall not be deemed "distributable" to a Borrower for purposes of the foregoing: (1) the amount of all Cash proceeds (including deferred compensation) which are required to prepay Indebtedness of the applicable Platform Company or its Subsidiary pursuant to the terms of such Indebtedness, (2) the amount of any Cash proceeds which are not permitted to be distributed pursuant to the terms of Indebtedness pursuant to a loan facility of the applicable Platform Company that exists on the date such Cash proceeds are received by such Platform Company and that was not entered into for the purpose of avoiding any obligation to make a prepayment of the Secured Obligations, and (3) the amount of all Cash proceeds (including deferred compensation) from a sale of a material part of the assets of a Platform Company or a Subsidiary thereof (other than a sale of all or substantially all such Platform Company's assets, on a consolidated basis), or an exclusive License by a Platform Company or a Subsidiary thereof (other than the License of Intellectual Property that constitutes all or substantially all the assets of such Platform Company, on a consolidated basis), in each case, in the ordinary course of business of such Platform Company or Subsidiary, to the extent the board of directors or similar governing body of such Platform Company or Subsidiary has approved the reinvestment of such proceeds to purchase assets useful in the business of such Platform Company or Subsidiary, or pay other expenses, in each case, in the ordinary course of business.

"New Drug Application" means a new drug application filed with the FDA.

"Non-Disclosure Agreement" means that certain Non-Disclosure Agreement/Confidentiality Agreement by and between Borrower Representative and Agent dated as of March 13, 2018.

"Non-Operating Subsidiary" means a Subsidiary of a Borrower other an Operating Company, and including, for avoidance of doubt, any alternative investment vehicle or other special purpose entity which holds, directly or indirectly, Investments of or on behalf of Parent, or any other Subsidiary primarily in the business of investing, reinvesting, holding or trading in securities.

"New Parent" has the meaning given to such term in the preamble hereto.

"OFAC" means the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Operating Company" means a Person which is predominately in the business of research, development, manufacturing, sale or marketing of products and activities related thereto, or a Person holding assets, including without limitation Intellectual Property that are useful for a Person that is predominately in the line of business described above and in anticipation of such Person commencing operations in such line of business and which Parent intends to cause to commence operations.

"Organizational Documents" means with respect to any Person, such Person's formation documents, and (a) if such Person is a corporation, its bylaws, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received

payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"Parent" has the meaning given to such term in the preamble hereto.

"Patent License" means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement a Borrower now holds or hereafter acquires any interest.

"Patents" means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

"Permitted Bond Hedge Transaction" means any call or capped call option (or substantively equivalent derivative transaction) relating to New Parent's common stock (or other securities or property following a merger event or other change of the common stock of New Parent) purchased by New Parent in connection with the issuance of any Permitted Convertible Debt and as may be amended in accordance with its terms; *provided* that, the net purchase price of any such call option transaction less the amount received by New Parent in respect of any Permitted Warrant Transaction in connection with such issuance of Permitted Convertible Debt shall not exceed 20% of the gross proceeds to New Parent from such issuance of Permitted Convertible Debt; provided further that the terms, conditions and covenants of each such call option transaction are customary for agreements of such type; provided further that (1) a certificate of New Parent as to the satisfaction of such requirement (described in the immediately preceding proviso) delivered at least two (2) Business Days prior to entering into such transaction, together with a reasonably detailed description of the material terms, conditions and covenants of such transaction or drafts of documentation relating thereto, stating that New Parent has determined in good faith that such terms, conditions and covenants satisfy the foregoing requirement, shall be conclusive evidence of satisfaction thereof unless Agent notifies the Borrower within such two (2) Business Day period that Agent disagrees, in its commercially reasonably judgment, with such determination (which notice shall include a description of the basis upon which Agent disagrees)) and (2) the Agent acknowledges that the terms, conditions and covenants of the call option transactions that the Company intends to enter into substantially concurrently with the Third Amendment to Loan and Security Agreement on the Third Amendment Effective Date, drafts of the documentation of which have been provided to Lender, are customary for agreements of such type.

"Permitted Convertible Debt" means Indebtedness of the New Parent that is convertible into a fixed number (subject to customary anti-dilution adjustments, "make-whole" increases and other customary changes thereto) of shares of common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent), cash or any combination thereof (with the amount of such cash or such combination determined by reference to the market price of such common stock or such other securities); provided that such Indebtedness shall (a) not require any scheduled amortization or otherwise require payment of principal prior to, or have a scheduled maturity date, earlier than, one hundred eighty (180) days after the Maturity Date, (b) be unsecured, (c) not be guaranteed by any Subsidiary of New Parent, and (d) be on terms and conditions customary for Indebtedness of such type; provided further that (1) a certificate of New Parent as to the satisfaction of the conditions described in clause (d) delivered at least two (2) Business Days prior to the incurrence of such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of documentation relating thereto, stating that New Parent has determined in good faith that such terms and conditions satisfy the foregoing requirements of clause (d), shall be conclusive unless Agent notifies the Borrower within such two (2) Business Day period that Agent disagrees, in its commercially reasonable judgment, with such determination which notice shall include a description of the basis upon which Agent disagrees) and (2) the Agent acknowledges that the terms and conditions of the convertible Indebtedness, drafts of the documentation of which have been provided to Agent, that the Company intends to issue substantially concurrently with the Third Amendment to Loan and Security Agreement on the Third Amendment Effective Date are customary for Indebtedness of such type.

"Permitted Indebtedness" means:

(a) Indebtedness of a Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A;

(c) Indebtedness to trade creditors incurred in the ordinary course of business and Indebtedness incurred in the ordinary course of business with corporate credit cards;

(d) Subordinated Indebtedness;

(e) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of a Borrower or a Subsidiary for real estate purposes in the ordinary course of business in an amount up to One Million Dollars ($1,000,000), and otherwise in an amount not to exceed $500,000 at any time outstanding;

(f) Indebtedness incurred to finance the acquisition of (i) equipment to be used for the development, testing and manufacturing of products, or (ii) other equipment, provided that the aggregate principal amount of Indebtedness outstanding at any time to finance equipment other than as described in subclause (i) shall not exceed $250,000;

(g) Intercompany Indebtedness among Borrowers;

(h) Indebtedness incurred to finance insurance premiums in the ordinary course of business;

(i) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(j) other unsecured Indebtedness in an amount not to exceed $250,000 at any time outstanding;

(k) Permitted Convertible Debt in an aggregate principal amount not to exceed $550,000,000 at any one time outstanding; and

(l) extensions, refinancings and renewals of any Permitted Indebtedness described in clause (b) above, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon the applicable Borrower, as the case may be, and subject to any limitations on aggregate amount of Indebtedness of such type, to the extent described in one of the foregoing clauses of this defined term.

"Permitted Investment" means:

(a) Investments existing on the Closing Date which are disclosed in Schedule 1B;

(b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (ii) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (iii) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein, (iv) money market accounts, and (v) Investments permitted by Borrower's investment policy, provided that Agent has approved such investment policy in writing;

(c) Repurchases by Parent of its Equity Interests issued to managers, advisory members, officers, employees, consultants, directors or other service providers of Parent, or officers, employees, consultants or other consultants of any Platform Company who are acting in such capacity on behalf of Parent of Equity Interests of Parent to the extent such Equity Interests are subject to a repurchase option upon the termination of service or otherwise in accordance with the applicable equity incentive plan, provided that the aggregate amount of such repurchases per fiscal year shall not exceed Five Hundred Thousand Dollars ($500,000) per fiscal year;

(d) Investments accepted in connection with Permitted Transfers;

(e) Investments received in connection with the bankruptcy or reorganization of a customer or supplier in the ordinary course of business;

(f) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions in the ordinary course of business in an aggregate amount outstanding not to exceed One Million Dollars ($1,000,000) at any time;

(g) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds relating to the purchase of Units of Parent pursuant to management incentive plans or other similar arrangements approved by Parent's Board;

(h) Investments consisting of travel advances in the ordinary course of business in an amount not to exceed $200,000;

(i) Investments in Qualified Subsidiaries, provided that each such Qualified Subsidiary is directly or indirectly wholly-owned by Parent, and that such Qualified Subsidiary has entered into a Joinder Agreement and has executed and delivered such other documents as shall be reasonably requested by Agent in connection therewith;

(j) Investments in Deposit Accounts, subject to compliance with Section 7.12 hereof;

(k) Investments consisting of (i) the ownership of Equity Interests of Platform Companies (whether as a result of a formation of a new Platform Company, the purchase of additional Equity Interests of a Platform Company, the formation of or contribution to a joint venture, or any other capital contribution a Platform Company), (ii) loans to a Platform Company, (iii) the purchase of capital assets to be used for the development, testing and manufacturing products (whether such capital assets are to be held by a Borrower or to be contributed to a Platform Company), in each case, consistent in all material respects with Parent's practices as of the Closing Date, provided that no Borrower shall make Investments in any Platform Company that is in default with respect to Indebtedness in excess of $500,000, except for (x) Equity Cure Investments up to $3,000,000 for any given Platform Company and up to $15,000,000 in the aggregate for all Platform Companies, in each case, during the term of this Agreement, (y) to fund any mandatory legal and regulatory expenses of a Platform Company when due, or (z) as otherwise approved by Agent in writing;

(l) New Parent's entry into (including payments of premiums in connection therewith), and the performance of obligations under, any Permitted Bond Hedge Transactions and Permitted Warrant Transactions in accordance with their terms; and

(m) additional Investments that do not exceed $500,000 in the aggregate.

"Permitted Liens" means any and all of the following:

(a) Liens in favor of Agent or Lender;

(b) Liens existing on the Closing Date which are disclosed in Schedule 1C;

(c) Liens arising by operation of law in favor of materialmen, artisans, mechanics, carriers warehouseman, landlords and other Persons securing ordinary course obligations which are not yet delinquent and not in connection with borrowed money;

(d) Liens for Taxes, fees, assessments or other governmental charges or levies, either (i) not delinquent or (ii) being contested in good faith by appropriate proceedings, provided that Borrowers maintain adequate reserves therefor in accordance with GAAP;

(e) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder;

(f) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;

(g) leasehold interests in leases or subleases and licenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor

(h) Liens on equipment, software embedded in such equipment, and proceeds thereof, which (i) secure Permitted Indebtedness described in clause (e) of the defined term "Permitted Indebtedness" above, or (ii) exist at the time such equipment is acquired by a Borrower;

(i) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(j) Liens in connection with Indebtedness described in clause (h) of the defined term "Permitted Indebtedness", provided that such Lien is limited to insurance proceeds arising from the subject insurance policy and the unearned portion of premium payments, and provided that financed premium payments are paid when due;

(k) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms or securities intermediaries solely to secure payment of amounts due in the ordinary course of business in connection with the maintenance of Deposit Accounts or securities accounts;

(l) easements, servitudes, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property;

(m) Licenses described in clause (b) of the defined term "Permitted Transfer";

(n) (i) Liens on Cash securing obligations permitted in accordance with clause (e) of the defined term "Permitted Indebtedness" in an aggregate amount not to exceed the reimbursement obligation secured, and (ii) security deposits in connection with real property leases in an aggregate amount not to exceed $1,000,000 at any time;

(o) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (a) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by

any payment thereon) does not increase, and subject to any limitation with respect to the amount secured by such Lien of such type, to the extent described in one of the foregoing clauses of this defined term; and

(p) to the extent constituting Liens, restrictions arising under applicable securities laws as a result of any Borrower's any/or any Agent's or Lender's status as an "affiliate" and/or "insider" of the issuer of any Equity Interests constituting Collateral and/or the status of any Equity Interests constituting Collateral as "restricted securities" under Rule 144 promulgated under the United States Securities Act of 1933, as amended.

"Permitted Reorganization" means a transaction or series of transactions pursuant to which (i) a newly formed holding company, which shall be a Delaware corporation ("New Parent"), shall create a wholly-owned Subsidiary, which shall be a Delaware limited liability company ("Merger Sub"), and (ii) Merger Sub shall merge with and into Parent, with Parent being the surviving entity of such merger, provided that (x) Parent shall have notified Agent at least five (5) Business Days prior to the consummation of such merger, (y) Agent shall have received copies of the transaction documents pursuant to which the transactions will be effected, and (z) upon the completion of such transaction or series of transactions or promptly (but no later than ten (10) Business Days) thereafter, New Parent shall have entered into a Joinder Agreement and any other collateral security documents necessary to grant Agent a first priority perfected security interest in the Collateral, subject to Permitted Liens.

"Permitted Transfers" means:

(a) sales of Inventory in the ordinary course of business;

(b) non-exclusive Licenses and similar arrangements for the use of Intellectual Property of in the ordinary course of business and Licenses to Platform Companies in the ordinary course of business;

(c) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business;

(d) use of cash in the ordinary course of business in a manner not prohibited by the terms of this Agreement;

(e) dispositions by Borrower of Investments in Platform Companies in accordance with Parent's Organizational Documents, subject to Section 2.4(b);

(f) transfers among Borrowers; and

(g) other transfers of assets having a fair market value of not more than $500,000 in the aggregate in any fiscal year.

"Permitted Warrant Transaction" means any call option, warrant or right to purchase (or substantively equivalent derivative transaction) relating to New Parent's common stock (or other securities or property following a merger event or other change of the common stock of New Parent) and/or cash (in an amount determined by reference to the price of such common stock) sold by Parent substantially concurrently with any purchase by New Parent of a related Permitted Bond Hedge Transaction and as may be amended in accordance with its terms; *provided* that (x) that the terms, conditions and covenants of each such call option transaction are customary for agreements of such type, as determined by Lender in its commercially reasonable discretion and (y) such call option transaction would be classified as an equity instrument in accordance with GAAP; *provided further* that a certificate of New Parent as to the satisfaction of such requirement (described in the immediately preceding proviso) delivered at least two (2) Business Days prior to the entry into such transaction, together with a reasonably detailed description of the material terms, conditions and covenant of such transaction or drafts of documentation relating thereto, stating that Parent has determined in good faith that such terms, conditions and covenants satisfy the foregoing requirement, shall be conclusive unless Agent notifies the Borrower within such two (2) Business Day period that Agent disagrees, in its commercially reasonable judgment, with such determination (which notice shall include a description of the basis upon which Agent disagrees).

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

"PIK Deferral Period" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Platform Company" means any Operating Company in the life science sector and focused on the development and commercialization of products, and in which a Borrower has made an Investment (whether by capital contribution, the acquisition of the Equity Interests thereof or in connection with a joint venture, corporate collaboration or similar corporate structure) in accordance with the terms of this Agreement, its Organizational Documents and consistent in all material respect with past practices, including each Operating Company in which Borrower maintains an Investment as of the Closing Date.

"Pledged Collateral" means

(a) all Equity Interests now owned or hereafter acquired by a Borrower;

(b) with respect to any limited liability company membership units or general or limited partnership interests now owned or hereafter acquired by a Borrower: (i) all payments or distributions whether in cash, property or otherwise, at any time owing or payable to such Borrower on account of its interest as a member or partner, as the case may be, in any of the issuers of such Equity Interests or in the nature of a management or other fee paid or payable by any of such issuers to such Borrower; (ii) all of such Borrower's rights and interests under each of the Organizational Documents, including all voting and management rights and all rights to grant or withhold consents or approvals; (iii) all rights of access and inspection to and use of all books and records, including computer software and computer software programs, of each of such issuers; (iv) all other rights, interests, property or claims to which such Borrower may be entitled in its capacity as a partner or a member of any such issuer; and (v) all proceeds, income from, increases in and products of any of the foregoing, in each case subject to the terms of this Agreement;

(c) all additional Equity Interests from time to time acquired or formed by a Borrower in any manner (which additional Equity Interests shall be deemed to be part of the Pledged Collateral whether or not Schedule 5.15 has been updated in accordance this Agreement), and any certificates, if applicable, representing such additional Equity Interests;

(d) all rights and interests of a Borrower in respect of a joint venture; and

(e) all dividends, distributions, cash, instruments and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such Equity Interests, in each case subject to the terms of this Agreement.

"Prepayment Charge" has the meaning assigned to such term in Section 2.4(a).

"Prepayment Event" means (i) any sale of Pledged Collateral (ii) the sale of a material portion of Collateral (other than Pledged Collateral), whether in a single transaction or series of related transactions, (iii) the sale by a Platform Company or any of its Subsidiaries of assets (including Intellectual Property) of such Platform Company or Subsidiary, to the extent the subject assets constitute all or a material part of the applicable Platform Company's assets, on a consolidated basis, (iv) the exclusive License by a Platform Company or its Subsidiary of its Intellectual Property (except to the extent exclusive only with respect to discrete geographic territories other than the United States) to the extent the subject Intellectual Property constitutes all or a material part of the applicable Platform Company's assets, determined on a consolidated basis, or (v) the repurchase or redemption of Pledged Collateral by a Platform Company.

"Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by a Platform Company or any of its Subsidiaries or which a Platform Company or such Subsidiary intends to sell, license, or distribute in the future including any products or service

offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by a Platform Company since each of its formation.

"Qualified IPO" means either (i) an initial public offering (and any follow-on offerings within six (6) months of such initial public offering) of Parent's or New Parent's common Equity Interests in an underwritten public offering that results in such common Equity Interests being listed on a United States national securities exchange, and as a result of which Parent receives not less than $225,000,000 in net cash proceeds, or (ii) an SPAC Transaction.

"Qualified Subsidiary" means any direct or indirect Non-Operating Subsidiary.

"Receivables" means (i) all of each Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

"Recipient" means Agent, Lender or any other recipient of any payment to be made by or on account of the Secured Obligations.

"Redemption Conditions" means, with respect to any redemption by New Parent of any Permitted Convertible Debt, satisfaction of each of the following events at the time of the issuance of the related redemption notice: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations (after giving pro forma effect to the maximum potential consideration deliverable upon redemption or conversion of such Permitted Convertible Debt pursuant to the terms of such redemption notice).

"Register" has the meaning given to it in Section 11.7.

"Required Lenders" means at any time, the holders of more than 50% of the unpaid principal amount of the Term Loan Advance then outstanding.

"Sanctioned Country" means, at any time, a country or territory which is the subject or target of any Sanctions.

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

"Sanctions" means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom.

"Second Amendment Effective Date" means May 17, 2019.

"Secured Obligations" means Borrowers' obligations under this Agreement and any Loan Document, including any obligation to pay any amount now owing or later arising, but excluding in all cases any warrant or other right to purchase Equity Interests of Parent in connection with any Loan Document.

"Services Company" has the meaning given to such term in the preamble to this Agreement.

"SPAC" means a newly formed special purpose acquisition entity, which (i) has been formed with the purpose of raising capital, (ii) has completed an initial public offering resulting in the Equity Interests of such

entity being listed on a United States national securities exchange, and (iii) does not conduct any material business or maintain any material assets other than Cash.

"SPAC Transaction" means an acquisition, merger or other business combination between Parent and an SPAC, provided that (i) the surviving entity shall be Parent, (ii) the transaction shall result in Parent being listed on a United States national securities exchange, (iii) Parent shall receive not less than $225,000,000 in net cash proceeds as a result of the transaction, and (iv) Borrowers shall have provided ten (10) Business Days prior written notice of the transaction to Agent, and Agent shall have received copies of the material documents entered into to effect the SPAC Transaction, as Agent may reasonably request, together with any documents that Agent may reasonably request to maintain Agent's security interest and other rights with respect to Borrowers and the Collateral pursuant to this Agreement.

"Subordinated Indebtedness" means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its reasonable discretion and subject to a subordination agreement in form and substance satisfactory to Agent in its reasonable discretion on customary deep subordination terms.

"Subsequent Financing" means the next equity offering of Parent consummated after the Closing Date which (i) is broadly marketed or offered to multiple investors, and (ii) pursuant to which Parent is offering to sell equity for an aggregate purchase price of at least Ten Million Dollars ($10,000,000).

"Subsidiary" means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which a Borrower owns or controls, directly or indirectly, 50% or more of the outstanding voting securities.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers as set forth in Section 2.1.

"Term Loan Advance" means, individually or collectively, as the context may require, a Tranche I Advance, Tranche II Advance, Tranche III Advance or Discretionary Advance.

"Term Loan Cash Interest Rate" means, for any day a per annum rate of interest equal to (a), in case of the Tranche I Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 4.35%, and (ii) 9.35%, (b) in case of the Tranche II Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.35%, and (ii) 9.10%, and (c) in case of the Tranche III Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.10%, and (ii) 9.10%, provided that if Parent consummates a Qualified IPO, the Term Loan Cash Interest Rate applicable to the Tranche I Advance and Tranche II Advance shall be reduced to a per annum rate of interest equal to (a) in case of the Tranche I Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.85%, and (ii) 8.85%, (b) in case of the Tranche II Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 2.85%, and (ii) 8.60%, provided further that the interest rate applicable to the Discretionary Advance will be determined prior to the Advance Date thereof. If Parent consummates a Qualified IPO, Parent may elect, by prior written notice to Agent at least five (5) Business Days prior to the first Business Day of a month, to reduce the then effective per annum rates of interest applicable to the Tranche I Advance, Tranche II Advance, and Tranche III Advance, respectively, by up to 1.50% (the amount of such reduction, the "Cash Interest Reduction Amount") for a period specified in such notice, provided that such period shall begin on the first Business Day of the next month and shall end on the last day of the third month or any subsequent month thereafter (the "PIK Deferral Period"), provided that after the expiration of the PIK Deferral Period, the reduction to the rates of interest applicable to the Tranche I Advance Tranche II Advance and Tranche III Advance shall cease to apply. If during a PIK Deferral Period, Parent desires to terminate the PIK Deferral Period prior to the previously requested end date of the PIK Deferral Period, Parent may by written notice to Agent at least five Business Days prior to the previously scheduled end date of the PIK Deferral Period, elect an earlier end date (which must be the last day of a month that is no earlier than the last day of the third month after the commencement

of the PIK Deferral Period). If during a PIK Deferral Period, Parent desires to change the Cash Interest Reduction Amount, Parent may by written notice to Agent at least five Business Days prior to the first Business Day of the month when such change is to take effect, elect a different Cash Interest Reduction Amount, provided that the Cash Interest Reduction Amount shall not be changed more frequently than once during any consecutive three month period.

"Term Loan PIK Interest" has the meaning set forth in Section 2.1(c)(ii).

"Term Loan PIK Interest Rate" means, for any day a per annum rate of interest equal to (a) during any PIK Deferral Period, the Cash Interest Reduction Amount, multiplied by 1.2, and (b) otherwise, 0.00%.

"Term Note" means a Secured Term Promissory Note in substantially the form of Exhibit B.

"Third Amendment Effective Date" means March 2, 2020.

"Trademark License" means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Trademarks" means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

"Tranche I Advance" has the meaning set forth in Section 2.1(a)(i).

"Tranche I Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche II Advance" has the meaning set forth in Section 2.1(a)(ii).

"Tranche II Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche III Advance" has the meaning set forth in Section 2.1(a)(iv).

"Tranche III Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche III Term Commitment" opposite such Lender's name on Schedule 1.1.

"UCC" means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

"Unit" means a unit of interest in Parent of any class or series hereafter created.

"United States" and "U.S." mean the United States of America.

"Unrestricted Cash" means unrestricted Cash of Borrower maintained in one or more Controlled Accounts.

"U.S. Borrower" means any Borrower that is a U.S. Person.

"U.S. Person" means any Person that is a "United States person" as defined in Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 2.9(d).

"Viking" means Viking Global Opportunities Illiquid Investments Sub-Master LP and its Controlled Investment Affiliates.

"Withholding Agent" means any Borrower and Agent.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC.

Notwithstanding anything to the contrary in this Agreement or any other Loan Document, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made without giving effect to any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof. For the avoidance of doubt, and without limitation of the foregoing, Permitted Convertible Debt shall at all times be valued at the full stated principal amount thereof and shall not include any reduction or appreciation in value of the shares deliverable upon conversion thereof.

SECTION 2. THE LOAN

2.1 Term Loan Advance.

(a) Term Commitments.

(i) *Tranche I Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender has made a Term Loan Advance in an original principal amount of $35,000,000 on the Closing Date (the "Tranche I Advance").

(ii) *Tranche II Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche II Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $20,000,000 on the First Amendment Effective Date (the "Tranche II Advance").

(iii) *Discretionary Advance*. Subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than June 15, 2021, Lender may make a Term Loan Advance in an aggregate principal amount up to $25,000,000 (the "Discretionary Advance").

(iv) *Tranche III Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche III Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $20,000,000 on or about the Second Amendment Effective Date but no later than May 17, 2019 (the "Tranche III Advance").

(b) Advance Request. Borrower shall complete, sign and deliver to Agent an Advance Request at least one (1) Business Day before the Advance Date of each Term Loan Advance. Lender shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the respective Advance Date.

(c) Interest.

(i) Term Loan Cash Interest Rate. In addition to interest accrued pursuant to the Term Loan PIK Interest Rate, the principal balance (including, for the avoidance of doubt, any amount equal to the Term Loan PIK Interest added to principal pursuant to Section 2.1(c)(ii)) of each Term Loan Advance shall bear interest thereon from such Advance Date (or date such amount equal to the Term Loan PIK Interest is added to the principal) at the Term Loan Cash Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Cash Interest Rate will float and change on the day the "prime rate" as reported in the Wall Street Journal changes from time to time.

(ii) Term Loan PIK Interest Rate. In addition to interest accrued pursuant to the Term Loan Cash Interest Rate, to the extent Parent has initiated a PIK Deferral Period, the principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan PIK Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed (the "Term Loan PIK Interest"), which amount shall be added to the outstanding principal balance and so capitalized so as to increase the outstanding principal balance of such Term Loan Advance on each payment date for such Advance and which amount shall be payable when the principal amount of the applicable Advance is payable in accordance with Section 2.1(d).

(d) Payment. Borrowers will pay interest on the Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date continuing until the Amortization Date. Borrowers shall repay the principal balance of the Term Loan Advance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid, provided that if the Term Loan Cash Interest Rate is adjusted in accordance with its terms, or the Amortization Date or the Maturity Date is extended, or a PIK Deferral Period becomes effective, the amount of each subsequent monthly installment shall be recalculated so that the remaining payments shall be equal monthly installments of principal and interest (mortgage style) beginning on the first Business Day of the month following such recalculation and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid in full. The entire principal balance of the Term Loan Advance and all accrued but unpaid interest hereunder, shall be due and payable on the Maturity Date. Borrowers shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to the Parent's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender with respect to the Term Loan Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to such Borrower's account for a certain amount of the periodic obligations due on a specific payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date,

Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Lender or Agent notifies Borrower Representative thereof; provided, further, that, with respect to clause (ii) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to a Borrower's account for specified out-of-pocket legal fees and costs incurred by Agent or Lender, Borrowers shall pay to Lender such amount in full in immediately available funds within three (3) Business Days.

2.2 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrowers have actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrowers shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrowers.

2.3 Default Interest. In the event any payment is not paid on the scheduled payment date (except if due solely to an administrative or operational error of Agent or Lender or Parent's bank if Borrowers had the funds to make the payment when due), an amount equal to four percent (4%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c), plus four percent (4%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or Section 2.3, as applicable.

2.4 Prepayment.

(a) Optional Prepayment. At its option upon at least five (5) Business Days prior written notice to Agent, Borrowers may prepay all or a portion of the outstanding Advance by paying principal, all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the principal amount being prepaid: if the prepayment is made on or prior to the one year anniversary of the Closing Date, 2.5%; after the one year anniversary of the Closing Date, through the two year anniversary of the Closing Date, 1.5%; and after the two year anniversary of the Closing Date, 1.0% (each, a "Prepayment Charge"), provided that each prepayment shall be in a minimum amount of $5,000,000 or, if less, the remaining outstanding principal amount of the Advance. Borrowers agree that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advance or any portion thereof. Borrowers shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge, (x) if Agent and Lender (in its sole and absolute discretion) agree in writing to refinance the Advance prior to the Maturity Date, and (y) with respect to the Tranche III Advance only, if such Advance is repaid no later than the six month anniversary of the Advance Date of the Tranche III Advance.

(b) Mandatory Prepayment. Within five (5) Business Days of receipt of any Net Cash Proceeds from a Prepayment Event, Borrowers shall at Agent's election in its sole and absolute discretion, prepay the outstanding Advance by paying up to 75% of such Net Cash Proceeds. For the avoidance of doubt, no Prepayment Charge or charge pursuant to Section 2.5 shall apply to a prepayment in accordance with this Section 2.4(b). Notwithstanding the foregoing, Net Cash Proceeds received at the closing of a sale Parent's Equity Interests of PellePharm, Inc. prior to December 31, 2018 shall not be required to be applied to the prepayment of the Secured Obligations as long as such Net Cash Proceeds are used by Parent

for its ordinary course operations and investment activities pursuant to the terms of this Agreement or to make tax distributions to Parent's members as permitted pursuant to Section 7.7.

2.5 End of Term Charge. On the earliest to occur of (i) the Maturity Date, (ii) the date that Borrowers prepay the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full or in part (in case of a prepayment pursuant to Section 2.4(a)), or (iii) the date that the Secured Obligations become due and payable in full pursuant to the terms of this Agreement, Borrowers shall pay Lender a charge equal to (A) in case of a partial prepayment pursuant to Section 2.4(a), (x) 6.35% of any principal prepayment in respect of the Tranche I Advance, (y) 5.75% of any principal prepayment in respect of Tranche II Advance, and (z) 5.75% of any principal prepayment in respect of the Tranche III Advance, and (B) in connection with the payment in full of the outstanding Secured Obligations a charge in an amount equal to the sum (x) of $2,222,500, in respect of the Tranche I Advance, (y) $1,150,000, in respect of the Tranche II Advance, and (z) $1,150,000, in respect of the Tranche III Advance, less any charges paid prior to such date pursuant to the foregoing clause (A) in connection with partial prepayments. Any similar charge applicable to payment of the Discretionary Advance will be determined prior to the Advance Date thereof. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

2.6 Due Diligence Fee. The Due Diligence Fee has been paid by Borrowers prior to the Closing Date.

2.7 Notes. If so requested by Lender by written notice to Borrower Representative, then Borrowers shall execute and deliver to Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of Lender pursuant to Section 11.13) (promptly after Borrower Representative's receipt of such notice) a Term Note or Term Notes to evidence Lender's Loans.

2.8 Pro Rata Treatment; Application of Payments. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. The Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. Lender has the exclusive right to determine the order and manner in which all payments with respect to the Secured Obligations may be applied. No Borrower shall have a right to specify the order or the accounts to which Lender shall allocate or apply any payments made by a Borrower to Lender or otherwise received by Lender under this Agreement when any such allocation or application is not expressly specified elsewhere in this Agreement.

2.9 Taxes.

(a) Withholding. Any and all payments by or on account of any obligation of any Borrower under any Loan Document will be made free and clear of and without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires a Withholding Agent to make any withholding or deduction of any Tax from any such payment, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant governmental authority in accordance with applicable law and, to the extent such Tax is an Indemnified Tax, then the sum payable by Borrowers hereunder shall be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Agent or Lender, as applicable receives an amount equal to the sum which it would have received had no such withholding or deduction been made. The applicable Borrower will, upon request, furnish Agent with proof reasonably satisfactory to Agent indicating that such Borrower has made such withholding payment.

(b) Payment of Other Taxes by Borrowers. Borrowers shall timely pay to the relevant governmental authority in accordance with applicable law, or at the option of Agent timely reimburse it for the payment of, any Other Taxes.

(c) Indemnification by Borrowers. Borrowers shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant governmental authority; provided that Borrowers shall not be obligated to compensate any Recipient pursuant to this Section in respect of penalties, interest or other liabilities attributable to any Indemnified Taxes, if such penalties, interest and other liabilities result solely from the gross negligence or willful misconduct of such Lender, the Agent or their Affiliates. A certificate as to the amount of such payment or liability delivered to Borrower Representative by a Lender (with a copy to Agent), or by Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Status of Lenders.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower Representative and Agent, at the time or times reasonably requested by a Borrower or Agent, such properly completed and executed documentation reasonably requested by such Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by a Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by such Borrower or Agent as will enable such Borrower or Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in paragraphs (d)(ii)(A), (ii)(B) and (ii)(D) of this Section) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that any Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to Borrower Representative and Agent on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit I-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code, or a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-2 or Exhibit I-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit any Borrower or Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower Representative and Agent at the time or times prescribed by law and at such time or times reasonably requested by any Borrower or Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by any Borrower or Agent as may be necessary for Borrowers and Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower Representative and Agent in writing of its legal inability to do so.

(e) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified

pursuant to this Section (including by the payment of additional amounts pursuant to this Section), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant governmental authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (e) (plus any penalties, interest or other charges imposed by the relevant governmental authority) in the event that such indemnified party is required to repay such refund to such governmental authority. Notwithstanding anything to the contrary in this paragraph (e), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (e) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(f) Survival. Each party's obligations under this Section shall survive the resignation or replacement of Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Term Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

SECTION 3. SECURITY INTEREST

3.1 Grant of Security Interest. As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, each Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in, to and under all of Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles; (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrowers' property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing.

3.2 Excluded Collateral. Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include (a) nonassignable licenses or contracts, which by their terms require the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406, 9407 and 9408 of the UCC) or Pledged Collateral consisting of Equity Interests, if pursuant to the terms of the applicable Equity Documents, a pledge of such Equity Interests would be prohibited or void or would require the consent of or waiver by the applicable Platform Company, provided further, that upon the lapse of such prohibition or such consent or waiver being provided with respect to any license or contract, such license, contract or Equity Interests shall automatically be included in the Collateral, (b) any property which is subject to a capital lease or similar equipment financing permitted under this Agreement, but only to the extent and for as long as a Lien in favor of Agent would be prohibited by the terms of the related equipment financing agreement or would result in a termination thereof, and provided further, that upon the termination of such prohibition, such property shall automatically be deemed included in the Collateral, or (c) any trademark application filed on an "intent-to-use" basis until the earlier of the filing of a statement of use with respect thereto or the issuance of a registration therefor.

3.3 Pledged Collateral.

(a) Each Borrower hereby pledges, collaterally assigns and grants to Agent a security interest in the Pledged Collateral, as security for the performance of the Secured Obligations. Each Borrower

irrevocably waives any and all of its rights under provisions of any Organizational Documents of any Subsidiary which is a limited liability company or limited partnership, and under the laws under which such Subsidiary has been organized, to the extent Borrower has the legal capacity to do so and that such waiver is permitted, that would operate to (a) prohibit, restrict, condition or otherwise adversely affect the pledge hereunder or any enforcement action which may be taken in respect of this pledge or (b) otherwise conflict with the terms of this Section 3.3. Each Borrower of which Equity Interests consisting of limited liability company or limited partnership interests constitute Pledged Collateral hereby irrevocably consents to the grant of the security interest provided for herein and to Agent or its nominee becoming a member or limited or general partner, as applicable, in such limited liability company or limited partnership, as applicable (including succeeding to any management rights appurtenant thereto), in connection with the exercise of remedies pursuant to Section 10; provided that such successor member or partner, as applicable, then agrees in writing to be bound by, and a party to, the applicable Organizational Document pursuant to the terms therein.

(b) Except as otherwise expressly provided in this Agreement, any sums or other property paid or distributed upon or with respect to any of the Pledged Collateral, whether by dividend or redemption or upon the liquidation or dissolution or recapitalization or reclassification of the capital of any issuer of the applicable Equity Interests or otherwise, shall, be paid over and delivered to Agent to be held by Agent as security for the payment in full in cash of all of the Secured Obligations, in each case, to the extent constituting Net Cash Proceeds. All payments received by a Borrower shall, until paid or delivered to Agent, be held in trust for Agent, as security for the payment and performance in full of all of the Secured Obligations, and when paid, shall be deposited into a Controlled Account.

(c) So long as no Event of Default shall have occurred and be continuing and at Agent's written direction to the contrary, each Borrower shall be entitled to receive all cash dividends and distributions paid in respect of Pledged Collateral owned by it, and, prior to any acceleration pursuant to Section 10.1 hereof and any election by Agent of any remedies pursuant to Section 10.2 hereof, each Borrower shall be entitled to vote any Equity Interests owned by it and to give consents, waivers and ratifications in respect of Pledged Collateral; provided, however, that no vote shall be cast or consent, waiver or ratification given by any Borrower if the effect thereof would materially impair respect Agent's rights with respect to the enforcement of its Lien on the Pledged Collateral or be inconsistent with or result in any violation of any of the provisions of this Agreement or any of the Loan Documents. All rights of any Borrower to receive cash dividends and distributions with respect to Pledged Collateral owned by such Borrower, and, at Agent's option, upon notice by Agent to the applicable Borrower, all right to vote and give consents, waivers and ratifications with respect to such Pledged Collateral, shall terminate upon the occurrence and during the continuation of an Event of Default.

3.4 Release; Agreements by Agent with respect to Pledged Collateral.

The security interest granted pursuant to this Agreement shall be automatically released (a) with respect to all Collateral upon the payment in full in cash of all Secured Obligations in accordance with this Agreement (other than inchoate indemnity obligations and any other obligations which, by their terms survive the termination of this Agreement), (b) with respect to any Pledged Collateral that is the subject of a sale or other disposition described in clause (e) of the defined term "Permitted Transfers", upon the consummation of such transaction, or (c) if otherwise approved, authorized or ratified in writing by Agent in its sole discretion. Upon such release, Agent shall, upon the reasonable request and at the sole cost and expense of Borrowers, assign, transfer and deliver to Borrowers, against receipt and without recourse to or warranty by Agent, except as to the fact that Agent does not continue to encumber the released assets, such Collateral or any part thereof, which shall be released in accordance with customary documents and instruments (including UCC-3 termination financing statements or releases) acknowledging the release of such Collateral. Agent agrees, on behalf of itself and Lender, that if any Platform Company is consummating an initial public offering of its stock or any relevant follow on offering, that Agent shall enter into lockup or similar agreements reasonably requested by Borrower or any underwriter with respect to Agent's exercise of remedies with respect to the Pledged Collateral constituting Equity Interests the Platform Company that is the issuer in such offering, in each case at the sole cost and expense of Borrower.

SECTION 4. CONDITIONS PRECEDENT TO LOAN

The obligations of Lender to make the Loan hereunder are subject to the satisfaction by Borrowers of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrowers shall have delivered to Agent the following:

(a) duly executed copies of the following, in form and substance acceptable to Agent:

(i) this Agreement;

(ii) the completed ACH Authorization;

(iii) Account Control Agreements with respect to all Deposit Accounts and any accounts where Investment Property is maintained, as required by Section 7.12 hereof;

(iv) a duly executed certificate of an officer of each Borrower certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of such Borrower as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of such Borrower, as in effect as of the Closing Date; (C) resolutions of such Borrower's Board evidencing approval of the Loan and other transactions contemplated by the Loan Documents, as in effect as of the Closing Date; (D) resolutions of the holders of such Borrower's Equity Interests in connection with the transactions contemplated by this Agreement as in effect as of the Closing Date, to the extent required by the applicable Organizational Documents; and (E) a schedule setting forth the name, title and specimen signature of officers or other authorized signers on behalf of each Borrower;

(v) a duly executed certificate of an officer of Parent certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of each Platform Company, as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of each Platform Company; (C) copies of all Equity Documents in effect as of the Closing Date; and (D) a summary capitalization table of each Platform Company;

(vi) a legal opinion of Borrowers' counsel;

(vii) any other Loan Documents; and

(viii) all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral.

(b) all originals certificates evidencing Pledged Collateral pledged pursuant to Section 3.3, together with any transfer powers or other instruments of transfer, in form and substance acceptable to Agent;

(c) copies of all consents, waivers, notices and other documents set forth on Schedule 5.15(ii);

(d) a certificate of good standing for each Borrower from its jurisdiction of organization and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified could have a Material Adverse Effect;

(e) payment of the Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance;

(f) all certificates of insurance, endorsements, and copies of each insurance policy required pursuant to Section 6.2; and

(g) such other documents as Agent may reasonably request.

Notwithstanding the foregoing, to the extent any of the above closing conditions is set forth on Schedule 7.19, Borrowers may deliver the same when required to be delivered pursuant to Schedule 7.19.

4.2 All Advance. On the Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), duly executed by Borrower Representative's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.

(b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.

(c) At the time of and immediately after such Advance no Event of Default shall have occurred and be continuing.

(d) Each Advance Request shall be deemed to constitute a representation and warranty by Borrowers on the relevant Advance Date as to the matters specified in subsections (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could reasonably be expected to, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWERS

Borrowers represent and warrant that:

5.1 Organizational Status. Each Borrower is duly organized, legally existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, limited liability company or partnership, as the case may be, in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Each Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, or as such Borrower has subsequently notified Agent after the Closing Date in accordance with this Agreement (including in any Compliance Certificate).

5.2 Collateral. Each Borrower owns the Collateral free of all Liens, except for Permitted Liens. Each Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Each Borrower's execution, delivery and performance of this Agreement and all other Loan Documents, (i) have been duly authorized by all necessary action in accordance with Borrower's Organizational Documents, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and the other Loan

Documents, (iii) do not violate any provisions of (A) a Borrower's Organizational Documents, or (B) any, law, regulation, order, injunction, judgment, decree or writ to which a Borrower is subject and which violation would have a Material Adverse Effect and (iv) do not violate any contract or agreement or require the consent or approval of any other Person which has not already been obtained if such violation or failure to obtain consent or approval would have a Material Adverse Effect. The individual or individuals executing the Loan Documents are duly authorized to do so.

5.4 Material Adverse Effect. Since December 31, 2017, no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of a Borrower, threatened against or affecting a Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws.

(a) Neither any Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. No Borrower is in default in any material respect in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound.

(b) Parent is not required to be registered as an "investment company" within the meaning of the Investment Company Act based on (i) Section 3(a)(1)(C) of the Investment Company Act, (ii) Rule 3a-1 promulgated under the Investment Company Act or (iii) certain other exemptions or exceptions from registration under the Investment Company Act, other than Sections 3(c)(1) or 3(c)(7) of the Investment Company Act. Neither a Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Each Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither a Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither a Borrower's nor any of its Subsidiaries' properties or assets has been used by a Borrower or such Subsidiary or, to a Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Each Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

(c) None of Borrowers, any of its Subsidiaries or, to Borrower's knowledge, any of Borrowers' or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrowers, any of its Subsidiaries, or to the knowledge of any Borrower any Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity,

in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrowers to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by a Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrowers, and (ii) the most current of such projections provided to Parent's Board, provided that it is understood that the projections are based on assumptions made in good faith but are subject to significant uncertainties and contingencies and that actual results may differ significantly and no assurances are provided by Borrower for any projections made or given.

5.8 Tax Matters. Except to the extent contested in good faith with adequate reserves under GAAP, (a) each Borrower has filed all material federal and state income tax returns and other tax returns that it is required to file, (b) each Borrower has duly paid or fully reserved for all federal and state income Taxes and other material Taxes or installments thereof (including any interest or penalties) as and when due, which have or may become due pursuant to such returns, and (c) each Borrower has paid or fully reserved for any material Tax assessment received by such Borrower for the three (3) years preceding the Closing Date, if any (including any material Taxes being contested in good faith and by appropriate proceedings).

5.9 Intellectual Property Claims. To Borrowers' knowledge, each Platform Company is the sole owner of, or otherwise has the right to use, the Intellectual Property material to such Platform Company's business. To Borrowers' knowledge, each of the material Copyrights, Trademarks and Patents is valid and enforceable, no material part of the Intellectual Property of a Platform Company has been judged invalid or unenforceable, in whole or in part, and no claim has been made to a Borrower or, to Borrower's knowledge, to a Platform Company, that any material part of the Intellectual Property of a Platform Company violates the rights of any third party. Exhibit D is a true, correct and complete list of all registered Trademarks, Copyrights, Patents of each Borrower, Qualified Subsidiary and, to the best of Borrower's knowledge, each Platform Company, together with application or registration numbers, as applicable, and of all material agreements under which a Borrower, Qualified Subsidiary or Platform Company licenses Intellectual Property from third parties (other than shrink-wrap software licenses or software licenses available in the ordinary course of business), in each case as of the Closing Date. No Borrower, Qualified Subsidiary or, to Borrowers' knowledge, no Platform Company is in material breach of, nor has such Person failed to perform any material obligations under, any material contracts, licenses or agreements and, to Borrowers' knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Intellectual Property. To Borrowers' knowledge, each Platform Company has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of such Person's business as currently conducted and proposed to be conducted. Without limiting the generality of the foregoing, and in the case of licenses, except for restrictions that are unenforceable under Division 9 of the UCC, to Borrowers' knowledge, each Platform Companies have the right, to the extent required to operate such Platform Company's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of such Platform Company's business as currently conducted and proposed to be conducted, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and, to Borrowers' knowledge, each Platform Company owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to such Platform Company's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Products except customary covenants in inbound license agreements and equipment leases where a Platform Company is the licensee or lessee.

5.11 Products. No material Intellectual Property owned by a Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company or Product has been or is subject to any actual or, to the knowledge of any Borrower, threatened litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner the use, transfer or licensing thereof by the owner thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company to grant licenses or ownership interest in any future material Intellectual Property related to the operation or conduct of the business of any Borrower, Qualified Subsidiary or Platform Company or to any Products. No Borrower or, to Borrowers' knowledge, Platform Company has received any written notice or claim, or, to the knowledge of any Borrower, oral notice or claim, challenging or questioning any Borrower's, Qualified Subsidiary's or Platform Company's ownership in any material Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to any Borrower's knowledge, is there a reasonable basis for any such claim. Neither any use by any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, by Platform Company, of its respective material Intellectual Property nor the production and sale of Products infringes in any material respect on the Intellectual Property or other rights of others.

5.12 Financial Accounts. Exhibit E, as may be updated by Borrowers in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which a Borrower or any Qualified Subsidiary maintains Deposit Accounts and (b) all institutions at which a Borrower or any Qualified Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name and address of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Other than loans constituting Permitted Investments, no Borrower has any outstanding loans to any employee, officer, manager or director of a Borrower, nor has a Borrower guaranteed the payment of any loan made to an employee, officer, manager or director of such Borrower by a third party.

5.14 Capitalization and Subsidiaries. Parent's capitalization as of the Closing Date is set forth on Schedule 5.14 annexed hereto. As of the Closing Date, no Equity Interests of a Qualified Subsidiary or a Platform Company are owned by a Borrower indirectly through a Subsidiary of such Borrower. No Borrower owns any stock, partnership interest or other securities of any Person, except for Permitted Investments.

5.15 Pledged Collateral; Instruments. All Equity Interests constituting Pledged Collateral are validly issued, fully paid and non-assessable in all material respects. The execution, delivery and performance thereof and the pledge of and granting of a security interest in the Pledged Collateral under this Agreement do not contravene any provision of the Organizational Documents of the issuer of such Equity Interests. All certificates representing a Borrower's interest in Pledged Collateral have been delivered to Agent, together with duly executed transfer powers or other appropriate instruments of transfer (each in form and substance satisfactory to Agent), duly executed in blank by the applicable Borrower. As of the Closing Date, Schedule 5.15 sets forth (i) a true and accurate schedule of all Pledged Collateral and all Instruments owned by Borrowers, and (ii) a complete and accurate list of all consents, waivers, amendment or modification or other action to be taken in connection with the grant of the security interest pursuant to the terms of this Agreement in the Pledged Collateral.

SECTION 6. INSURANCE; INDEMNIFICATION

6.1 Coverage. Each Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrowers' line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal

injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrowers must maintain a minimum of $2,000,000 of commercial general liability insurance for each occurrence. Borrowers have and agree to maintain a minimum of $2,000,000 of directors' and officers' insurance for each occurrence and $5,000,000 in the aggregate. So long as there are any Secured Obligations outstanding, Borrowers shall also cause to be carried and maintained insurance upon the business and assets of Borrower and each of its Subsidiaries, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

6.2 Certificates. Borrowers shall deliver to Agent certificates of insurance that evidence Borrowers' compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrowers' insurance certificate shall state Agent (shown as "Hercules Capital, Inc.", as "Agent") is an additional insured for commercial general liability, a lender loss payee for all risk property damage insurance, subject to the insurer's approval, and promptly following any purchase of new or replacement insurance, Borrower shall deliver to Agent certificates of insurance showing Agent as additional insured and a lender loss payee for property insurance and additional insured for liability insurance for any future insurance that Borrowers may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. At Agent's reasonable request, Borrowers shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder, Borrowers shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.

6.3 Indemnity. Borrowers agree to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement, in each case subject to the applicable statute of limitations. Furthermore, this Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

SECTION 7. COVENANTS OF BORROWERS

Each Borrower agrees as follows:

7.1 Financial Reports. Borrower Representative shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements")

(a) as soon as practicable (and in any event within 30 days) after the end of each month, unaudited interim and year-to-date financial statements of each Borrower as of the end of such month, including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against such

Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, and including, for the balance sheet line item for "investments", a breakdown by Platform Company or other investment, all certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (i) except for the absence of footnotes, (ii) subject to normal year-end adjustments, and (iii) except for certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) (i) as soon as practicable (and in any event within 45 days) after the end of each calendar quarter, the most recent capitalization table for Parent, including the weighted average exercise price of employee stock options, (ii) if Parent completes an initial public offering, unaudited interim and year-to-date financial statements as of the end of such calendar quarter, including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (A) except for the absence of footnotes, and (B) subject to normal year-end adjustments; and (iii) if Parent changes its accounting practices to perform a quarterly fair value analysis of its Equity Interests, copies of such valuations when completed; and

(c) as soon as practicable (and in any event within 180 days) after the end of each fiscal year, unqualified audited financial statements (other than a as going concern qualification), prepared on a consolidated basis, including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrowers and reasonably acceptable to Agent, provided that to the extent not required by the Board of Parent, audited financial statements shall not be required;

(d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit F;

(e) promptly after the sending or filing thereof, as the case may be, copies of any material financial statements or reports that Parent has made available to holders of its Preferred Units, including any valuation report with respect to Investments in Platform Companies made available to members of Parent, and copies of any regular, periodic and special reports or registration statements that Parent files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(f) at the same time and in the same manner as provided to the members of the Board, (i) a report of any new Investments (by a Borrower or otherwise) made in Platform Companies, (ii) a report of any material developments with respect to Platform Companies, including financial performance, research and development, clinical milestones, sales and pipeline, strategic partnerships and other transactions and registration, licensing and other matters relating to Intellectual Property, (iii) copies of all notices, minutes, consents and other materials that Parent provides to the members of its Board in connection with meetings of the Board, and (iv) within 30 days after each such meeting, minutes of such meeting, provided that in all cases Parent may exclude (x) confidential compensation information, (y) any information or materials referred to in clauses (iii) and (iv) that are confidential, and (z) any information or materials referred to in clauses (i) through (iv) that are subject to attorney-client privilege or would potentially create a conflict of interest with Agent or Lender;

(g) financial and business projections and budget promptly following their approval by Parent's Board, and in any event, within 90 days after the end of Parent's fiscal year, and promptly after any material update to such projections or budget is approved by Parent's Board, in each case as well as any other budgets, operating plans and other financial information or information with respect to the Collateral or the Platform Companies as may be reasonably requested by Agent;

(h) within five (5) Business Days of the acquisition of Collateral consisting of Equity Interests or Instruments, notification thereof, together with such originals and other documents as required pursuant to Section 7.18;

(i) within five (5) Business Days of (i) the formation of a new Platform Company, (ii) any material amendment, restatement, supplement or other modification of or to any Organizational Document of a Platform Company, (iii) the entering into of any new material Equity Documents with respect to a Platform Company's Equity Interests, any material amendment, restatement, supplement or other modification of or to any such Equity Document, copies of such Organizational Documents, Equity Documents or applicable amendment, restatement, supplement or modification, as the case may be;

(j) together with the monthly financial statements, copies of any loan documents entered into by a Platform Company or any Subsidiary thereof with respect to secured Indebtedness for borrowed money of a Platform Company or such Subsidiary, and any material amendment or other modification thereto, in each case to the extent permitted by law or contract;

(k) promptly after any material amendment, restatement, supplement or other modification to or of any Organizational Document or Equity Document of a Borrower or Qualified Subsidiary, a copy thereof;

(l) within five (5) Business Day of the occurrence of a Prepayment Event, a notification thereof, together with a description of such Prepayment Event, copies of such documents entered into in connection with the transaction giving rise to the Prepayment Event as Agent may reasonably request and calculations in form reasonably acceptable to Agent of the amount of Net Cash Proceeds, if any, arising from such Prepayment Event;

(m) promptly upon any legal process in an amount greater than $500,000 affecting the Collateral, a notification thereof;

(n) within three (3) Business Days of the occurrence of any Event of Default, a notification thereof; and

(o) promptly (and in any event within three (3) Business Days) notice if a Borrower or any Subsidiary has knowledge that a Borrower, or any Subsidiary or Affiliate of a Borrower, is listed on the OFAC Lists or (a) is convicted of, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Notwithstanding the foregoing, documents required to be delivered under this Article 7 may be delivered electronically and shall be deemed delivered when Borrower posts a link to such publically disclosed documents on its website.

No Borrower shall make any change in its (a) accounting policies or reporting practices other than to the extent required or otherwise contemplated by GAAP or other applicable regulatory requirements, or (b) and shall not change its fiscal years or fiscal quarters. The fiscal year of each Borrower shall end on December 31.

The executed Compliance Certificate may be sent via email to Agent at legal@herculestech.com with a copy to hbhalla@htgc.com and nshah@htgc.com. All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financialstatements@herculestech.com with a copy to legal@herculestech.com with a copy to hbhalla@htgc.com; and nshah@htgc.com, provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: BridgeBio Pharma LLC,

7.2 Management Rights. Borrowers shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrowers at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than twice per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrowers to

discuss such books of account and records at reasonable times and upon reasonable notice. In addition, Agent or Lender shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrowers concerning significant business issues affecting Borrowers. Such consultations shall not unreasonably interfere with Borrowers' business operations. The parties intend that the rights under this paragraph shall permit Agent or Lender solely the right to provide advice or recommendations and not be deemed to give Agent or Lender any right to exercise control or any rights of operations with respect to Borrower or its business.

7.3 Further Assurances. Each Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral. Each Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, each Borrower hereby authorizes Agent to execute and deliver on behalf of such Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of such Borrower in accordance with Section 9-504 of the UCC), and each Borrower hereby authorizes Agent, at any time during the existence of an Event of Default, to execute and deliver on behalf of such Borrower any collateral assignments, notices, control agreements, security agreements and other documents without the signature of such Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for such Borrower if such Borrower does not deliver the same within three (3) Business Days of Agent's request. Each Borrower shall protect and defend such Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to such Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. No Borrower shall create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on any Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) with respect to purchase money Indebtedness permitted hereunder to the extent the outright purchase of such equipment would constitute an Investment in a capital asset that is permitted, (c) to the extent refinanced with similar Permitted Indebtedness, (d) to the extent permitted pursuant to the terms of any subordination or intercreditor agreement executed by Agent, or (e) as otherwise permitted hereunder or approved in writing by Agent.

Notwithstanding anything to the contrary in the foregoing, the issuance of, performance of obligations under (including any payments of interest), and conversion, exercise, repurchase, redemption (including, for the avoidance of doubt, a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt), settlement or early termination or cancellation of (whether in whole or in part and including by netting or set-off) (in each case, whether in cash, common stock of New Parent, Permitted Convertible Debt or, following a merger event or other change of the common stock of New Parent, other securities or property), or the satisfaction of any condition that would permit or require any of the foregoing, any Permitted Convertible Debt shall not constitute a prepayment of Indebtedness by New Parent for the purposes of this Section 7.4; *provided* that New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversion in connection with such redemption with consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Permitted Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Bond

Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess cash shall not be permitted by the preceding sentence, unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration.

7.5 Liens. Each Borrower shall at all times keep the Collateral and all other property and assets used in Borrowers' business or in which such Borrower now or hereafter holds any interest free and clear from any Liens whatsoever (except for Permitted Liens). No Borrower shall agree with any Person other than Agent or Lender not to encumber the Collateral, other than pursuant to Permitted Indebtedness and except for restrictions on the granting of Liens (other than Permitted Liens and the Liens pursuant to the Loan Documents) in a Borrower's Organizational Documents.

7.6 Investments. Each Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person other than Permitted Investments.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.6 shall not prohibit the conversion by holders of (including any payment upon conversion, whether in cash, common stock or a combination thereof), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture (or other agreement) governing such Permitted Convertible Debt; *provided* that, New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversions in connection with such redemption with consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Bond Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess cash shall not be permitted by the preceding sentence, unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration.

Notwithstanding the foregoing, New Parent may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of New Parent's common stock and/or a different series of Permitted Convertible Debt and/or by payment of cash (in an amount that does not exceed the proceeds received by New Parent from the substantially concurrent issuance of shares of New Parent's common stock and/or Permitted Convertible Debt plus the net cash proceeds, if any, received by New Parent pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); *provided* that, for the avoidance of doubt, New Parent may exercise or unwind or terminate early (whether in cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

Notwithstanding the foregoing, New Parent may repurchase its common stock with a portion of the proceeds from the sale of Permitted Convertible Debt; *provided* that, the aggregate purchase price of such common stock, shall not exceed 15% of the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) to New Parent from the sale of such Permitted Convertible Debt; provided further that for purposes of this calculation New Parent may assume any option granted to purchase additional Permitted Convertible Debt granted to initial purchasers or underwriters pursuant to a customary

purchase or underwriting agreement is exercised in full and the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) therefrom are received by New Parent.

7.7 Distributions. No Borrower shall (a) repurchase or redeem any class of stock or other Equity Interest of Borrower or a Qualified Subsidiary other than repurchases described in clause (c) of the defined term "Permitted Investments"; (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other Equity Interest, except for (i) distributions of Net Cash Proceeds, to the extent Agent shall have waived the application of any portion of such Net Cash Proceeds to the mandatory prepayment and to the extent Agent has consented to the distribution in respect of any portion of such Net Cash Proceeds to Parent's members, (ii) distributions of proceeds received by Parent from an initial public offering of Parent's common stock on a recognized national or international exchange, or (iii) for any calendar year or portion thereof during which Parent is a pass-through entity for U.S. federal income tax purposes, payments and distributions to members of Parent, on or prior to each estimated tax payment date as well as each other applicable due date, in an amount not to exceed the product of (x) the total aggregate taxable income of Parent and its Subsidiaries (or estimates thereof) which is allocable to its members or partners as a result of the operations or activities of Parent and its Subsidiaries during the relevant period, multiplied by (y) the highest combined marginal federal, state and local income tax rates applicable to any member or partner of Parent (or, if any of them are themselves a pass-through entity for U.S. federal income tax purposes, their members or partners) determined by taking into account the character of the income and loss allocable to the members or partners as it affects the applicable tax rate, after taking proper account of loss carryforwards resulting from losses allocated to the members or partners by Parent, to the extent not taken into account in prior periods; (c) lend money to any employees, officers, managers or directors or guarantee the payment of any such loans granted by a third party in excess of $500,000 in the aggregate; or (d) waive, release or forgive any Indebtedness owed by any employees, officers, managers or directors in excess of $100,000 in the aggregate.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.7 shall not prohibit (i) the conversion by holders of (including any cash payment upon conversion), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture (or other agreement) governing such Permitted Convertible Debt; *provided* that, New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversions in connection with such redemption with consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Permitted Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Permitted Bond Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess cash shall not be permitted by this clause (i), unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration, or (ii) the entry into (including the payment of premiums in connection therewith) or any required payment with respect to, or required early unwind or settlement of, any Permitted Bond Hedge Transaction or Permitted Warrant Transaction, in each case, in accordance with the terms of the agreement governing such Permitted Bond Hedge Transaction or Permitted Warrant Transaction; *provided* that, to the extent cash is required to be paid under a Permitted Warrant Transaction as a result of the election of "cash settlement" (or substantially equivalent term) as the "settlement method" (or substantially equivalent term) thereunder by New Parent (or its Affiliate) (including in connection with the exercise and/or early unwind or settlement thereof), the payment of such cash shall not be permitted by this clause (ii), unless the Cash Payment Conditions are satisfied at the time of the payment.

Notwithstanding the foregoing, New Parent may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of New Parent's common stock and/or a different series of Permitted Convertible Debt and/or by payment of cash (in an amount that does not exceed the proceeds received by New Parent from the substantially concurrent issuance of shares of New Parent's common stock and/or Permitted Convertible Debt plus the net cash proceeds, if any, received by Borrower pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); *provided* that, for the avoidance of doubt, New Parent may exercise or unwind or terminate early (whether in cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

Notwithstanding the foregoing, New Parent may repurchase its common stock with a portion of the proceeds from the sale of Permitted Convertible Debt; *provided* that, the aggregate purchase price of such common stock shall not exceed 15% of the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) to New Parent from the sale of such Permitted Convertible Debt; provided that for purposes of this calculation New Parent may assume any option granted to purchase additional Permitted Convertible Debt granted to initial purchasers or underwriters pursuant to a customary purchase or underwriting agreement is exercised in full and the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) therefrom are received by New Parent.

7.8 Transfers. Except for Permitted Transfers, no Borrower shall voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets.

7.9 Mergers or Acquisitions. No Borrower shall merge or consolidate with or into any other Person, except for the Permitted Reorganization.

7.10 Taxes. Each Borrower and each Qualified Subsidiary shall pay when due all material Taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against a Borrower or the Collateral or upon a Borrower's ownership, possession, use, operation or disposition thereof or upon a Borrower's rents, receipts or earnings arising therefrom, unless the same are being contested in good faith and by appropriate proceedings and adequate reserves in accordance with GAAP are being maintained by such Borrower or such Qualified Subsidiary. Each Borrower shall file on or before the due date therefor all material personal property Tax returns in respect of the Collateral.

7.11 Certain Changes. No Borrower shall

(a) suffer a Change in Control.

(b) change its jurisdiction of organization, organizational form or legal name without twenty (20) days' prior written notice to Agent.

(c) relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America.

(d) amend, restate, supplement or otherwise modify the terms of the Organizational Documents of a Borrower or Qualified Subsidiary if the effect of such change could be expected to be materially adverse to the interests of Agent or Lender.

(e) suffer any Investments in Equity Interests of a Platform Company to be held, directly or indirectly by a Subsidiary of Parent that is not organized under the laws of the United States or any state or territory thereof.

7.12 Deposit Accounts. No Borrower shall maintain any Deposit Accounts, or accounts holding Investment Property, except for Excluded Accounts and accounts with respect to which Agent has an Account Control Agreement.

7.13 Qualified Subsidiaries; Platform Companies.

(a) Borrower Representative shall, within 15 days of formation, shall cause any Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement. Prior to the execution and delivery of a Joinder Agreement, Borrowers shall cause any Qualified Subsidiary to comply with the terms of this Agreement applicable to Borrowers.

(b) No Borrower shall suffer the Organizational Documents of any Platform Company or any Qualified Subsidiary, or any of its Equity Document to contain any provision, unless waived, which would restrict, delay or condition the grant of the security interest in the Pledged Collateral as set forth in this Agreement or the exercise of any remedy with respect to the Pledged Collateral, including, without limitation, the exercise of voting rights by Agent or the disposition of the Pledged Collateral after the occurrence and during the continuation of an Event of Default.

7.14 Use of Proceeds. Each Borrower agrees that the proceeds of the Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general business purposes, including Investments in Platform Companies. The proceeds of the Loans will not be used in violation of Anti-Corruption Laws or applicable Sanctions.

7.15 Compliance with Laws.

(a) Each Borrower shall maintain compliance in all material respect with all applicable laws, rules or regulations, and shall, or cause its Subsidiaries to, obtain and maintain all required governmental authorizations, approvals, licenses, franchises, permits or registrations reasonably necessary in connection with the conduct of Borrowers' business; and no Borrower shall become an "investment company" or a company controlled by an "investment company", under the Investment Company Act.

(b) No Borrower shall, nor shall a Borrower permit any controlled Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. No Borrower shall (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law, nor shall a Borrower knowingly permit any controlled Affiliate to, directly or indirectly do any of the foregoing.

(c) Each Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by a Borrower, and their respective directors, officers, managers, employees, and agents with Anti-Corruption Laws and applicable Sanctions, and each Borrower, and their respective officers and employees and to the knowledge of each Borrower its directors, managers and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects.

(d) None of Borrowers, or any of their respective directors, officers, managers or employees, or to the knowledge of Borrowers, any agent for Borrowers that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

7.16 Intellectual Property. Each Borrower shall (i) protect, defend and maintain the validity and enforceability of its Intellectual Property necessary for its continued operations; (ii) promptly advise Agent in writing of material infringements of material Intellectual Property of a Borrower; and Borrower shall use commercially reasonable efforts to prevent any Intellectual Property material to Borrowers' business from being abandoned, forfeited or dedicated to the public. If a Borrower (i) obtains any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, or (ii) applies for any Patent or the registration of any Trademark, then such Borrower shall on the next Compliance Certificate required to be delivered hereunder provide written notice thereof to Agent and shall execute such intellectual property security agreements and other documents and take such other actions as Agent may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent in such property. Borrowers shall when it delivers the next Compliance Certificate required to be delivered hereunder provide to Agent copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement required for Agent to perfect and maintain a first priority perfected security interest in such property.

7.17 Transactions with Affiliates. No Borrower shall, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of any Borrower on terms that are less favorable to Borrowers, than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of a Borrower, except that Borrower shall not be subject to the foregoing limitation with respect to (i) issuance of Subordinated Indebtedness or Equity Interests, including to existing investors, (ii) entrance into customary compensation arrangements in the ordinary course of business a and approved by the Board, (iii) consummation of any Permitted Transfer expressly contemplated to be entered into between a Borrower and an Affiliate, or (iv) any distribution permitted pursuant to Section 7.7.

7.18 Pledged Collateral. Any Borrower shall, (a) at such Borrower's expense, promptly execute, acknowledge and deliver all such instruments and take all such actions as Agent from time to time may reasonably request in order to ensure to Agent the benefits of the pledge intended to be created by Section 3.3, shall maintain, preserve and defend the title to the Pledged Collateral and the Lien of the Agent thereon against the claim of any other Person (other than Permitted Liens); (b) with respect to any Equity Interests of an issuer owned by such Borrower constituting limited liability company membership interests, shall, to the extent it controls such issuer, cause Article 8 of the Uniform Commercial Code of such issuer's jurisdiction of organization to govern the Equity Interests of such issuer, such Equity Interests to be certificated or otherwise evidenced by an instrument, and shall deliver such certificate or instrument, together with a duly executed transfer power or other instrument of transfer (in form and substance reasonably satisfactory to the Agent) executed in blank, promptly (but in any event within three (3) Business Days after receipt thereof by Borrower) to the Agent; (c) upon acquiring any new Equity Interests constituting Pledged Collateral or Instruments constituting Collateral, within five (5) Business Days (i) deliver to Agent an updated Schedule 5.15 hereto, in form reasonably satisfactory to Agent, identifying such additional Equity Interests, which shall be attached to this Agreement, (ii) either deliver or otherwise cause the transfer of such additional Equity Interests or Instruments (including any certificates and duly executed transfer powers or other instruments of transfer executed in blank and in form and substance satisfactory to Agent) to Agent as required under this Agreement or any Loan Document or enter into a control agreement in favor of Agent in form acceptable to Agent with respect thereto, provided that with respect to Equity Interests of a Borrower other than Parent, to the extent the Organizational Documents of such Borrower do not provide for the issuance of physical stock certificates and as long as no physical stock certificates are issued, Borrowers shall not be required to deliver stock certificates, stock powers or control agreements, and (iii) to the extent related to an Investment in a new Platform Company, deliver an acknowledgement, consent and waiver in substantially the form delivered by the Platform Companies as of the Closing Date. No Borrower shall enter into any agreement restricting its ability to vote the Equity Interests or assigning or otherwise transferring or restricting its ability to vote the Equity Interests owned by such Borrower other than pursuant to any Loan Document or in connection with voting agreements entered into by holders of Equity Interests in each Platform Company on customary terms for venture capital financings, in each case, which are not designed to impair the pledge or Agent's exercise of remedies with respect to Pledged Collateral.

7.19 Post-Closing Deliveries. Borrower shall deliver the documents or take the actions as set forth in Schedule 7.19 hereto.

7.20 Introductions. When any Platform Company is considering a secured loan facility, Borrower shall use commercially reasonable efforts to introduce a representative of Agent to the chief financial officer or other appropriate officer of such Platform Company to allow Agent's representative to present possible lending options to such Platform Company.

7.21 Minimum Cash. If the Tranche III Advance is made, at all times after September 15, 2019 (or if earlier, the date a Qualified IPO is effective), Borrowers shall maintain unrestricted Cash in a Deposit Account subject to an Account Control Agreement in favor of Agent in an aggregate amount not less than $20,000,000, provided that if a Qualified IPO is effective on or prior to September 15, 2019, the foregoing covenant shall not apply during any period which the Market Capitalization is at least $750,000,000, provided further that upon the achievement of the Achievement Milestone, this Section 7.21 shall cease to apply.

SECTION 8. RIGHT TO INVEST

8.1 Lender or its assignee or nominee shall have the right, in its discretion, to participate in the next Subsequent Financing in an amount of up to $2,000,000 on the same terms, conditions and pricing afforded to others participating in any such Subsequent Financing, provided that with respect to an initial public offering of Parent, Parent shall use commercially reasonable efforts to allow such participation. Parent shall provide written notice to Lender at least five (5) Business Days prior to the consummation of each Subsequent Financing, and if Lender desires to exercise its right to participate in such Subsequent Financing, Lender shall cooperate to consummate its Investment in such closing within five (5) days of receipt of documentation with respect thereto. Parent shall not take any action to avoid or seek to avoid the observance or performance of any of the obligations pursuant to this Section 8.1, but will at all times in good faith assist in the carrying out the same and take all such action as may be necessary or appropriate to protect the rights of Lender hereunder against impairment. Without limiting the generality of the foregoing, Parent will obtain all such authorizations, exemptions or consents from any third party or any Governmental Authority having jurisdiction thereof as may be necessary to enable Parent to perform its obligations under this Agreement.

SECTION 9. EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrowers fail to pay principal, interest and regularly scheduled fee when due under this Agreement or any other Loan Document, or shall pay any other amount due hereunder within three (3) Business Days of the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or a Borrower's bank if such Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following such Borrowers' knowledge of such failure to pay; or

9.2 Covenants. A Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among any Borrower, Agent and Lender, and (a) with respect to a default under any covenant under this Agreement other than the Sections specifically identified in clause (b) hereof, any other Loan Document or any other agreement between any Borrower and Agent or Lender, and such default continues for more than twenty (20) days, or (b) with respect to a default under any of Sections 6, 7.1, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.17, 7.18, or 7.19, the occurrence of such default; or

9.3 Material Adverse Effect. A circumstance has occurred that could reasonably be expected to have a Material Adverse Effect or a "change of control", "fundamental change" or any comparable term under and as defined in any indenture governing any Permitted Convertible Debt (but not "make-whole

fundamental change" unless it results in a put right for holders of such Permitted Convertible Debt) has occurred; or

9.4 Representations. Any representation or warranty made by any Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Any Borrower or Qualified Subsidiary (i) (A) shall make an assignment for the benefit of creditors; or (B) shall be unable to pay its debts as they become due, or shall become insolvent; or (C) shall file a voluntary petition in bankruptcy; or (D) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (E) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of such Person or of all or any part of the assets or property of such Person; or (F) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (G) any Borrower or Qualified Subsidiary or the Board or majority of the holders of the Equity Interests of the foregoing shall take any action initiating any of the foregoing actions described in clauses (A) through (F); or (ii) either (A) forty-five (45) days shall have expired after the commencement of an involuntary action against any Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of a Borrower, or a Qualified Subsidiary being stayed; or (B) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be appealed within twenty (20) days; or (C) any Borrower, or Qualified Subsidiary shall file any answer admitting or not contesting the material allegations of a petition filed against such Borrower or Qualified Subsidiary in any such proceedings; or (D) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (E) thirty (30) days shall have expired after the appointment, without the consent or acquiescence of the applicable Borrower or Qualified Subsidiary, of any trustee, receiver or liquidator of such Person or of all or any material part of the properties of such Person without such appointment being vacated; or

9.6 Attachments; Judgments. Any material portion of the assets of any Borrower or Qualified Subsidiary is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered (in each case not covered by independent third party insurance) for the payment of money individually or in the aggregate, of at least $500,000, or any Borrower or Qualified Subsidiary is enjoined or in any way prevented by court order from conducting any material part its business; or

9.1 Other Obligations. The occurrence of any default under any agreement or obligation of any Borrower or Qualified Subsidiary involving any Indebtedness in excess of $500,000, which could entitle or permit any Person to accelerate such Indebtedness or any early cash payment in excess of $500,000 by New Parent or its Affiliate is required or unwinding or termination occurs with respect to any Permitted Bond Hedge Transaction or Permitted Warrant Transaction that requires New Parent or its Affiliate to make a net cash payment in excess of $500,000, or any condition giving rise to the foregoing is met, in each case, with respect to which New Parent or its Affiliate is the "defaulting party" under the terms of such Permitted Bond Hedge Transaction or Permitted Warrant Transaction.

SECTION 10. REMEDIES

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in any Borrower's name any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, each Borrower hereby grants Agent an irrevocable power of attorney coupled

with an interest, and (iii) Agent may notify any of any Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on such Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent shall at the direction of the Required Lenders, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Each Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower Representative. Agent may require any Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, subject to increase in accordance with Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrowers or each of its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of any Borrower or any other Person, and each Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Pledged Collateral. Upon the occurrence and during the continuation of an Event of Default, (a) at Agent's election and upon notice to the applicable Borrower, Agent may vote any or Equity Interests (whether or not the same shall have been transferred into its name or the name of its nominee or nominees) for any lawful purpose, including, without limitation, for the liquidation of the assets of the issuer thereof, and give all consents, waivers and ratifications in respect of the Equity Interests and otherwise act with respect thereto as though it were the outright owner thereof (hereby irrevocably constituting and appointing Agent the proxy and attorney-in-fact of such Borrower, with full power of substitution, to do so); (b) Agent may demand, sue for, collect or make any compromise or settlement Agent deems suitable in respect of any Equity Interests; (c) Agent may sell, resell, assign and deliver, or otherwise dispose of any or all of the Pledged Collateral, for cash or credit or both and upon such terms at such place or places, at such time or times and to such entities or other persons as Agent deems expedient, all without demand for performance by any Borrower or any notice or advertisement whatsoever except as expressly provided herein or as may otherwise be required by law; (d) Agent may cause all or any part of the Pledged Collateral to be transferred into its name or the name of its nominee or nominees; and (e) at Agent's election and upon notice thereof to the applicable Borrower, Agent may exercise all membership or partnership, as applicable, rights, powers and privileges to the same extent as the applicable Borrower is entitled to exercise such rights, powers and privileges. Agent may enforce its rights hereunder without any other notice and without compliance with any other condition precedent now or hereunder imposed by statute, rule of law or otherwise (all of which are hereby expressly waived by each Borrower, to the fullest extent permitted by

law). Each Borrower recognizes that the Collateral Agent may be unable to effect a public sale or other disposition of its Equity Interests by reason of certain prohibitions contained in securities laws and other applicable laws, but may be compelled to resort to one or more private sales thereof to a restricted group of purchasers. Each Borrower agrees that any such private sales may be at prices and other terms less favorable to the seller than if sold at public sales and that such private sales shall not by reason thereof be deemed not to have been made in a commercially reasonable manner. Agent shall be under no obligation to delay a sale of any of the Pledged Collateral for the period of time necessary to permit the issuer of Equity Interests to register such securities for public sale under securities laws or other applicable laws, even if such issuer would agree to do so. In connection with the sale of Pledged Collateral by Agent during the continuation of an Event of Default, each Borrower agrees to use its commercially reasonable efforts to cause each issuer of the Equity Interests contemplated to be sold, to execute and deliver, and cause the directors and officers of such issuer to execute and deliver, all at such Borrower's expense, all such instruments and documents, and to do or cause to be done all such other acts and things as may be necessary or, in the reasonable opinion of Agent, advisable to exempt such Equity Interests from registration under the provisions of applicable laws, and to make all amendments to such instruments and documents which, in the opinion of Agent, are necessary or advisable, all in conformity with the requirements of applicable laws and the rules and regulations of the Securities and Exchange Commission applicable thereto.

10.5 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11. MISCELLANEOUS

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(b) If to Lender:

HERCULES CAPITAL, INC.
Legal Department

Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(c) If to Borrowers:

BridgeBio Pharma LLC
Attention:
421 Kipling Street
Palo Alto, CA 94301

email: nk@bridgebio.com
Telephone: 650-391-9740

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated April 12, 2018 and the Non-Disclosure Agreement).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrowers party to the relevant Loan Document may, or, with the written consent of the Required Lenders, Agent and Borrowers party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of Lender or of Borrowers hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder, or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Borrowers of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrowers, Lender, Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of

proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrowers at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and Borrowers and shall survive the execution and delivery of this Agreement. Section 2.9, Section 6.3 and Section 11.14 shall survive the termination of this Agreement.

11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on each Borrower and its permitted assigns (if any). No Borrower shall assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrowers, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrowers or a distressed debt or vulture investor (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to a Controlled Investment Affiliate of any Lender or Agent shall be allowed. Agent, acting solely for this purpose as an agent of Borrowers, shall maintain at one of its offices in the State of California a copy of each assignment delivered to it in connection with any assignment by a Lender, and a register for the recordation of the names and addresses of each Lender, and the Term Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrowers, Agent and Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrowers and Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrowers of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents following the exhaustion of all rights with respects to appeals relating thereto. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other

manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.10 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWERS, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWERS AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST A BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrowers and Lender; Claims that arise out of or are in any way connected to the relationship among Borrowers, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.11 Professional Fees. Each Borrower promises to pay Agent's and Lender's reasonable fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys' fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, each Borrower promises to pay any and all reasonable attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to a Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to a Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of a Borrower's estate, and any appeal or review thereof.

11.12 Confidentiality. Agent and Lender acknowledge that certain items of Collateral and information provided to Agent and Lender by a Borrower are confidential and proprietary information of Borrowers, if and to the extent such information either (i) is marked as confidential by such Borrower at the time of disclosure, or (ii) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain in the course of acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrowers, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their reasonable discretion determines that any such party should have access to such

information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of any Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of any Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and Lender's obligations under this Section 11.12 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

11.13 Assignment of Rights. Each Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve any Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Term Note(s)(if any), it will endorse thereon a notation as to the portion of the principal of the Term Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.14 Revival of Secured Obligations; Termination. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against any Borrower for liquidation or reorganization, if any Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of any Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations (other than obligations that survive termination) shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and payment in cash to Agent or Lender in cash. This Agreement and the Loan Documents shall terminate on the payment in full in cash of the Secured Obligations (other than any obligations that specifically survive termination).

11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrowers unless specifically provided otherwise herein, and,

except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, Lender and Borrowers.

11.17 Agency.

(a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as Agent hereunder and under the other Loan Documents and authorizes Agent to take such actions on its behalf and to exercise such powers as are delegated to Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Lender agrees to indemnify Agent in its capacity as such (to the extent not reimbursed by Borrowers and without limiting the obligation of Borrowers to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Agent is required to exercise as directed in writing by Lender, provided that Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Agent to liability or that is contrary to any Loan Document or applicable law; and

(iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and Agent shall not be liable for the failure to disclose, any information relating to Borrowers or any of its Affiliates that is communicated to or obtained by any Person serving as Agent or any of its Affiliates in any capacity.

(e) Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of Lender or as Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan

Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.

11.19 Multiple Borrowers.

(a) Borrowers' Agent. Each of Borrowers hereby irrevocably appoints Borrower Representative as its agent, attorney-in-fact and legal representative for all purposes, including requesting disbursement of the Term Loan Advance and receiving account statements and other notices and communications to Borrowers (or any of them) from Agent or any Lender. Agent may rely, and shall be fully protected in relying, on any request for the Term Loan Advance, disbursement instruction, report, information or any other notice or communication made or given by Borrower Representative, whether in its own name or on behalf of one or more of the other Borrowers, and Agent shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrowers' obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require Agent to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other Person, or to proceed against any property of any kind which secures all or any part of the Secured Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with Agent or any Indebtedness of Agent or any Lender to any other Borrower, or to exercise any other right or power, or pursue any other remedy Agent or any Lender may have; (ii) any defense arising by reason

of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other Person, or by reason of the cessation from any cause whatsoever of any liability of any other Borrower or any guarantor or any endorser, co-maker or other Person, with respect to all or any part of the Secured Obligations, or by reason of any act or omission of Agent or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other Person or any Secured Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of Agent to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other Person; (iv) any defense based upon or arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against any other Borrower or any guarantor or any endorser, co-maker or other Person, including without limitation any discharge of, or bar against collecting, any of the Secured Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Secured Obligations have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of any Borrower hereunder except the full performance and payment of all of the Secured Obligations. If any claim is ever made upon Agent for repayment or recovery of any amount or amounts received by Agent in payment of or on account of any of the Secured Obligations, because of any claim that any such payment constituted a preferential transfer or fraudulent conveyance, or for any other reason whatsoever, and Agent repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over Agent or any of its property, or by reason of any settlement or compromise of any such claim effected by Agent with any such claimant (including without limitation the any other Borrower), then and in any such event, each Borrower agrees that any such judgment, decree, order, settlement and compromise shall be binding upon such Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Secured Obligations, or any release of any of the Secured Obligations, and each Borrower shall be and remain liable to Agent and Lender under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by Agent or any Lender, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Secured Obligations, including (but not limited to) any of the foregoing rights which a Borrower may have under any present or future document or agreement with any other Borrower or other Person, and including (but not limited to) any of the foregoing rights which any Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by such Borrower and without affecting or impairing in any way the obligations or liability of such Borrower hereunder, Agent may, from time to time before or after revocation of this Agreement, do any one or more of the following in its sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Secured Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Secured Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Secured Obligations or any guaranty of any or all of the Secured Obligations, or on which Agent at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or

any part of the Secured Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of such Borrower; (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any Indebtedness whatsoever owing from such Person or secured by such Collateral or security, in such manner and order as Agent determines in its sole discretion, and regardless of whether such Indebtedness is part of the Secured Obligations, is secured, or is due and payable. Each Borrower consents and agrees that Agent shall be under no obligation to marshal any assets in favor of Borrower, or against or in payment of any or all of the Secured Obligations. Each Borrower further consents and agrees that Agent shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Secured Obligations. Without limiting the generality of the foregoing, Agent shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Secured Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against such Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by Agent. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and such Borrower is not relying in any manner upon any representation or statement of Agent or any Lender with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower's financial condition and any other matter pertinent hereto as such Borrower may desire, and such Borrower is not relying upon or expecting Agent to furnish to it any information now or hereafter in Agent's possession concerning the same or any other matter.

(e) Subordination. All Indebtedness of any Borrower now or hereafter arising held by another Borrower is subordinated to the Secured Obligations and any Borrower holding the Indebtedness shall take all actions reasonably requested by Agent to effect, to enforce and to give notice of such subordination.

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[SIGNATURE PAGE TO LOAN AND SECURITY AGREEMENT]

IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

BORROWERS:

BRIDGEBIO PHARMA, INC.

Signature: _____
Print Name: _____
Title: _____

BRIDGEBIO PHARMA LLC

Signature: _____
Print Name: _____
Title: _____

BRIDGEBIO SERVICES INC.

Signature: _____
Print Name: _____
Title: _____

SUB20, INC.

Signature: _____
Print Name: _____
Title: _____

[SIGNATURE PAGE TO LOAN AND SECURITY AGREEMENT]

IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

Accepted in Palo Alto, California:

AGENT:

HERCULES CAPITAL, INC.

Signature: _____
Print Name: Zhuo Huang
Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: _____
Print Name: Zhuo Huang
Title: Associate General Counsel

Table of Exhibits and Schedules

EXHIBIT A

ADVANCE REQUEST

To: Agent:Date: , 2018

Hercules Capital, Inc. (the "Agent")
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Attn: Legal Department; Himani Bhalla; Nimesh Shah

Re: Loan and Security Agreement dated as of June ___, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Agreement"), by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Borrower Representative, on behalf of Borrowers, hereby requests Agent to cause Lender to make an Advance in the amount of _____ Dollars ($_____) on _____, _____ (the "Advance Date") pursuant to the Agreement. Capitalized words and other terms used but not otherwise defined herein are used with the same meanings as defined in the Agreement.

Please:

(a) Issue a check payable to Borrower Representative ☐

or

(b) Wire Funds Borrower Representative's account ☐

Bank:	Silicon Valley Bank
Address:	Santa Clara, CA
To the credit of:	BridgeBio Pharma LLC
Account Number:	3301428699
Routing Number:	121140399
Contact Person:	Neil Kumar
Email address:	nk@bridgebio.com

Borrower Representative represents that the conditions precedent to the Advance set forth in the Agreement are satisfied and shall be satisfied upon the making of such Advance, including but not limited to: (i) that no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing; (ii) that the representations and warranties set forth in the Agreement and in any warrant issued to Lender are and shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date; (iii) that each Borrower is in compliance with all the terms and provisions set forth in each Loan Document on its part to be observed or performed; and (iv) that as of the Advance Date, no fact or condition exists that constitutes (or could, with the passage of time, the giving of notice, or both constitute) an Event of Default under the Loan Documents. Borrower Representative understands and acknowledges that Agent has the right to review the financial information supporting this representation and, based upon such review in its reasonable discretion, Lender may decline to fund the requested Advance.

Borrower Representative hereby represents that each Borrower's jurisdiction of organization, organizational form, legal name and locations have not changed since the date of the Agreement or, if the Attachment to this Advance Request is completed, are as set forth in the Attachment to this Advance Request.

Borrower Representative agrees to notify Agent promptly before the funding of the Loan if any of the matters which have been represented above shall not be true and correct on the Advance Date and if Agent has received no such notice before the Advance Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct as of the Advance Date.

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This Advance Request is duly executed as of the date set forth above.

BRIDGEBIO PHARMA LLC

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

ATTACHMENT TO ADVANCE REQUEST

Dated: _____, 2018

Borrower Representative hereby represents and warrants to Agent, on behalf of each Borrower, that each of Borrowers' current names and organizational status is as follows:

Name:	BridgeBio Pharma LLC
Type of organization:	limited liability company
State of organization:	Delaware
Organization file number:	5984875

Name:	BridgeBio Services Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	6382136

Borrower Representative hereby represents and warrants to Agent, on behalf of Borrowers, that the street addresses, cities, states and postal codes of each Borrower's current locations are as follows:

BridgeBio Pharma LLC and BridgeBio Services Inc.:

421 Kipling Street
Palo Alto, CA 94301

EXHIBIT B

SECURED TERM PROMISSORY NOTE

$35,000,000 Advance Date: June ____, 2018

Maturity Date: December 1, 2021

FOR VALUE RECEIVED, each of BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), from time to time, hereby promises to pay to Hercules Capital, Inc., a Maryland corporation or its registered assigns (the "Lender") at 400 Hamilton Avenue, Suite 310, Palo Alto, CA 94301 or such other place of payment as the Lender may specify from time to time in writing, in lawful money of the United States of America, the principal amount of $35,000,000 or such other principal amount as Lender has advanced to Borrowers, together with interest at a rate as set forth in Section 2.1(c) of the Loan Agreement based upon a year consisting of 360 days, with interest computed daily based on the actual number of days in each month.

This Secured Term Promissory Note (the "Term Note") is the Term Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement dated as of June ___, 2018, by and among Borrowers, Hercules Capital, Inc., a Maryland corporation (the "Agent") and the several banks and other financial institutions or entities from time to time party thereto as lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All payments shall be made in accordance with the Loan Agreement. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. An Event of Default under the Loan Agreement shall constitute a default under this Term Note.

Each Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest under the UCC or any applicable law. Each Borrower agrees to make all payments under this Term Note without setoff, recoupment or deduction and regardless of any counterclaim or defense. Borrowers shall be jointly and severally liable with respect to all Secured Obligations pursuant to this Term Note and the Loan Agreement. This Term Note has been negotiated and delivered to Lender and is payable in the State of California. This Term Note shall be governed by and construed and enforced in accordance with, the laws of the State of California, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

The undersigned have duly executed this Term Note.

BRIDGEBIO PHARMA LLC

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

BRIDGEBIO SERVICES INC.

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

EXHIBIT C

NAME, LOCATIONS, AND OTHER INFORMATION FOR BORROWER

Legal Name:	BridgeBio Pharma LLC
Type of organization:	limited liability company
State of organization:	Delaware
Organization file number:	6382136
Prior Legal Names:	N/A
Periods of use:	August 2017
Fiscal Year End:	December 31
Federal Employer Tax Identification Number:	81-1790983
Chief Executive Office Location:	421 Kipling Street, Palo Alto, CA 94301

Legal Name:	BridgeBio Services Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	5984875
Prior Legal Names:	N/A
Periods of use:	N/A
Fiscal Year End:	December 31
Federal Employer Tax Identification Number:	35-2592788
Chief Executive Office Location:	421 Kipling Street, Palo Alto, CA 94301

1.

EXHIBIT D

PATENTS, TRADEMARKS, COPYRIGHTS AND LICENSES

See attached.

EXHIBIT E

DEPOSIT ACCOUNTS AND INVESTMENT ACCOUNTS

ACCOUNT HOLDER	DEPOSITORY / INTERMEDIARY	ADDRESS	PURPOSE	ACCOUNT NUMBER
BridgeBio Pharma LLC	Silicon Valley Bank	555 Mission St., Ste. 900, San Francisco, CA 94105	Operating Account	3301428699
BridgeBio Services Inc.	Silicon Valley Bank	555 Mission St., Ste. 900, San Francisco, CA 94105	Operating Account	3301539758

EXHIBIT F

COMPLIANCE CERTIFICATE

Hercules Capital, Inc.
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Attn: Legal Department; Himani Bhalla; Nimesh Shah

Reference is made to that certain Loan and Security Agreement dated as of June 19, 2018, by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and administrative agent for Lender (in such capacity "Agent"). All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Borrower Representative, knowledgeable of all Borrowers' financial matters, and is authorized to provide certification of information regarding Borrowers; hereby certifies, in such capacity, that in accordance with the terms and conditions of the Loan Agreement, each Borrower is in compliance for the period ending _____ with all covenants, conditions and terms and hereby reaffirms that all representations and warranties contained therein are true and correct in all material respects (except to the extent any representation or warranty is qualified by any applicable standard of materiality in the Loan Agreement) on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent that such representations and warranties expressly relate to an earlier date, and except that no representation and warranty related to the Platform Companies is deemed to be made except for the representations and warranties set forth in Section 5.15 with respect to the Pledged Collateral. Attached are the required documents supporting the above certification. The undersigned further certifies that all financial statements delivered herewith are prepared in accordance with GAAP (except for the absence of footnotes with respect to unaudited financial statement and subject to normal year-end adjustments) and are consistent from one period to the next except as explained below.

REPORTING REQUIREMENT	REQUIRED	CHECK IF ATTACHED
Monthly Financial Statements	Monthly, within 30 days	☐
Quarterly Financial Statements	Quarterly, within 45 days (if public)	☐
Updated Capitalization Tables of Platform Companies	Quarterly, within 45 days	☐
Audited Financial Statements (if required by Borrower's board of directors)	Annually, within 180 days of fiscal year end	☐
Budget and Projections	Annually, within 90 days of fiscal year end, and promptly upon any Board approved material update	☐

FINANCIAL COVENANT	REQUIRED	COMPLIES
Minimum Cash	$20,000,000[1]	☐Yes ☐No

The undersigned hereby also confirms as follows:

[1] Applicable after 9/15/2019 or upon effectiveness of Qualified IPO, if earlier; waived after effectiveness of Qualified IPO as long as Market Capitalization exceeds $750,000,000; waived after Achievement Milestone is met.

1.Does any Borrower or Qualified Subsidiary have any deposit account or investment account not set forth on Exhibit E to the Loan Agreement, as updated to date? ☐Yes ☐No
(*If yes, please attach updated Exhibit E.)*

2.Has any new Qualified Subsidiary been formed that has not entered into a Joinder Agreement? ☐Yes ☐No

3.Has a Borrower acquired any Equity Interests or Instruments not set forth on Schedule 5.15 to the Loan Agreement, as updated to date? ☐Yes ☐No
(*If yes, please provide updated Schedule 5.15.)*

4.Have the Organizational Documents or financing documents or similar agreements or documents governing the Equity Interests of any Platform Company been materially amended, restated, supplemented or otherwise modified? ☐Yes ☐No
(*If yes, please provide copies.)*

5.Has any Prepayment Event occurred of which Agent has not yet been notified? ☐Yes ☐No
(*If yes, please provide details and calculations of Net Cash Proceeds.)*

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Very Truly Yours,

BRIDGEBIO PHARMA LLC

SIGNATURE: _____
TITLE:
PRINT NAME: _____

EXHIBIT G

FORM OF JOINDER AGREEMENT

This Joinder Agreement (the "Joinder Agreement") is made and dated as of June ___, 2018, and is entered into by and between_____, a _____ corporation ("Subsidiary"), and HERCULES CAPITAL, INC., a Maryland corporation (as "Agent").

RECITALS

A. Subsidiary's Affiliate, BridgeBio Pharma LLC ("Company") has entered into that certain Loan and Security Agreement dated as of June ___, 2018, with the several banks and other financial institutions or entities from time to time party thereto as lender (collectively, the "Lender") and Agent, as such agreement may be amended (the "Loan Agreement"), together with the other agreements executed and delivered in connection therewith;

B. Subsidiary acknowledges and agrees that it will benefit both directly and indirectly from Company's execution of the Loan Agreement and the other agreements executed and delivered in connection therewith;

AGREEMENT

NOW THEREFORE, Subsidiary and Agent agree as follows:

1. The recitals set forth above are incorporated into and made part of this Joinder Agreement. Capitalized terms not defined herein shall have the meaning provided in the Loan Agreement.

2. By signing this Joinder Agreement, Subsidiary shall be bound by the terms and conditions of the Loan Agreement the same as if it were a Borrower (as defined in the Loan Agreement) under the Loan Agreement, mutatis mutandis, provided however, that (a) with respect to (i) Section 5.1 of the Loan Agreement, Subsidiary represents that it is an entity duly organized, legally existing and in good standing under the laws of [_____], (b) neither Agent nor Lender shall have any duties, responsibilities or obligations to Subsidiary arising under or related to the Loan Agreement or the other Loan Documents, (c) that if Subsidiary is covered by Company's insurance, Subsidiary shall not be required to maintain separate insurance or comply with the provisions of Sections 6.1 and 6.2 of the Loan Agreement, and (d) that as long as Company satisfies the requirements of Section 7.1 of the Loan Agreement, Subsidiary shall not have to provide Agent separate Financial Statements. To the extent that Agent or Lender has any duties, responsibilities or obligations arising under or related to the Loan Agreement or the other Loan Documents, those duties, responsibilities or obligations shall flow only to Company and not to Subsidiary or any other Person or entity. By way of example (and not an exclusive list): (i) Agent's providing notice to Company in accordance with the Loan Agreement or as otherwise agreed among Company, Agent and Lender shall be deemed provided to Subsidiary; (ii) a Lender's providing an Advance to Company shall be deemed an Advance to Subsidiary; and (iii) Subsidiary shall have no right to request an Advance or make any other demand on Lender.

3. Subsidiary agrees to deliver any equity securities to Agent in order to perfect Agent's security interest in such equity securities.

4. Subsidiary acknowledges that it benefits, both directly and indirectly, from the Loan Agreement, and hereby waives, for itself and on behalf on any and all successors in interest (including without limitation any assignee for the benefit of creditors, receiver, bankruptcy trustee or itself as debtor-in-possession under any bankruptcy proceeding) to the fullest extent provided by law, any and all claims, rights or defenses to the enforcement of this Joinder Agreement on the basis that (a) it failed to receive adequate consideration for the execution and delivery of this Joinder Agreement or (b) its obligations under this Joinder Agreement are avoidable as a fraudulent conveyance.

5. As security for the prompt, complete and indefeasible payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Subsidiary grants to Agent a security interest in all of Subsidiary's right, title, and interest in and to the Collateral.

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SUBSIDIARY:

[_____]

By: _____

Name: _____

Title: _____

Address:

[_____]

[_____]

[_____]

Telephone: [_____]

email: [_____]

AGENT:

HERCULES CAPITAL, INC.

By: _____

Name: _____

Title: _____

Address:
400 Hamilton Ave., Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

EXHIBIT H

ACH DEBIT AUTHORIZATION AGREEMENT

Hercules Capital, Inc.
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Re: Loan and Security Agreement dated as of June ___, 2018 (the "Agreement") by and among BRIDGEBIO PHARMA LLC, BRIDGEBIO SERVICES INC., and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers") and Hercules Capital, Inc., as administrative agent ("Agent") and the lenders party thereto (collectively, "Lender").

In connection with the above referenced Agreement, the undersigned Borrower hereby authorizes Agent to initiate debit entries for (i) the periodic payments due under the Agreement and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender pursuant to Section 11.11 of the Agreement to its account indicated below. The undersigned authorizes the depository institution named below to debit to such account.

DEPOSITORY NAME SILICON VALLEY BANK	BRANCH
CITY SANTA CLARA	STATE AND ZIP CODE CALIFORNIA 95054
TRANSIT/ABA NUMBER 121140399	ACCOUNT NUMBER 3301428699

This authority will remain in full force and effect so long as any amounts are due under the Agreement.

BRIDGEBIO PHARMA LLC

By: _____
Name: _____
Date: _____

EXHIBIT I-1

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June ___, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Term Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and the Borrower Representative with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform the Borrower Representative and the Agent, and (2) the undersigned shall have at all times furnished the Borrower Representative and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

DATE: _____ __, 20[ ]

EXHIBIT I-2

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June ___, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT I-3

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June ___, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT I-4

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June ___, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Term Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Term Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Loan Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished Agent and the Borrower Representative with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform the Borrower Representative and Agent, and (2) the undersigned shall have at all times furnished the Borrower Representative and Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

SCHEDULE 1.1

COMMITMENTS

LENDER	TRANCHE I TERM COMMITMENT	TRANCHE II TERM COMMITMENT	TRANCHE III TERM COMMITMENT	DISCRETIONARY TERM COMMITMENT
Hercules Capital, Inc.	$35,000,000	$20,000,000	$20,000,000	$25,000,000
TOTAL COMMITMENTS	$35,000,000	$20,000,000	$20,000,000	$25,000,000

SCHEDULE 1A

EXISTING INDEBTEDNESS

None.

SCHEDULE 1B

EXISTING INVESTMENTS

1. Equity Interests

Company	**Record Owner & Percent Ownership**
A. Adrenas Therapeutics, Inc.	BioBridge Pharma LLC – 28%
b.Aspa Therapeutics, Inc.	BioBridge Pharma LLC –31%
C. Coa Therapeutics, Inc.	BioBridge Pharma LLC – 84%
D. Dermecular Therapeutics, Inc.	BioBridge Pharma LLC – 84%
E. Eidos Therapeutics, Inc.	BioBridge Pharma LLC – 60%
F. Ferro Therapeutics, Inc.	BioBridge Pharma LLC – 52%
G. Fortify Therapeutics, Inc.	BioBridge Pharma LLC – 100%
H. Molecular Skin Therapeutics, Inc.	BioBridge Pharma LLC – 33%
I.Navire Pharma, Inc.	BioBridge Pharma LLC – 26%
J.Orfan Biotech Inc.	BioBridge Pharma LLC – 35%
K. Origin Biosciences, Inc.	BioBridge Pharma LLC – 82%
L. PellePharm, Inc.	BioBridge Pharma LLC – 50%
M. Phoenix Tissue Repair, Inc.	BioBridge Pharma LLC – 29%
N. QED Therapeutics, Inc.	BioBridge Pharma LLC – 80%
O. Quartz Therapeutics, Inc.	BioBridge Pharma LLC – 40%
P. Shift Therapeutics, Inc.	[Not Yet Funded]
Q. TheRas, Inc.	BioBridge Pharma LLC – 84%
R. Venthera, Inc.	BioBridge Pharma LLC – 39%

SCHEDULE 1C

EXISTING LIENS

None.

SCHEDULE 5.14

CAPITALIZATION

SCHEDULE 5.15

EQUITY INTERESTS; INSTRUMENTS

(i) EQUITY INTERESTS

Issuer	Type and Class of Equity Interests	Number of Pledged Equity Interests	Certificate Number
Adrenas Therapeutics, Inc.	Preferred A	1,000,000	PA-0001
Adrenas Therapeutics, Inc.	Preferred A	3,000,000	PA-0002
Aspa Therapeutics, Inc.	Preferred A	2,000,000	PA-0001
Coa Therapeutics, Inc.	Common	900,000	CS-0002
Coa Therapeutics, Inc.	Preferred A	100,000	PA-0001
Coa Therapeutics, Inc.	Preferred A	514,958	PA-0002
Coa Therapeutics, Inc.	Preferred A	400,000	PA-0003
Coa Therapeutics, Inc.	Preferred A	500,000	PA-0004
Coa Therapeutics, Inc.	Preferred A	2,000,000	PA-0005
Calcilytix Therapeutics, Inc.	Preferred A	2,000,000	PA-0001
Dermecular Therapeutics, Inc.	Preferred A	4,500,000	PA-0001
Eidos Therapeutics, Inc.	Common	18,614,655	ET 00001
Ferro Therapeutics, Inc.	Preferred A	1,500,000	PA-0001
Fortify Therapeutics, Inc.	Preferred A	150,000	PA-0001
Molecular Skin Therapeutics, Inc.	Preferred A	1,500,000	PA-1
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	800,000	PA-0001
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	480,000	PA-0002
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	720,000	PA-0003
Orfan Biotech Inc.	Preferred A	1,500,000	PA-0001
Origin Biosciences, Inc. (fka Origin Therapeutics, Inc.)	Preferred A	3,000,000	PA-0001
Origin Biosciences, Inc. (fka Origin Therapeutics, Inc.)	Preferred A	2,000,000	PA-0002
PellePharm, Inc.	Common	1,000,000	CS-24
PellePharm, Inc.	Common	400,000	CS-25
PellePharm, Inc.	Preferred B	3,888,889	PB-2
PellePharm, Inc.	Preferred B-2	4,683,763	PB-2-35

Issuer	Type and Class of Equity Interests	Number of Pledged Equity Interests	Certificate Number
PellePharm, Inc.	Preferred B-2	2,096,992	PB-2-15
PellePharm, Inc.	Preferred B-2	3,464,705	PB-2-24
PellePharm, Inc.	Preferred B-2	2,350,427	PB-2-34
PellePharm, Inc.	Preferred B-2	3,594,842	PB-2-36
PellePharm, Inc.	Preferred C	629,946	PC-1
Phoenix Tissue Repair, Inc.	Preferred A	3,000,000	1
Phoenix Tissue Repair, Inc.	Preferred A	1,500,000	2
QED Therapeutics, Inc.	Preferred A	20,000,000	PA-0001
QED Therapeutics, Inc.	Preferred A	15,000,000	PA-0003
Quartz Therapeutics, Inc.	Preferred A	805,256	PA-01
Quartz Therapeutics, Inc.	Preferred A	826,700	PA-02
Quartz Therapeutics, Inc.	Preferred A	805,256	PA-03
Quartz Therapeutics, Inc.	Preferred A	2,415,770	PA-04
Quartz Therapeutics, Inc.	Preferred A	1,610,513	PA-05
Quartz Therapeutics, Inc.	Voting Common	100	VCS-01
Sub20, Inc.	Common	200,000	CS-0001
TheRas, Inc.	Common	1,000	C-1
TheRas, Inc.	Series Seed Preferred	8,998,965	PS-1
TheRas, Inc.	Preferred A	500,045	PA-1
TheRas, Inc.	Preferred A	500,045	PA-2
TheRas, Inc.	Preferred A	2,000,200	PA-3
TheRas, Inc.	Preferred A	2,000,200	PA-4
Venthera, Inc.	Preferred A	1,948,051	PA-0001

(ii) REQUIRED NOTICES, CONSENTS OR WAIVERS

1. Acknowledgment, Consent and Waiver, dated as of the Closing Date, among Adrenas Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
2. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Aspa Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
3. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Coa Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
4. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Dermecular Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
5. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Eidos Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
6. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Fortify Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.

7. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Ferro Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
8. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Molecular Skin Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
9. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Navire Pharma, Inc. (Fka Ptp Pharmaceuticals, Inc.), Bridgebio Pharma LLC and Hercules Capital, Inc.
10. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Orfan Biotech Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
11. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Origin Biosciences, Inc. (Fka Origin Therapeutics, Inc.), Bridgebio Pharma LLC and Hercules Capital, Inc.
12. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Pellepharm, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
13. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Phoenix Tissue Repair, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
14. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Qed Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
15. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Quartz Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
16. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Theras, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
17. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Venthera, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
18. Acknowledgment, Consent and Waiver, dated as of February 27, 2019, among Calcilytix Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.

SCHEDULE 7.19

POST-CLOSING DELIVERIES

1. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the stock certificates representing all of Parent's ownership of Equity Interests of the following Platform Companies and other Qualified Subsidiaries, together with stock powers, in form acceptable to Agent:

- Molecular Skin Therapeutics, Inc.
- TheRas, Inc.
- Fortify Therapeutics, Inc.

2. Within 4 business days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the stock certificate(s) representing all of Parent's ownership of Equity Interests of Pellepharm Inc., together with a stock power or stock powers, as applicable, duly executed and in blank, in form acceptable to Agent.

3. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), on a commercially reasonable efforts basis, either (i) a stock certificate representing all of Parent's ownership of Equity Interests of Eidos Therapeutics, Inc., together with a stock power, duly executed and in blank, in form acceptable to Agent, or (ii) a control agreement with respect to such Equity Interests (if the same are not evidenced by a certificate), in form acceptable to Agent.

4. Within 5 business days of the Closing Date (or with respect to stock certificates permitted to be delivered post-closing, within 5 business days of the due date therefore in accordance with this Schedule) (or in each case, at such later date as Agent may approve in its sole discretion), the original stock certificates together with the original stock powers.

5. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the insurance endorsements required to be delivered pursuant to the Agreement.

6. Within 15 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), a Joinder Agreement, duly executed by Sub20, Inc., together with corporate authority documents, a customary closing certificate and any other documents reasonably required by Agent to perfect Agent's security interest in the Collateral owned by Sub20, Inc.

7. Within 15 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), a waiver, in form acceptable to Agent, of any applicable provisions in the Equity Documents of Fortify Therapeutics, Inc., with respect to the pledge of the Equity Interests of Fortify Therapeutics, Inc.

EXHIBIT B

(See Attached)

FIFTH AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS FIFTH AMENDMENT TO LOAN AND SECURITY AGREEMENT (this "Amendment"), dated as of January 25, 2021, is entered into by and among BRIDGEBIO PHARMA, INC., a Delaware corporation ("New Parent"), BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), SUB20, INC., a Delaware corporation ("Sub20", and together with New Parent, Parent, Services Company and each other Person party thereto from time to time as borrower, from time to time, collectively, "Borrowers", and each, a "Borrower"), and the several banks and other financial institutions or entities party thereto as Lender, constituting the Required Lenders and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

A. Parent, Services Company, Lender and Agent are parties to that certain Loan and Security Agreement, dated as of June 19, 2018, as amended by that certain First Amendment to Loan and Security Agreement, dated as of December 28, 2018, further amended by that certain Second Amendment to Loan and Security Agreement, dated as of May 17, 2019, further amended by that certain Third Amendment to Loan and Security Agreement, dated as of March 2, 2020, and further amended by that certain Fourth Amendment to Loan and Security Agreement, dated as of April 27, 2020 (the "Existing Loan Agreement"; and the Existing Loan Agreement, as amended by this Amendment and as further amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement").

B. Borrowers, Lender and Agent desire to modify the terms of the Existing Loan Agreement as set forth in this Amendment.

SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

(b) **Rules of Construction**. The rules of construction that appear in the last paragraph of Section 1.1 of the Loan Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

SECTION 2 Amendments to the Loan Agreement.

(a) Upon satisfaction of the conditions set forth in Section 3 hereof, the Existing Loan Agreement is hereby amended as follows:

(i) Exhibit A attached hereto sets forth a clean copy of the Loan Agreement as amended hereby;

(ii) In Exhibit B hereto, deletions of the text in the Existing Loan Agreement (including, to the extent included in such Exhibit B, each Schedule or Exhibit to the Existing Loan Agreement) are indicated by ~~struck-through text~~, and insertions of text are indicated by **bold, double-underlined text**.

(b) **References Within Existing Loan Agreement**. Each reference in the Existing Loan Agreement to "this Agreement" and the words "hereof," "herein," "hereunder," or words of like import, shall mean and be a reference to the Existing Loan Agreement as amended by this Amendment. This Amendment shall be a Loan Document.

SECTION 3 Conditions of Effectiveness. The effectiveness of Section 2 of this Amendment shall be subject to Agent's receipt of this Amendment, executed by Agent, Lender and Borrowers.

SECTION 4 Representations and Warranties. To induce Agent and Lender to enter into this Amendment, each Borrower hereby confirms, as of the date hereof, that the representations and warranties made by it in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct in all material respects; *provided*,

however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof and that any representations and warranties made as of a specific date are only true and correct in all material respects as of such date, and that no Event of Default has occurred and is continuing.

SECTION 5 Miscellaneous.

(a) **Loan Documents Otherwise Not Affected; Reaffirmation**. Except as expressly amended pursuant hereto or referenced herein, the Loan Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. Lender's and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. Each Borrower hereby reaffirms the security interest granted pursuant to the Loan Documents and hereby reaffirms that such grant of security in the Collateral as granted as of the Closing Date continues without novation and secures all Secured Obligations under the Loan Agreement and the other Loan Documents.

(b) **Conditions**. For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the date hereof specifying its objection thereto.

(c) **Release**. In consideration of the agreements of Agent and Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lender and all such other persons being hereinafter referred to collectively as the "Releasees" and individually as a "Releasee"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which any Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Each Borrower waives the provisions of California Civil Code section 1542, which states:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

Each Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Each Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above. The provisions of this

section shall survive payment in full of the Secured Obligations, full performance of all the terms of this Amendment and the other Loan Documents.

(d) **No Reliance**. Each Borrower hereby acknowledges and confirms to Agent and Lender that such Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses**. Each Borrower agrees to pay to Agent on the date hereof the reasonable out-of-pocket costs and expenses of Agent and Lender party hereto, and the fees and disbursements of counsel to Agent and Lender party hereto in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the date hereof.

(f) **Binding Effect**. This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law.** This Amendment and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions.** Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts**. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment, as of the date first above written.

BORROWERS:

BRIDGEBIO PHARMA, INC.

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: President and Chief Executive Officer

BRIDGEBIO PHARMA LLC

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: President and Chief Executive Officer

BRIDGEBIO SERVICES INC.

Signature: /s/ Neil Kumar

Print Name: Neil Kumar

Title: President and Chief Executive Officer

SUB20, INC.

Signature: /s/ Michael Pettigrew

Print Name: Michael Pettigrew

Title: President and Chief Executive Officer

[SIGNATURES CONTINUE ON THE NEXT PAGE]

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

[Signature Page to Fifth Amendment to Loan and Security Agreement]

EXHIBIT A

(See Attached)

Conformed Through:
Fifth Amendment (1/25/21);
Fourth Amendment (4/27/20); Third Amendment (3/2/20);
Second Amendment (5/17/19); First Amendment (12/28/18)

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of June 19, 2018 and is entered into by and among BRIDGEBIO PHARMA, INC., a Delaware corporation ("New Parent"), BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), SUB20, INC., a Delaware corporation ("Sub20", and together with New Parent, Parent, Services Company and each other Person party hereto from time to time as a borrower, collectively, "Borrowers", and each, a "Borrower"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

RECITALS

A. Borrowers have requested Lender to make available to Borrowers one or more term loans in an aggregate principal amount of up to $200,000,000; and

B. Lender is willing to make such term loan on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrowers, Agent and Lender agree as follows:

SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

"Account Control Agreement(s)" means any agreement entered into by and among Agent, a Borrower and a third party bank or other institution (including a Securities Intermediary) in which such Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts.

"ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit H.

"Achievement Milestone" means Borrowers shall have provided evidence satisfactory to Agent of (i) positive clinical data from the Part A read-out of the ATTRibute-CM Phase 3 trial, such that the data is sufficient to support a New Drug Application, subject to verification by Agent in its reasonable discretion (including supporting documentation reasonably requested by Agent), or (ii) the acceptance of a New Drug Application submitted by any other Platform Company.

"Acquisition" means any transaction or series of related transactions for the purpose of or resulting, directly or indirectly, in (a) the acquisition of all or substantially all of the assets of a Person, or of any business, line of business or division or other unit of operation of a Person, (b) the acquisition of fifty percent (50%) or more of the Equity Interests of any Person, whether or not involving a merger, consolidation or similar transaction with such other Person, or otherwise causing any Person to become a Subsidiary of Borrower, or (c) the acquisition of, or the right to use, develop, license or sell (in each case, including through licensing), any product, product line, royalty rights or Intellectual Property of or from any other Person.

"Additional Clinical Advancements" means each of the following:

(a) The FDA has approved QED's New Drug Application infigratinib for the treatment of cholangiocarcinoma (2L CCA).

(b) The FDA has approved Origin's New Drug Application for BBP-870 for the treatment of MOCD.

(c) Borrower has received positive top-line data from the Phase 1/2 clinical trial of BBP-589 in adult subjects with recessive dystrophic epidermolysis bullosa, clinicaltrials.gov identifier NCT03752905, where such positive data, as reasonably determined by Lender, would support the advancement of BBP-589 into pivotal clinical trials.

(d) Borrower has received positive data from the Phase 3 clinical trial of BBP-009 in adult subjects with Gorlin Syndrome, clinicaltrials.gov identifier NCT03703310, showing that BBP-009 met the predefined primary and secondary outcome measures established for the trial.

(e) Borrower has received positive top-line clinical data from a clinical trial evaluating BBP-631 in Congenital Adrenal Hyperplasia, where such positive data, as reasonably determined by Lender, would support the advancement of BBP-631 into a pivotal clinical trial.

(f) Borrower has received positive top-line clinical data from a clinical trial evaluating infigratinib in achondroplasia, where such positive data, as reasonably determined by Lender, would support the advancement of infigratinib into a pivotal clinical trial as a treatment for achondroplasia.

"Advance" means the Term Loan Advance.

"Advance Date" means the funding date of any Advance.

"Advance Request" means a request for Advance submitted by Borrower Representative to Agent in substantially the form of Exhibit A.

"Affiliate" means any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question. As used in the definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise. If not otherwise specified or required by the context, "Affiliate" shall refer to an Affiliate of a Borrower.

"Agent" has the meaning given to such term in the preamble to this Agreement.

"Agreement" means this Loan and Security Agreement, as amended, restated, supplemented or otherwise modified from time to time.

"Amortization Date" means July 1, 2022, provided that, so long as no Default or Event of Default has occurred and is continuing, (i) if Borrower achieves, on or before June 15, 2022, either (a) the Eidos Part A Success or (b) at least two (2) Additional Clinical Advancements, in each case, subject to verification by Agent (including supporting documentation requested by Agent), the Amortization Date shall be extended to January 1, 2023, and (ii) if Borrower achieves, on or before December 15, 2022, each of (a) Eidos Part A Success and (b) at least two (2) Additional Clinical Advancements, subject to verification by Agent (including supporting documentation requested by Agent), the Amortization Date shall be extended to July 1, 2023; provided further, that the Amortization Date of the Discretionary Advance II will be determined prior to the Advance Date thereof.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to any Borrower or any of its Affiliates from time to time concerning or relating to bribery or corruption, including

without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

"Anti-Terrorism Laws" means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Assignee" has the meaning given to it in Section 11.13.

"ATTR-CM" means transthyretin amyloid cardiomyopathy.

"BBP-009" means patidegib topical gel, 2%.

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Board" means, with respect to any Person that is a corporation, its board of directors, with respect to any Person that is a limited liability company, its board of managers, board of members or similar governing body, and with respect to any other Person that is a legal entity, such Person's governing body in accordance with its Organizational Documents. "Borrower" has the meaning given to such term in the preamble to this Agreement.

"Borrower Representative" means BridgeBio Pharma, Inc.

"Business Day" means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

"Cash" means all cash, cash equivalents and liquid funds.

"Cash Interest Reduction Amount" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Cash Management Services" means any of the following to the extent not constituting a line of credit (other than an overnight draft facility that is not in default); automated clearing house transactions, treasury and/or cash management services, including, without limitation, treasury, depository, overdraft, credit, purchasing or debit card, non-card e-payable services, electronic funds transfer, treasury management services (including controlled disbursement services, overdraft automatic clearing house fund transfer services, return items and interstate depository network services), other demand deposit or operating account relationships, foreign exchange facilities, and merchant services.

"Cash Payment Conditions" means, with respect to any cash payment made under a Permitted Warrant Transaction as a result of the election of "cash settlement" (or substantially equivalent term) as the "settlement method" (or substantially equivalent term) thereunder by New Parent (or its Affiliate) (including in connection with the exercise and/or early unwind or settlement thereof), satisfaction of each of the following events at the time of such payment: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations.

"Cash Settlement Conditions" means, with respect to the settlement by New Parent of any conversion of any Permitted Convertible Debt, satisfaction of each of the following events at the time of the delivery

of the conversion consideration: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations.

"Change in Control" means a transaction or series of related transactions (i) pursuant to which, or as a result of which, a single Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) acquires or holds equity interests of New Parent representing (A) a majority of the outstanding voting securities (in each case excluding any unvested voting securities that would not become vested voting securities as a result of such transaction, whether pursuant to the terms of such unvested voting securities, by Board action or otherwise), or (B) the right to receive a majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of New Parent, or (ii) resulting in Parent, Services Company or any other Subsidiary that is a Borrower ceasing to be a wholly-owned Subsidiary of a Borrower**.** Notwithstanding the foregoing, a "Change in Control" shall not include any Permitted Transfer. "Charter" means, with respect to any Person, such Person's formation documents, as in effect from time to time.

"Claims" has the meaning given to it in Section 11.10(a).

"Closing Date" means the date of this Agreement.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"Collateral" means the property described in Section 3.1.

"Compliance Certificate" means a certificate in the form attached hereto as Exhibit F

"Confidential Information" has the meaning given to it in Section 11.12.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed, without duplication of the primary obligation, to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement. For the avoidance of doubt, no Permitted Bond Hedge Transaction or Permitted Warrant Transaction will be considered a Contingent Obligation of Borrower.

"Controlled Account" means a Deposit Account or account in which Investment Property is maintained that is subject to an Account Control Agreement in favor of Agent in form and substance reasonably satisfactory to Agent.

"Controlled Investment Affiliate" means, as to any Person, any other Person, which directly or indirectly is in control of, is controlled by, or is under common control with such Person.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

"Default" means any event, occurrence or condition which is, or with the giving of any notice, the passage of time, or both, could reasonably be expected to result in an Event of Default.

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Discretionary Advance I" has the meaning set forth in Section 2.1(a)(iii).

"Discretionary Advance II" has the meaning set forth in Section 2.1(a)(viii).

"Due Diligence Fee" means $25,000, which fee has been paid to Agent prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

"Eidos" means Eidos Therapeutics, Inc.

"Eidos Part A Success" means Eidos has obtained positive results from the ATTRIBUTE-CM Phase 3 clinical trial of AG10 in subjects with symptomatic ATTR-CM, clinicaltrials.gov identifier NCT03860935, showing that AG10 met the predefined primary efficacy endpoint for Part A of the trial and no negative safety concerns, where such results would support the submission of a New Drug Application for AG10 for the treatment of ATTR-CM, or other indication as agreed to by Lender.

"End of Term Charge" has the meaning given to it in Section 2.5.

"Equity Cash Payment Conditions" means, with respect to a given Equity Cash Payment Transaction, in each case measured immediately before and immediately after giving effect to any Cash payments to be made in connection with such Equity Cash Payment Transaction: (a) no Event of Default shall have occurred and be continuing and (b) if Cash payments made by Borrower are greater than $75,000,000 in the aggregate in any fiscal year in connection with any Equity Cash Payment Transaction, Borrower shall have Qualified Cash in an amount greater than or equal to 200% of the then-outstanding Secured Obligations.

"Equity Cash Payment Transaction" means any transaction or series of related transactions whereby any Cash, cash equivalents or other immediately available funds are distributed, exchanged, redeemed, deposited, paid, settled or otherwise transferred for, on account of, or in connection with the ownership of any Equity Interests or other ownership rights in any capital stock, joint venture or similar interests, including without limitation in connection with any Permitted Investments, Permitted Indebtedness or any transaction permitted under Section 7.7 of this Agreement.

"Equity Cure Investment" means any Investment by a Borrower in a Platform Company or Subsidiary thereof, whether directly or indirectly through an Affiliate or another Platform Company, if (i) immediately prior to the consummation of such Investment, an event of default has occurred and is continuing pursuant to the terms of any secured loan facility to which such Platform Company or Subsidiary is a party, which could result in the acceleration of Indebtedness of such Platform Company in excess of $500,000 or more, and (ii) immediately after the making of such Investment, such event of default will be cured or waived.

"Equity Documents" means any agreement entered into in connection with an equity financing or otherwise among holders of the Equity Interests of a Person or otherwise binding upon the holders of the Equity Interests of such Person.

"Equity Interests" means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Event of Default" has the meaning given to it in Section 9.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"Excluded Accounts" means Deposit Accounts (i) established in the ordinary course of business and used exclusively for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of employees of Borrower, provided that the aggregate balance maintained in such Deposit Accounts shall not exceed the amount to be paid for the following four payroll periods at any time, (ii) used exclusively as escrow, fiduciary, withholding, tax payment or trust accounts, (iii) used exclusively to maintain Cash subject to a Lien permitted pursuant to the defined term "Permitted Liens", (iv) that is a deposit account subject to a zero dollar balance, and (v) that do not at any time have Cash, investment property or other amounts on deposit therein in excess of $500,000 individually or $1,000,000 in the aggregate for all such accounts, provided that, in each case, any Excluded Account shall be identified to Agent in writing;

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof), or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes that are imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Term Commitment pursuant to a law in effect on the date that (i) such Lender acquires such interest in the Loan or Term Commitment or (ii) such Lender changes its lending office, except in each case to the extent, pursuant to Section 2.9, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) any withholding Taxes imposed under FATCA, and (d) Taxes attributable to such Recipient's failure to comply with Section 2.9(d).

"Facility Charge" means, collectively, (i) $350,000, due on the Closing Date (which has been paid prior to the First Amendment Effective Date), (ii) $100,000, due on the First Amendment Effective Date (which has been paid prior to the Second Amendment Effective Date), (iii) $200,000, due on the Second Amendment Effective Date, and (iv) 0.25% of any Tranche IV (Discretionary I) Advance, Tranche V Advance, Tranche VI Advance or Discretionary Advance II, due on each applicable Advance Date.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among governmental authorities and implementing such Sections of the Code

"FDA" means the United States Food and Drug Administration, and any successor agency having substantially the same functions and jurisdiction.

"Fifth Amendment Effective Date" means January 25, 2021.

"Financial Statements" has the meaning given to it in Section 7.1.

"First Amendment Effective Date" means December 28, 2018.

"Foreign Lender" shall mean a Lender that is not a U.S. Person.

"Fourth Amendment Effective Date" means April 27, 2020.

"GAAP" means generally accepted accounting principles in the United States of America, as in effect from time to time.

"Indebtedness" means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, as determined under GAAP, and (d) all Contingent Obligations. For the avoidance of doubt no Permitted Warrant Transaction shall be considered Indebtedness of New Parent.

"Indemnified Person" shall have the meaning set forth in Section 6.13.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Borrower under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

"Intellectual Property" means all of each Borrower's Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; each Borrower's applications therefor and reissues, extensions, or renewals thereof; and each Borrower's goodwill associated with any of the foregoing, together with each Borrower's rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

"Investment" means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of any material asset or property of another Person.

"Investment Company Act" means the Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder.

"Joinder Agreements" means a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

"Lender" has the meaning given to such term in the preamble to this Agreement.

"Liabilities" shall have the meaning given to such term in Section 6.3.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests.

"Lien" means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

"Loan" means the Advances made under this Agreement.

"Loan Documents" means this Agreement, the Term Note (if any), the ACH Authorization, the Account Control Agreements, any Joinder Agreements, all UCC Financing Statements, and any other documents executed in connection with the Secured Obligations and the security interest granted in connection therewith, or delivered pursuant to this Agreement or any of the foregoing Loan Documents, in each case, as the same may from

time to time be amended, modified, supplemented or restated, but in each case excluding ministerial notices or ordinary course communications.

"Market Capitalization" means, as of any date of determination, the product of (a) the number of shares of New Parent's common stock publicly disclosed in the most recent filing of New Parent with the United States Securities Exchange Commission as outstanding as of such date of determination and (b) the closing price of New Parent's common stock (as quoted on Bloomberg L.P.'s page or any successor page thereto of Bloomberg L.P. or if such page is not available, any other commercially available source providing quotations of such closing price as designated by Agent from time to time) on such date of determination.

"Material Adverse Effect" means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrowers and each of its Subsidiaries taken as a whole; or (ii) the ability of Borrowers to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent's Liens on the Collateral or the priority of such Liens except, in the case of clauses (ii) or (iii), to the extent resulting from an action or failure to act by the Agent or Lender.

"Maturity Date" means November 1, 2023, provided that if Borrower achieves the Performance Milestone on or before October 15, 2023, the Maturity Date shall be May 1, 2024, provided further, that the Maturity Date of the Discretionary Advance II will be determined prior to the Advance Date thereof.

"Maximum Rate" shall have the meaning assigned to such term in Section 2.2.

"MOCD" means molybdenum cofactor deficiency, Type A.

"Net Cash Proceeds" means the amount of all Cash proceeds (including deferred compensation) received (directly or indirectly) by or on behalf of a Borrower (if on behalf, then for the account of such Borrower), or distributable to a Borrower (to the extent such proceeds which are distributable are not distributed at the direction of such Borrower or as a result of such Borrower voting Equity Interests owned in favor of any corporate action that would result in such proceeds not being actually distributed), from time to time, as a result of a Prepayment Event, after deducting therefrom, without duplication, (x) reasonable fees, commissions, expenses and other direct costs related thereto and required to be paid or payable by such Borrower (or the applicable Platform Company or its applicable Subsidiary) in connection with such Prepayment Event (including attorneys' fees, accountants' fees, investment banking fees, survey costs, title insurance premiums, and related search and recording charges, transfer taxes, deed or mortgage recording taxes, other customary expenses and brokerage, consultant and other customary fees actually incurred in connection therewith), (y) Taxes paid, payable, or determined by such Borrower to be payable or attributable for payment in connection with such transaction to any taxing authorities by such Borrower (or the applicable Platform Company or its applicable Subsidiary), to the extent then paid or payable and reasonably attributable to such transaction, and any repatriation costs associated with receipt or distribution by the applicable taxpayer of such proceeds, and (z) any cash reserves required to be maintained by such Borrower (or the applicable Platform Company or its applicable Subsidiary) in connection with such transaction in accordance with GAAP or applicable law, provided that when any reserve or any portion thereof is no longer required to be maintained such amount shall be considered Net Cash Proceeds then received, and provided further, that Borrowers shall, at Agent's reasonable request, provide such calculations or evidence of costs deducted in arriving at Net Cash Proceeds as Agent may reasonably require to confirm the calculation of Net Cash Proceeds in accordance with the foregoing, it being understood and agreed that the following shall not be deemed "distributable" to a Borrower for purposes of the foregoing: (1) the amount of all Cash proceeds (including deferred compensation) which are required to prepay Indebtedness of the applicable Platform Company or its Subsidiary pursuant to the terms of such Indebtedness, (2) the amount of any Cash proceeds which are not permitted to be distributed pursuant to the terms of Indebtedness pursuant to a loan facility of the applicable Platform Company that exists on the date such Cash proceeds are received by such Platform Company and that was not entered into for the purpose of avoiding any obligation to make a prepayment of the Secured Obligations, and (3) the amount of all Cash proceeds (including deferred compensation) from a sale of a material part of the assets of a Platform Company or a Subsidiary thereof (other than a sale of all or substantially all of such Platform Company's assets, on a consolidated basis), or an exclusive License by a Platform Company or a Subsidiary thereof (other than the License of Intellectual Property that constitutes all or substantially all the assets of

such Platform Company, on a consolidated basis), in each case, in the ordinary course of business of such Platform Company or Subsidiary, to the extent the board of directors or similar governing body of such Platform Company or Subsidiary has approved the reinvestment of such proceeds to purchase assets useful in the business of such Platform Company or Subsidiary, or pay other expenses, in each case, in the ordinary course of business.

"New Drug Application" means a new drug application filed with the FDA under 21 U.S.C. § 355(b).

"New Parent" has the meaning given to such term in the preamble hereto.

"Non-Disclosure Agreement" means that certain Non-Disclosure Agreement/Confidentiality Agreement by and between Parent and Agent dated as of March 13, 2018.

"Non-Operating Subsidiary" means a Subsidiary of a Borrower other than an Operating Company, and including, for avoidance of doubt, any alternative investment vehicle or other special purpose entity which holds, directly or indirectly, Investments of or on behalf of New Parent, or any other Subsidiary primarily in the business of investing, reinvesting, holding or trading in securities.

"OFAC" means the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Operating Company" means a Person which is predominately in the business of research, development, manufacturing, sale or marketing of products and activities related thereto, or a Person holding assets, including without limitation Intellectual Property that are useful for a Person that is predominately in the line of business described above and in anticipation of such Person commencing operations in such line of business and which New Parent intends to cause to commence operations.

"Organizational Documents" means with respect to any Person, such Person's formation documents, and (a) if such Person is a corporation, its bylaws, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"Origin" means Origin Biosciences, Inc.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"Parent" has the meaning given to such term in the preamble hereto.

"Patent License" means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement a Borrower now holds or hereafter acquires any interest.

"Patents" means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

"PellePharm" means PellePharm, Inc.

"Performance Milestone" means Borrower has achieved, in each case, subject to verification by Agent (including supporting documentation requested by Agent) in its reasonable discretion, each of (x) the Eidos Part A Success and (y) at least two (2) Additional Clinical Advancements.

"Permitted Acquisition" means any Acquisition which is conducted in accordance with the following requirements:

(a) of a business or Person or product engaged in a line of business that is similar, ancillary, complementary, incidental or related thereto, or an extension, development or expansion of the business of the Borrower or its Subsidiaries;

(b) if such Acquisition is structured as a stock acquisition, then the Person so acquired shall either (i) become a wholly-owned Subsidiary of Borrower or of a Subsidiary and the Borrower shall comply, or cause such Subsidiary to comply, with 7.13 hereof or (ii) such Person shall be merged with and into Borrower (with the Borrower being the surviving entity);

(c) if such Acquisition is structured as the acquisition of assets, such assets shall be acquired by Borrower, and shall be free and clear of Liens other than Permitted Liens;

(d) if such Acquisition is structured as the in-licensing of assets, (i) Borrower shall be required to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (A) any such assets to be deemed "Collateral" and for Agent to have a security interest in such assets that might otherwise be restricted or prohibited by the terms of any such in-license agreement, whether now existing or entered into in the future, (B) Agent to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Agent's rights and remedies under this Agreement and the other Loan Documents and (ii) such assets shall be free and clear of Liens other than Permitted Liens;

(e) the Borrower shall have delivered to the Lenders not less than fifteen (15) days prior to the date of such Acquisition, notice of such Acquisition; and

(f) both immediately before and after such Acquisition, no Event of Default shall have occurred and be continuing.

"Permitted Bond Hedge Transaction" means any call or capped call option (or substantively equivalent derivative transaction) relating to New Parent's common stock (or other securities or property following a merger event or other change of the common stock of New Parent) purchased by New Parent in connection with the issuance of any Permitted Convertible Debt and as may be amended in accordance with its terms; provided that, the net purchase price of any such call option transaction less the amount received by New Parent in respect of any Permitted Warrant Transaction in connection with such issuance of Permitted Convertible Debt shall not exceed 20% of the gross proceeds to New Parent from such issuance of Permitted Convertible Debt; provided further that the terms, conditions and covenants of each such call option transaction are customary for agreements of such type; provided further that (1) a certificate of New Parent as to the satisfaction of such requirement (described in the immediately preceding proviso) delivered at least one (1) Business Day prior to entering into such transaction, together with a reasonably detailed description of the material terms, conditions and covenants of such transaction or drafts of documentation relating thereto, stating that New Parent has determined in good faith that such terms, conditions and covenants satisfy the foregoing requirement, shall be conclusive evidence of satisfaction thereof unless Agent notifies the Borrower within such one (1) Business Day period that Agent disagrees, in its commercially reasonably judgment, with such determination (which notice shall include a description of the basis upon which

Agent disagrees) and (2) the Agent acknowledges that the terms, conditions and covenants of the call option transactions that the Company intends to enter into substantially concurrently with the Third Amendment to Loan and Security Agreement on the Third Amendment Effective Date or the Fifth Amendment to Loan and Security Agreement on the Fifth Amendment Effective Date, as applicable, drafts of the documentation of which have been provided to Lender, are customary for agreements of such type.

"Permitted Convertible Debt" means Indebtedness of the New Parent that is convertible into a fixed number (subject to customary anti-dilution adjustments, "make-whole" increases and other customary changes thereto) of shares of common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent), Cash or any combination thereof (with the amount of such Cash or such combination determined by reference to the market price of such common stock or such other securities); provided that such Indebtedness shall (a) not require any scheduled amortization or otherwise require payment of principal prior to, or have a scheduled maturity date, earlier than, one hundred eighty (180) days after the Maturity Date, (b) be unsecured, (c) not be guaranteed by any Subsidiary of New Parent, and (d) be on terms and conditions customary for Indebtedness of such type; provided further that (1) a certificate of New Parent as to the satisfaction of the conditions described in clause (d) delivered at least two (2) Business Days prior to the incurrence of such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of documentation relating thereto, stating that New Parent has determined in good faith that such terms and conditions satisfy the foregoing requirements of clause (d), shall be conclusive unless Agent notifies the Borrower within such two (2) Business Day period that Agent disagrees, in its commercially reasonable judgment, with such determination which notice shall include a description of the basis upon which Agent disagrees and (2) the Agent acknowledges that the terms and conditions of the convertible Indebtedness, drafts of the documentation of which have been provided to Agent, that the Company intends to issue substantially concurrently with the Third Amendment to Loan and Security Agreement on the Third Amendment Effective Date or the Fifth Amendment to Loan and Security Agreement on the Fifth Amendment Effective Date, as applicable, are customary for Indebtedness of such type.

"Permitted Indebtedness" means**:**

(a) Indebtedness of a Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A;

(c) Indebtedness to trade creditors incurred in the ordinary course of business;

(d) Subordinated Indebtedness;

(e) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of a Borrower or a Subsidiary for real estate purposes in the ordinary course of business in an amount up to Two Million Dollars ($2,000,000), and otherwise in an amount not to exceed $1,000,000) at any time outstanding;

(f) Indebtedness incurred to finance the acquisition of (i) equipment to be used for the development, testing and manufacturing of products, or (ii) other equipment, provided that the aggregate principal amount of Indebtedness outstanding at any time to finance equipment other than as described in subclause (i) shall not exceed $500,000;

(g) Intercompany Indebtedness among Borrowers;

(h) Indebtedness incurred to finance insurance premiums in the ordinary course of business;

(i) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(j) other unsecured Indebtedness in an amount not to exceed $500,000 at any time outstanding;

(k) Permitted Convertible Debt in an aggregate principal amount not to exceed $1,298,000,000 at any one time outstanding;

(l) extensions, refinancings and renewals of any Permitted Indebtedness described in clause (b) above, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon the applicable Borrower, as the case may be, and subject to any limitations on aggregate amount of Indebtedness of such type, to the extent described in one of the foregoing clauses of this defined term;

(m) unsecured Indebtedness of a Borrower or any of its Subsidiaries in connection with acquisitions permitted pursuant to clause (k) of Permitted Investments (i) consisting of earnouts or similar deferred purchase price (including customary purchase price adjustments and modifications) or (ii) that is issued to a seller of assets or an entity acquired in an acquisition permitted hereunder, provided, that such obligations shall be subordinated to the Secured Obligations pursuant to subordination provisions reasonably satisfactory to Agent, in an aggregate amount of subclauses (i) and(ii) not to exceed $10,000,000 at any time outstanding;

(n) unsecured Indebtedness of a Subsidiary owed to New Parent or a wholly-owned Subsidiary, which Indebtedness shall (i) to the extent required by the Agent, be evidenced by promissory notes which shall be pledged to the Agent as Collateral for the Secured Obligations in accordance with the terms hereof, (ii) be subordinated to the Secured Obligations pursuant to an intercompany subordination agreements on terms reasonably acceptable to the Agent and (iii) be otherwise permitted hereunder;

(o) guarantees of the Borrowers in respect of Indebtedness of any Borrower to the extent permitted under Section 7.6;

(p) Indebtedness arising from a bank or other financial institution honoring a check, draft or similar instrument (other than resulting from any overdraft) in the ordinary course of business;

(q) Indebtedness incurred in respect of Cash Management Services, in each case, incurred in the ordinary course of business;

(r) Indebtedness arising under performance, payment, surety, customs, stay, bid or appeal bonds, performance and completion guaranties and similar instruments, in each case in the ordinary course of business and not in connection with any Indebtedness for borrowed money; provided that an aggregate amount of such Indebtedness shall not exceed $2,000,000 at any time outstanding;

(s) Indebtedness consisting of Contingent Obligations in connection with any equity exchange program involving the issuance of equity awards under New Parent's equity incentive plans; provided that any Cash payments made in connection with such Indebtedness shall be made pursuant to an Equity Cash Payment Transaction that satisfies the Equity Cash Payment Conditions; and

(t) unsecured Indebtedness of the Borrowers or any of their respective Subsidiaries.

"Permitted Investment" means:

(a) Investments existing on the Closing Date which are disclosed in Schedule 1B;

(b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or

Moody's Investors Services, (ii) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (iii) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein, (iv) money market accounts, and (v) Investments permitted by Borrower's investment policy, provided that Agent has approved such investment policy in writing;

(c) Repurchases by New Parent of its Equity Interests issued to managers, advisory members, officers, employees, consultants, directors or other service providers of New Parent, or officers, employees, consultants or other consultants of any Platform Company who are acting in such capacity on behalf of New Parent of Equity Interests of New Parent, provided that the aggregate amount of such repurchases per fiscal year shall not exceed Two Million Dollars ($2,000,000) per fiscal year;

(d) Investments accepted in connection with Permitted Transfers;

(e) Investments received in connection with the bankruptcy or reorganization of a customer or supplier in the ordinary course of business;

(f) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions in the ordinary course of business in an aggregate amount outstanding not to exceed Five Million Dollars ($5,000,000) at any time;

(g) [Reserved];

(h) loans and advances to, or guarantees of Indebtedness of, employees, directors, officers, managers, consultants or independent contractors in the ordinary course of business in an amount not to exceed $500,000;

(i) Investments by any Borrower in another Borrower;

(j) Investments in Deposit Accounts, subject to compliance with Section 7.12 hereof;

(k) Investments consisting of (i) the ownership of Equity Interests of Platform Companies (whether as a result of a formation of a new Platform Company, the purchase of additional Equity Interests of a Platform Company, the formation of or contribution to a joint venture, or any other capital contribution to a Platform Company), (ii) loans to a Platform Company, (iii) the purchase of capital assets to be used for the development, testing and manufacturing products (whether such capital assets are to be held by a Borrower or to be contributed to a Platform Company), in each case, consistent in all material respects with Parent's practices as of the Closing Date, provided that no Borrower shall make Investments in any Platform Company that is in default with respect to Indebtedness in excess of $1,000,000, except for (x) Equity Cure Investments up to $5,000,000 for any given Platform Company and up to $25,000,000 in the aggregate for all Platform Companies, in each case, during the term of this Agreement, (y) to fund any mandatory legal and regulatory expenses of a Platform Company when due, or (z) as otherwise approved by Agent in writing;

(l) New Parent's entry into (including payments of premiums in connection therewith), and the performance of obligations under, any Permitted Bond Hedge Transactions and Permitted Warrant Transactions in accordance with their terms;

(m) Investments consisting of the leasing, licensing, sublicensing or contribution of Intellectual Property, in each case, on a nonexclusive basis and in the ordinary course of business or pursuant to non-exclusive joint marketing arrangements with other Persons;

(n) Investments consisting of purchases or acquisitions of inventory, supplies, materials and equipment or Permitted Acquisitions, in each case in the ordinary course of business;

(o) extensions of trade credit in the ordinary course of business by any Borrower;

(p) Investments in connection with the cash management operations of the Borrower and its Subsidiaries that constitute Permitted Indebtedness;

(q) Licenses described in clause (b) of the defined term "Permitted Transfer";

(r) guarantees of operating leases or of other obligations permitted under this Agreement that do not constitute Indebtedness, in each case, entered into by any Borrower in the ordinary course of business;

(s) Investments in joint ventures in the ordinary course of Borrower's business; provided that (i) all Equity Interests and other ownership interests held by Borrower in any such joint venture shall constitute Pledged Collateral, (ii) all representations and warranties set forth in Section 5.15 shall be true and correct with respect to such Pledged Collateral, (iii) (A) Borrower has taken all steps necessary to permit Agent to become a "transferee" under the relevant joint venture Organizational Documents and any other joint venture governing documents if Agent exercises its remedies with respect to such joint venture interest and (B) no other consent, approval, authorization or other order of any Person and no consent or authorization of any governmental authority or regulatory body is required to be made or obtained by Borrower either (x) for the pledge by Borrower of such Pledged Collateral pursuant to this Agreement or (y) for the exercise by Agent or Lenders of the voting or other rights provided for this Agreement or the remedies in respect of the Pledged Collateral pursuant to this Agreement, except for those which have been obtained and (iv) the pledge, grant of a security interest in, and delivery of the such Pledged Collateral to Agent pursuant to this Agreement will create a valid first priority Lien on and in such Pledged Collateral;

(t) subject to satisfaction of the Equity Cash Payment Conditions, Investments consisting of the purchase, redemption or other acquisition of the common stock of New Parent;

(u) Investments constituting the cashless repurchase of common stock of New Parent deemed to occur upon the exercise of options, warrants or similar rights solely to the extent that shares of such stock represent a portion of the exercise price of such options, warrants or similar rights;

(v) Investments consisting of the exchange of Equity Interests of New Parent for the Equity Interests of an Affiliate in connection with a tender offer, in each case subject to the satisfaction of the Equity Cash Payment Conditions;

(w) Investments consisting of Contingent Obligations to the extent permitted in clause (s) of the defined term "Permitted Indebtedness"; and

(x) additional Investments that do not exceed $500,000 in the aggregate.

"Permitted Liens" means any and all of the following:

(a) Liens in favor of Agent or Lender;

(b) Liens existing on the Closing Date which are disclosed in Schedule 1C;

(c) Liens arising by operation of law in favor of materialmen, artisans, mechanics, carriers warehouseman, landlords and other Persons securing ordinary course obligations which are not yet delinquent and not in connection with borrowed money;

(d) Liens for Taxes, fees, assessments or other governmental charges or levies, either (i) not delinquent or (ii) being contested in good faith by appropriate proceedings, provided that Borrowers maintain adequate reserves therefor in accordance with GAAP;

(e) Liens arising from judgments, decrees or attachments (or appeal or other surety bonds related to such judgments) in circumstances which do not constitute an Event of Default hereunder;

(f) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;

(g) leasehold interests in leases or subleases and licenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor;

(h) Liens on equipment, software embedded in such equipment, and proceeds thereof, which (i) secure Permitted Indebtedness described in clause (e) of the defined term "Permitted Indebtedness" above, or (ii) exist at the time such equipment is acquired by a Borrower;

(i) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(j) Liens in connection with Indebtedness described in clause (h) of the defined term "Permitted Indebtedness", provided that such Lien is limited to insurance proceeds arising from the subject insurance policy and the unearned portion of premium payments, and provided that financed premium payments are paid when due;

(k) statutory and common law rights of set-off and other similar rights as to deposits of Cash and securities in favor of banks, other depository institutions and brokerage firms or securities intermediaries solely to secure payment of amounts due in the ordinary course of business in connection with the maintenance of Deposit Accounts or securities accounts;

(l) easements, servitudes, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property;

(m) Licenses described in clause (b) of the defined term "Permitted Transfer";

(n) (i) Liens on Cash securing obligations permitted in accordance with clause (e) of the defined term "Permitted Indebtedness" in an aggregate amount not to exceed the reimbursement obligation secured, and (ii) security deposits in connection with real property leases in an aggregate amount not to exceed $1,000,000 at any time;

(o) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (a) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase, and subject to any limitation with respect to the amount secured by such Lien of such type, to the extent described in one of the foregoing clauses of this defined term; and

(p) to the extent constituting Liens, restrictions arising under applicable securities laws as a result of any Borrower's any/or any Agent's or Lender's status as an "affiliate" and/or "insider" of the issuer of any Equity Interests constituting Collateral and/or the status of any Equity Interests constituting Collateral as "restricted securities" under Rule 144 promulgated under the United States Securities Act of 1933, as amended.

"Permitted Transfers" means:

(a) sales of Inventory in the ordinary course of business;

(b) (i) non-exclusive Licenses and similar arrangements for the use of Intellectual Property of in the ordinary course of business, (ii) Licenses to Platform Companies in the ordinary course of business, (iii) Licenses that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory or may be exclusive as to territory but only as to discreet geographical areas outside of the United States of America in the ordinary course of business and (iv) other exclusive Licenses in the ordinary course of business; provided that (A) at any time (x) such License is in effect and (y) Borrower's Market Capitalization is less than $1,000,000,000, then Borrower shall maintain Qualified Cash in an aggregate amount of not less than $40,000,000 and (B) such License shall only be entered into with third parties on commercially reasonable terms.

(c) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business;

(d) use of Cash in the ordinary course of business in a manner not prohibited by the terms of this Agreement;

(e) dispositions by Borrower of Investments in Platform Companies in accordance with New Parent's Organizational Documents, subject to Section 2.4(b);

(f) transfers (i) among Borrowers, (ii) by a Subsidiary that is not a Borrower to a Borrower, (iii) of Permitted Investments by and to a Platform Company to and from a Borrower, (iv) of Licenses permitted to be transferred by and to a Platform Company pursuant to clause (b) above or (v) of assets other than Investments and Intellectual Property by and to a Platform Company to and from a Borrower in the ordinary course of business; and

(g) other transfers of assets having a fair market value of not more than $500,000 in the aggregate in any fiscal year.

"Permitted Warrant Transaction" means any call option, warrant or right to purchase (or substantively equivalent derivative transaction) relating to New Parent's common stock (or other securities or property following a merger event or other change of the common stock of New Parent) and/or Cash (in an amount determined by reference to the price of such common stock) sold by New Parent substantially concurrently with any purchase by New Parent of a related Permitted Bond Hedge Transaction and as may be amended in accordance with its terms; provided that (x) that the terms, conditions and covenants of each such call option transaction are customary for agreements of such type, as determined by Lender in its commercially reasonable discretion and (y) such call option transaction would be classified as an equity instrument in accordance with GAAP; provided further that a certificate of New Parent as to the satisfaction of such requirement (described in the immediately preceding proviso) delivered at least two (2) Business Days prior to the entry into such transaction, together with a reasonably detailed description of the material terms, conditions and covenant of such transaction or drafts of documentation relating thereto, stating that New Parent has determined in good faith that such terms, conditions and covenants satisfy the foregoing requirement, shall be conclusive unless Agent notifies the Borrower within such two (2) Business Day period that Agent disagrees, in its commercially reasonable judgment, with such determination (which notice shall include a description of the basis upon which Agent disagrees).

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

"PIK Deferral Period" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Platform Company" means any Operating Company in the life science sector and focused on the development and commercialization of products, and in which a Borrower has made an Investment (whether by capital contribution, the acquisition of the Equity Interests thereof or in connection with a joint venture, corporate collaboration or similar corporate structure) in accordance with the terms of this Agreement, its Organizational Documents and consistent in all material respect with past practices, including each Operating Company in which Borrower maintains an Investment as of the Closing Date; provided that no Restricted Foreign Subsidiary shall constitute a Platform Company. Notwithstanding the foregoing or any other provision to the contrary, upon the effectiveness of any Joinder Agreements as required under Section 7.13(c), only PellePharm and Eidos shall be each considered a "Platform Company" under this Agreement and the other Loan Documents, and all other Subsidiaries upon the effectiveness of the Joinder Agreements as required under Section 7.13(c), shall be considered "Qualified Subsidiaries" under this Agreement and the other Loan Documents.

"Pledged Collateral" means:

(a) all Equity Interests now owned or hereafter acquired by a Borrower to the extent constituting Collateral;

(b) with respect to any limited liability company membership units or general or limited partnership interests now owned or hereafter acquired by a Borrower: (i) all payments or distributions whether in Cash, property or otherwise, at any time owing or payable to such Borrower on account of its interest as a member or partner, as the case may be, in any of the issuers of such Equity Interests or in the nature of a management or other fee paid or payable by any of such issuers to such Borrower; (ii) all of such Borrower's rights and interests under each of the Organizational Documents, including all voting and management rights and all rights to grant or withhold consents or approvals; (iii) all rights of access and inspection to and use of all books and records, including computer software and computer software programs, of each of such issuers; (iv) all other rights, interests, property or claims to which such Borrower may be entitled in its capacity as a partner or a member of any such issuer; and (v) all proceeds, income from, increases in and products of any of the foregoing, in each case subject to the terms of this Agreement;

(c) all additional Equity Interests from time to time acquired or formed by a Borrower in any manner (which additional Equity Interests shall be deemed to be part of the Pledged Collateral whether or not Schedule 5.15 has been updated in accordance this Agreement) to the extent constituting Collateral, and any certificates, if applicable, representing such additional Equity Interests;

(d) all rights and interests of a Borrower in respect of a joint venture; and

(e) all dividends, distributions, cash, instruments and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such Equity Interests, in each case subject to the terms of this Agreement.

"Prepayment Charge" has the meaning assigned to such term in Section 2.4(a).

"Prepayment Charge Start Date" means, (a) with respect to any prepayment of any Tranche I Advance, Tranche II Advance and Tranche III Advance, the Closing Date and (b) with respect to all other Advances, the Advance Date of such Advance.

"Prepayment Event" means (i) any sale of Pledged Collateral to the extent Net Cash Proceeds exceed one million dollars ($1,000,000) in any fiscal year, (ii) the sale of a material portion of Collateral (other than Pledged Collateral) to the extent Net Cash Proceeds exceed one million dollars ($1,000,000) in any fiscal year,

whether in a single transaction or series of related transactions, (iii) the sale by a Platform Company or any of its Subsidiaries of assets (including Intellectual Property) of such Platform Company or Subsidiary, to the extent the subject assets constitute all or a material part of the applicable Platform Company's assets, on a consolidated basis, (iv) the exclusive License by a Platform Company or its Subsidiary of its Intellectual Property (except to the extent exclusive only with respect to discrete geographic territories other than the United States) to the extent the subject Intellectual Property constitutes all or a material part of the applicable Platform Company's assets, determined on a consolidated basis, or (v) the repurchase or redemption of Pledged Collateral by a Platform Company.

"Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by a Platform Company or any of its Subsidiaries or which a Platform Company or such Subsidiary intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by a Platform Company since each of its formation.

"Publicity Materials" has the meaning set forth in Section 11.18.

"QED" means QED Therapeutics, Inc.

"Qualified Cash" means the amount of Borrower's unrestricted Cash held in accounts subject to an Account Control Agreement.

"Qualified IPO" means an initial public offering (and any follow-on offerings within six (6) months of such initial public offering) of Parent's or New Parent's common Equity Interests in an underwritten public offering that results in such common Equity Interests being listed on a United States national securities exchange, and as a result of which Parent receives not less than $225,000,000 in net cash proceeds.

"Qualified Subsidiary" means (x) prior to the effectiveness of any Joinder Agreements as required under Section 7.13(c), any direct or indirect Non-Operating Subsidiary and (y) upon the effectiveness of any Joinder Agreements as required under Section 7.13(c), each Subsidiary other than Eidos and PellePharm; provided that no Restricted Foreign Subsidiary shall constitute a Qualified Subsidiary.

"Receivables" means (i) all of each Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

"Recipient" means Agent, Lender or any other recipient of any payment to be made by or on account of the Secured Obligations.

"Redemption Conditions" means, with respect to any redemption by New Parent of any Permitted Convertible Debt, satisfaction of each of the following events at the time of the issuance of the related redemption notice: (a) no Default or Event of Default shall exist or result therefrom, and (b) Borrower's Unrestricted Cash shall be no less than 150% of the outstanding Secured Obligations (after giving pro forma effect to the maximum potential consideration deliverable upon redemption or conversion of such Permitted Convertible Debt pursuant to the terms of such redemption notice).

"Register" has the meaning given to it in Section 11.7.

"Required Lenders" means at any time, the holders of more than 50% of the unpaid principal amount of the Term Loan Advance then outstanding.

"Restricted Foreign Subsidiary" means (a) any Subsidiary that is a controlled foreign corporation (as defined in Section 957 of the Code), (b) any Subsidiary, substantially all of the assets of which consist of equity interests and/or indebtedness in one or more entities that are treated as a controlled foreign corporation (as defined in Section 957 of the Code), or (c) any Subsidiary owned directly or indirectly by a Subsidiary described in clauses (a)

or (b) of this definition; in each case, provided that (i) the pledge of all of the Equity Interests of such Subsidiary as Collateral, (ii) the guarantee by such Subsidiary of the Secured Obligations, or (iii) the execution of a Joinder Agreement by such Subsidiary, would result in material adverse tax consequences to the Borrower (as reasonably determined by the Borrower).

"Sanctioned Country" means, at any time, a country or territory which is the subject or target of any Sanctions.

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

"Sanctions" means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom.

"Second Amendment Effective Date" means May 17, 2019.

"Secured Obligations" means Borrowers' obligations under this Agreement and any Loan Document, including any obligation to pay any amount now owing or later arising, but excluding in all cases any warrant or other right to purchase Equity Interests of New Parent in connection with any Loan Document.

"Services Company" has the meaning given to such term in the preamble to this Agreement.

"Subordinated Indebtedness" means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its reasonable discretion and subject to a subordination agreement in form and substance satisfactory to Agent in its reasonable discretion on customary deep subordination terms.

"Subsequent Financing" means the next equity offering of Parent or New Parent consummated after the Closing Date which (i) is broadly marketed or offered to multiple investors, and (ii) pursuant to which Parent or New Parent, as applicable, is offering to sell equity for an aggregate purchase price of at least Ten Million Dollars ($10,000,000).

"Subsidiary" means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which a Borrower owns or controls, directly or indirectly, 50% or more of the outstanding voting securities.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers as set forth in Section 2.1.

"Term Loan Advance" means, individually or collectively, as the context may require, a Tranche I Advance, Tranche II Advance, Tranche III Advance, Tranche IV (Discretionary I) Advance, Tranche V Advance, Tranche VI Advance or Discretionary Advance II.

"Term Loan Cash Interest Rate" means, for any day a per annum rate of interest equal to:

(a) in case of the Tranche I Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.85%, and (ii) 8.75%,

(b) in case of the Tranche II Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 2.85%, and (ii) 8.60%,

(c) in case of the Tranche III Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.10%, and (ii) 8.85%, and

(d) the interest rate applicable to the Tranche IV (Discretionary I) Advance, the Tranche V Advance, the Tranche VI Advance and the Discretionary Advance II will be determined prior to the applicable Advance Date thereof.

If New Parent consummates a Qualified IPO, New Parent, may elect, by prior written notice to Agent at least five (5) Business Days prior to the first Business Day of a month, to reduce the then effective per annum rates of interest applicable to the Tranche I Advance, Tranche II Advance, Tranche III Advance, Tranche IV (Discretionary I) Advance, Tranche V Advance, and Tranche VI Advance, respectively, by up to 1.50% (the amount of such reduction, the "Cash Interest Reduction Amount") for a period specified in such notice, provided that such period shall begin on the first Business Day of the next month and shall end on the last day of the third month or any subsequent month thereafter (the "PIK Deferral Period"), provided that after the expiration of the PIK Deferral Period, the reduction to the rates of interest applicable to the Tranche I Advance, Tranche II Advance, Tranche III Advance, Tranche IV (Discretionary I) Advance, Tranche V Advance, and Tranche VI Advance shall cease to apply. If during a PIK Deferral Period, New Parent, desires to terminate the PIK Deferral Period prior to the previously requested end date of the PIK Deferral Period, New Parent, may by written notice to Agent at least five (5) Business Days prior to the previously scheduled end date of the PIK Deferral Period, elect an earlier end date (which must be the last day of a month that is no earlier than the last day of the third month after the commencement of the PIK Deferral Period). If during a PIK Deferral Period, New Parent, desires to change the Cash Interest Reduction Amount, New Parent, may by written notice to Agent at least five (5) Business Days prior to the first Business Day of the month when such change is to take effect, elect a different Cash Interest Reduction Amount, provided that the Cash Interest Reduction Amount shall not be changed more frequently than once during any consecutive three (3) month period.

"Term Loan PIK Interest" has the meaning set forth in Section 2.1(c)(ii).

"Term Loan PIK Interest Rate" means, for any day a per annum rate of interest equal to (a) during any PIK Deferral Period, the Cash Interest Reduction Amount, multiplied by 1.2, and (b) otherwise, 0.00%.

"Term Note" means a Secured Term Promissory Note in substantially the form of Exhibit B.

"Third Amendment Effective Date" means March 2, 2020.

"Trademark License" means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Trademarks" means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

"Tranche I Advance" has the meaning set forth in Section 2.1(a)(i).

"Tranche I Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche II Advance" has the meaning set forth in Section 2.1(a)(ii).

"Tranche II Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche III Advance" has the meaning set forth in Section 2.1(a)(iv).

"Tranche III Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche III Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche IV (Discretionary I) Advance" has the meaning set forth in Section 2.1(a)(v).

"Tranche IV (Discretionary I) Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche IV (Discretionary I) Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche V Advance" has the meaning set forth in Section 2.1(a)(vi).

"Tranche V Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche IV (Discretionary I) Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche VI Advance" has the meaning set forth in Section 2.1(a)(vii).

"Tranche VI Availability Period" means the period beginning on the later of (a) Borrower's achievement of the Performance Milestone and (b) January 1, 2021, and ending on the earliest to occur of (x) December 15, 2021 and (y) the occurrence of an Event of Default.

"Tranche VI Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche IV (Discretionary I) Term Commitment" opposite such Lender's name on Schedule 1.1.

"UCC" means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

"United States" and "U.S." mean the United States of America.

"Unrestricted Cash" means unrestricted Cash of Borrower maintained in one or more Controlled Accounts.

"U.S. Borrower" means any Borrower that is a U.S. Person.

"U.S. Person" means any Person that is a "United States person" as defined in Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 2.9(d).

"Withholding Agent" means any Borrower and Agent.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

Notwithstanding anything to the contrary in this Agreement or any other Loan Document, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made without giving effect to any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof. For the avoidance of doubt, and without limitation of the foregoing, Permitted Convertible Debt shall at all times be valued at the full stated principal amount thereof and shall not include any reduction or appreciation in value of the shares deliverable upon conversion thereof.

SECTION 2. THE LOAN

2.1 Term Loan Advance.

(a) Term Commitments.

(i) *Tranche I Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender has made a Term Loan Advance in an original principal amount of $35,000,000 on the Closing Date (the "Tranche I Advance").

(ii) *Tranche II Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche II Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $20,000,000 on the First Amendment Effective Date (the "Tranche II Advance").

(iii) *Discretionary Advance I*. On the Closing Date, the parties hereto agreed that subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than June 15, 2021, Lender may make a Term Loan Advance in an aggregate principal amount up to $25,000,000 (the "Discretionary Advance I").

(iv) *Tranche III Term Loan Advance*. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make a Term Loan Advance in a principal

amount not to exceed its respective Tranche III Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $20,000,000 on or about the Second Amendment Effective Date but no later than May 17, 2019 (the "Tranche III Advance").

(v) *Tranche IV (Discretionary I) Term Loan Advance*. Subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than December 15, 2020, Borrower may request and Lender may severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche IV (Discretionary I) Term Commitment (the "Tranche IV (Discretionary I) Advance").

(vi) *Tranche V Term Loan Advance*. Subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than December 15, 2021, Borrower may request and Lender may severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche V Term Commitment (the "Tranche V Advance").

(vii) *Tranche VI Term Loan Advance*. Subject to the terms and conditions of this Agreement, during the Tranche VI Availability Period and subject to Lender's approval in its sole and absolute discretion, Borrower may request and Lender may severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche VI Term Commitment (the "Tranche VI Advance").

(viii) *Discretionary Advance II*. Subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than December 15, 2022, Lender may make a Term Loan Advance in an aggregate principal amount up to $50,000,000 (the "Discretionary Advance II").

(b) Advance Request. Borrower shall complete, sign and deliver to Agent an Advance Request at least one (1) Business Day before the Advance Date of each Term Loan Advance. Lender shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the respective Advance Date.

(c) Interest.

(i) Term Loan Cash Interest Rate. In addition to interest accrued pursuant to the Term Loan PIK Interest Rate, the principal balance (including, for the avoidance of doubt, any amount equal to the Term Loan PIK Interest added to principal pursuant to Section 2.1(c)(ii)) of each Term Loan Advance shall bear interest thereon from such Advance Date (or date such amount equal to the Term Loan PIK Interest is added to the principal) at the Term Loan Cash Interest Rate based on a year consisting of three hundred sixty (360) days, with interest computed daily based on the actual number of days elapsed. The Term Loan Cash Interest Rate will float and change on the day the "prime rate" as reported in the Wall Street Journal changes from time to time.

(ii) Term Loan PIK Interest Rate. In addition to interest accrued pursuant to the Term Loan Cash Interest Rate, to the extent New Parent, has initiated a PIK Deferral Period, the principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan PIK Interest Rate based on a year consisting of three hundred sixty (360) days, with interest computed daily based on the actual number of days elapsed (the "Term Loan PIK Interest"), which amount shall be added to the outstanding principal balance and so capitalized so as to increase the outstanding principal balance of such Term Loan Advance on each payment date for such Advance and which amount shall be payable when the principal amount of the applicable Advance is payable in accordance with Section 2.1(d).

(d) Payment. Borrowers will pay interest on the Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date continuing until the Amortization Date. Borrowers shall repay the principal balance of the Term Loan Advance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style), based on a payment schedule of twenty-four (24) months, beginning on the Amortization Date and continuing on the first Business Day of each month thereafter. The entire principal balance of the Term Loan Advance and all accrued but unpaid interest hereunder, shall be due and payable on the Maturity Date. Borrowers shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to New Parent's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender with respect to the Term Loan Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to such Borrower's account for a certain amount of the periodic obligations due on a specific payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Lender or Agent notifies Borrower Representative thereof; provided, further, that, with respect to clause (ii) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to a Borrower's account for specified out-of-pocket legal fees and costs incurred by Agent or Lender, Borrowers shall pay to Lender such amount in full in immediately available funds within three (3) Business Days.

2.2 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrowers have actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrowers shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrowers.

2.3 Default Interest. In the event any payment is not paid on the scheduled payment date (except if due solely to an administrative or operational error of Agent or Lender or New Parent's bank if Borrowers had the funds to make the payment when due), an amount equal to four percent (4%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c), plus four percent (4%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or Section 2.3, as applicable.

2.4 Prepayment.

(a) Optional Prepayment. At its option upon at least five (5) Business Days prior written notice to Agent, Borrowers may prepay all or a portion of the outstanding Advance by paying principal, all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the principal amount being prepaid: if the prepayment is made on or prior to the one year anniversary of the applicable Prepayment Charge Start Date, 2.5%; after the one year anniversary of the applicable

Prepayment Charge Start Date, through the two year anniversary of the applicable Prepayment Charge Start Date, 1.5%; and after the two year anniversary of the applicable Prepayment Charge Start Date, 1.0% (each, a "Prepayment Charge"), provided that each prepayment shall be in a minimum amount of $5,000,000 or, if less, the remaining outstanding principal amount of the Advance. Borrowers agree that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advance or any portion thereof. Borrowers shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge, (x) if Agent and Lender (in its sole and absolute discretion) agree in writing to refinance the Advance prior to the Maturity Date, and (y) with respect to the Tranche III Advance only, if such Advance is repaid no later than the six (6) month anniversary of the Advance Date of the Tranche III Advance.

(b) Mandatory Prepayment. Within five (5) Business Days of receipt of any Net Cash Proceeds from a Prepayment Event, Borrowers shall at Agent's election in its sole and absolute discretion, prepay the outstanding Advance by paying up to 75% of such Net Cash Proceeds. For the avoidance of doubt, no Prepayment Charge or charge pursuant to Section 2.5 shall apply to a prepayment in accordance with this Section 2.4(b). Notwithstanding the foregoing, Net Cash Proceeds received at the closing of a sale of Parent's Equity Interests of PellePharm, Inc. prior to December 31, 2018 shall not be required to be applied to the prepayment of the Secured Obligations as long as such Net Cash Proceeds are used by Parent for its ordinary course operations and investment activities pursuant to the terms of this Agreement or to make tax distributions to Parent and/or New Parent as permitted pursuant to Section 7.7.

2.5 End of Term Charge. On the earliest to occur of (i) January 1, 2023 (solely with respect to any Tranche I Advance, Tranche II Advance or Tranche III Advance), (ii) the Maturity Date, (iii) the date that Borrowers prepay the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full or in part (in case of a prepayment pursuant to Section 2.4(a)), or (iv) the date that the Secured Obligations become due and payable in full pursuant to the terms of this Agreement, Borrowers shall pay Lender a charge (each, an "End of Term Charge") equal to (A) in case of a partial prepayment pursuant to Section 2.4(a), (x) 6.35% of any principal prepayment in respect of the Tranche I Advance, (y) 5.75% of any principal prepayment in respect of Tranche II Advance, and (z) 5.75% of any principal prepayment in respect of the Tranche III Advance, and (B) in connection with the payment in full of the outstanding Secured Obligations, a charge in an amount equal to the sum (x) of $2,222,500, in respect of the Tranche I Advance, (y) $1,150,000, in respect of the Tranche II Advance, and (z) $1,150,000, in respect of the Tranche III Advance, less any charges paid prior to such date pursuant to the foregoing clause (A) in connection with partial prepayments. Any similar charge applicable to payment of any of the Tranche IV (Discretionary I) Advance, Tranche V Advance, Tranche VI Advance or Discretionary Advance II will be determined prior to the Advance Date thereof. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

2.6 Due Diligence Fee. The Due Diligence Fee has been paid by Borrowers prior to the Closing Date.

2.7 Notes. If so requested by Lender by written notice to Borrower Representative, then Borrowers shall execute and deliver to Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of Lender pursuant to Section 11.13) (promptly after Borrower Representative's receipt of such notice) a Term Note or Term Notes to evidence Lender's Loans.

2.8 Pro Rata Treatment; Application of Payments. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. The Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. Lender has the exclusive right to determine the order and manner in which all payments with respect to the Secured Obligations may be applied. No Borrower shall have a right to specify the order or the accounts to which Lender shall allocate or apply any payments made

by a Borrower to Lender or otherwise received by Lender under this Agreement when any such allocation or application is not expressly specified elsewhere in this Agreement.

2.9 Taxes.

(a) Withholding. Any and all payments by or on account of any obligation of any Borrower under any Loan Document will be made free and clear of and without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires a Withholding Agent to make any withholding or deduction of any Tax from any such payment, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant governmental authority in accordance with applicable law and, to the extent such Tax is an Indemnified Tax, then the sum payable by Borrowers hereunder shall be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Agent or Lender, as applicable receives an amount equal to the sum which it would have received had no such withholding or deduction been made. The applicable Borrower will, upon request, furnish Agent with proof reasonably satisfactory to Agent indicating that such Borrower has made such withholding payment.

(b) Payment of Other Taxes by Borrowers. Borrowers shall timely pay to the relevant governmental authority in accordance with applicable law, or at the option of Agent timely reimburse it for the payment of, any Other Taxes.

(c) Indemnification by Borrowers. Borrowers shall indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant governmental authority; provided that Borrowers shall not be obligated to compensate any Recipient pursuant to this Section in respect of penalties, interest or other liabilities attributable to any Indemnified Taxes, if such penalties, interest and other liabilities result solely from the gross negligence or willful misconduct of such Lender, the Agent or their Affiliates. A certificate as to the amount of such payment or liability delivered to Borrower Representative by a Lender (with a copy to Agent), or by Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Status of Lenders.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower Representative and Agent, at the time or times reasonably requested by a Borrower or Agent, such properly completed and executed documentation reasonably requested by such Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by a Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by such Borrower or Agent as will enable such Borrower or Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in paragraphs (d)(ii)(A), (ii)(B) and (ii)(D) of this Section) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that any Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to Borrower Representative and Agent on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit I-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code, or a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-2 or Exhibit I-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a party to this Agreement (and from time to time thereafter upon the

reasonable request of any Borrower or Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit any Borrower or Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower Representative and Agent at the time or times prescribed by law and at such time or times reasonably requested by any Borrower or Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by any Borrower or Agent as may be necessary for Borrowers and Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower Representative and Agent in writing of its legal inability to do so.

(e) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section (including by the payment of additional amounts pursuant to this Section), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant governmental authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (e) (plus any penalties, interest or other charges imposed by the relevant governmental authority) in the event that such indemnified party is required to repay such refund to such governmental authority. Notwithstanding anything to the contrary in this paragraph (e), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (e) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(f) Survival. Each party's obligations under this Section shall survive the resignation or replacement of Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Term Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

2.10 Treatment of Prepayment Charge and End of Term Charge. Borrower agrees that any Prepayment Charge and any End of Term Charge payable shall be presumed to be the liquidated damages sustained by each Lender as the result of the early termination, and Borrower agrees that it is reasonable under the circumstances currently existing and existing as of the Closing Date. The Prepayment Charge and the End of Term Charge shall also be payable in the event the Secured Obligations (and/or this

Agreement) are satisfied or released by foreclosure (whether by power of judicial proceeding), deed in lieu of foreclosure, or by any other means. Borrower expressly waives (to the fullest extent it may lawfully do so) the provisions of any present or future statute or law that prohibits or may prohibit the collection of the foregoing Prepayment Charge and End of Term Charge in connection with any such acceleration. Borrower agrees (to the fullest extent that each may lawfully do so): (a) each of the Prepayment Charge and the End of Term Charge is reasonable and is the product of an arm's length transaction between sophisticated business people, ably represented by counsel; (b) each of the Prepayment Charge and the End of Term Charge shall be payable notwithstanding the then prevailing market rates at the time payment is made; (c) there has been a course of conduct between the Lenders and Borrower giving specific consideration in this transaction for such agreement to pay the Prepayment Charge and the End of Term Charge as a charge (and not interest) in the event of prepayment or acceleration; and (d) Borrower shall be estopped from claiming differently than as agreed to in this paragraph. Borrower expressly acknowledges that their agreement to pay each of the Prepayment Charge and the End of Term Charge to the Lenders as herein described was on the Closing Date and continues to be a material inducement to the Lenders to provide the Term Loan Advances.

SECTION 3. SECURITY INTEREST

3.1 Grant of Security Interest. As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, each Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in, to and under all of Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles; (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrowers' property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing.

3.2 Excluded Collateral. Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include (a) nonassignable licenses or contracts, which by their terms require the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406, 9407 and 9408 of the UCC) or Pledged Collateral consisting of Equity Interests, if pursuant to the terms of the applicable Equity Documents, a pledge of such Equity Interests would be prohibited or void or would require the consent of or waiver by the applicable Platform Company, provided further, that upon the lapse of such prohibition or such consent or waiver being provided with respect to any license or contract, such license, contract or Equity Interests shall automatically be included in the Collateral, (b) any property which is subject to a capital lease, purchase money Lien or similar equipment financing permitted under this Agreement, but only to the extent and for as long as a Lien in favor of Agent would be prohibited by the terms of the related equipment financing agreement or would result in a termination thereof, and provided further, that upon the termination of such prohibition, such property shall automatically be deemed included in the Collateral, (c) any trademark application filed on an "intent-to-use" basis until the earlier of the filing of a statement of use with respect thereto or the issuance of a registration therefor, and (d) Excluded Accounts. In addition, in the event any change in the U.S. tax laws would cause a pledge of some or all of the outstanding Equity Interests of a Restricted Foreign Subsidiary of New Parent to result in material adverse tax consequences to the Borrower (as reasonably determined by the Borrower), the Collateral shall automatically and without further action required by, and without notice to, any Person exclude such Equity Interests of such Restricted Foreign Subsidiary in excess of the maximum percentage of the outstanding Equity Interests of such Restricted Foreign Subsidiary that may be pledged without causing such adverse tax consequences.

3.3 Pledged Collateral.

(a) Each Borrower hereby pledges, collaterally assigns and grants to Agent a security interest in the Pledged Collateral, as security for the performance of the Secured Obligations. Each Borrower irrevocably waives any and all of its rights under provisions of any Organizational Documents of any Subsidiary which is a limited liability company or limited partnership, and under the laws under which such Subsidiary has been organized, to the extent Borrower has the legal capacity to do so and that such waiver is permitted, that would operate to (a) prohibit, restrict, condition or otherwise adversely affect the pledge hereunder or any enforcement action which may be taken in respect of this pledge or (b) otherwise conflict with the terms of this Section 3.3. Each Borrower of which Equity Interests consisting of limited liability company or limited partnership interests constitute Pledged Collateral hereby irrevocably consents to the grant of the security interest provided for herein and to Agent or its nominee becoming a member or limited or general partner, as applicable, in such limited liability company or limited partnership, as applicable (including succeeding to any management rights appurtenant thereto), in connection with the exercise of remedies pursuant to Section 10; provided that such successor member or partner, as applicable, then agrees in writing to be bound by, and a party to, the applicable Organizational Document pursuant to the terms therein.

(b) Except as otherwise expressly provided in this Agreement, any sums or other property paid or distributed upon or with respect to any of the Pledged Collateral, whether by dividend or redemption or upon the liquidation or dissolution or recapitalization or reclassification of the capital of any issuer of the applicable Equity Interests or otherwise, shall, be paid over and delivered to Agent to be held by Agent as security for the payment in full in Cash of all of the Secured Obligations, in each case, to the extent constituting Net Cash Proceeds. All payments received by a Borrower shall, until paid or delivered to Agent, be held in trust for Agent, as security for the payment and performance in full of all of the Secured Obligations, and when paid, shall be deposited into a Controlled Account.

(c) So long as no Event of Default shall have occurred and be continuing and at Agent's written direction to the contrary, each Borrower shall be entitled to receive all cash dividends and distributions paid in respect of Pledged Collateral owned by it, and, prior to any acceleration pursuant to Section 10.1 hereof and any election by Agent of any remedies pursuant to Section 10.2 hereof, each Borrower shall be entitled to vote any Equity Interests owned by it and to give consents, waivers and ratifications in respect of Pledged Collateral; provided, however, that no vote shall be cast or consent, waiver or ratification given by any Borrower if the effect thereof would materially impair respect Agent's rights with respect to the enforcement of its Lien on the Pledged Collateral or be inconsistent with or result in any violation of any of the provisions of this Agreement or any of the Loan Documents. All rights of any Borrower to receive cash dividends and distributions with respect to Pledged Collateral owned by such Borrower, and, at Agent's option, upon notice by Agent to the applicable Borrower, all right to vote and give consents, waivers and ratifications with respect to such Pledged Collateral, shall terminate upon the occurrence and during the continuation of an Event of Default.

3.4 Release; Agreements by Agent with respect to Pledged Collateral.

The security interest granted pursuant to this Agreement shall be automatically released (a) with respect to all Collateral upon the payment in full in cash of all Secured Obligations in accordance with this Agreement (other than inchoate indemnity obligations and any other obligations which, by their terms survive the termination of this Agreement), (b) with respect to any Pledged Collateral that is the subject of a sale or other disposition described in clause (e) of the defined term "Permitted Transfers", upon the consummation of such transaction, or (c) if otherwise approved, authorized or ratified in writing by Agent in its sole discretion. Upon such release, Agent shall, upon the reasonable request and at the sole cost and expense of Borrowers, assign, transfer and deliver to Borrowers, against receipt and without recourse to or warranty by Agent, except as to the fact that Agent does not continue to encumber the released assets, such Collateral or any part thereof, which shall be released in accordance with customary documents and instruments (including UCC-3 termination financing statements or releases) acknowledging the release of such Collateral. Agent agrees, on behalf of itself and Lender, that if any Platform Company is consummating an

initial public offering of its stock or any relevant follow on offering, that Agent shall enter into lockup or similar agreements reasonably requested by Borrower or any underwriter with respect to Agent's exercise of remedies with respect to the Pledged Collateral constituting Equity Interests the Platform Company that is the issuer in such offering, in each case at the sole cost and expense of Borrower.

SECTION 4. CONDITIONS PRECEDENT TO LOAN

The obligations of Lender to make the Loan hereunder are subject to the satisfaction by Borrowers of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrowers shall have delivered to Agent the following:

(a) duly executed copies of the following, in form and substance acceptable to Agent:

(i) this Agreement;

(ii) the completed ACH Authorization;

(iii) Account Control Agreements with respect to all Deposit Accounts and any accounts where Investment Property is maintained, as required by Section 7.12 hereof;

(iv) a duly executed certificate of an officer of each Borrower certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of such Borrower as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of such Borrower, as in effect as of the Closing Date; (C) resolutions of such Borrower's Board evidencing approval of the Loan and other transactions contemplated by the Loan Documents, as in effect as of the Closing Date; (D) resolutions of the holders of such Borrower's Equity Interests in connection with the transactions contemplated by this Agreement as in effect as of the Closing Date, to the extent required by the applicable Organizational Documents; and (E) a schedule setting forth the name, title and specimen signature of officers or other authorized signers on behalf of each Borrower;

(v) a duly executed certificate of an officer of Parent certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of each Platform Company, as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of each Platform Company; (C) copies of all Equity Documents in effect as of the Closing Date; and (D) a summary capitalization table of each Platform Company;

(vi) a legal opinion of Borrowers' counsel;

(vii) any other Loan Documents; and

(viii) all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral.

(b) all originals certificates evidencing Pledged Collateral pledged pursuant to Section 3.3, together with any transfer powers or other instruments of transfer, in form and substance acceptable to Agent;

(c) copies of all consents, waivers, notices and other documents set forth on Schedule 5.15(ii);

(d) a certificate of good standing for each Borrower from its jurisdiction of organization and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified could have a Material Adverse Effect;

(e) payment of the Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance;

(f) all certificates of insurance, endorsements, and copies of each insurance policy required pursuant to Section 6.2; and

(g) such other documents as Agent may reasonably request.

Notwithstanding the foregoing, to the extent any of the above closing conditions is set forth on Schedule 7.19, Borrowers may deliver the same when required to be delivered pursuant to Schedule 7.19.

4.2 All Advances. On the Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), duly executed by Borrower Representative's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.

(b) Agent shall have received the applicable Facility Charge with respect to such Advance.

(c) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.

(d) At the time of and immediately after such Advance no Event of Default shall have occurred and be continuing.

(e) Each Advance Request shall be deemed to constitute a representation and warranty by Borrowers on the relevant Advance Date as to the matters specified in subsections (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could reasonably be expected to, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWERS

Borrowers represent and warrant that:

5.1 Organizational Status. Each Borrower is duly organized, legally existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, limited liability company or partnership, as the case may be, in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Each Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, or as such Borrower has subsequently notified Agent after the Closing Date in accordance with this Agreement (including in any Compliance Certificate).

5.2 Collateral. Each Borrower owns the Collateral free of all Liens, except for Permitted Liens. Each Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Each Borrower's execution, delivery and performance of this Agreement and all other Loan Documents, (i) have been duly authorized by all necessary action in accordance with Borrower's Organizational Documents, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and the other Loan Documents, (iii) do not violate any provisions of (A) a Borrower's Organizational Documents, or (B) any, law, regulation, order, injunction, judgment, decree or writ to which a Borrower is subject and which violation would have a Material Adverse Effect and (iv) do not violate any contract or agreement or require the consent or approval of any other Person which has not already been obtained if such violation or failure to obtain consent or approval would have a Material Adverse Effect. The individual or individuals executing the Loan Documents are duly authorized to do so.

5.4 Material Adverse Effect. Since the Closing Date, no event that has had or would reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of a Borrower, threatened against or affecting a Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws.

(a) Neither any Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. No Borrower is in default in any material respect in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound.

(b) No Borrower is required to be registered as an "investment company" within the meaning of the Investment Company Act based on (i) Section 3(a)(1)(C) of the Investment Company Act, (ii) Rule 3a-1 promulgated under the Investment Company Act or (iii) certain other exemptions or exceptions from registration under the Investment Company Act, other than Sections 3(c)(1) or 3(c)(7) of the Investment Company Act. No Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Each Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. No Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. No Borrower's nor any of its Subsidiaries' properties or assets has been used by any Borrower or such Subsidiary or, to any Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Each Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary to continue their respective businesses as currently conducted.

(c) None of Borrowers, any of its Subsidiaries or, to Borrower's knowledge, any of Borrowers' or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrowers, any of its Subsidiaries, or to the

knowledge of any Borrower any Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrowers to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by a Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrowers, and (ii) the most current of such projections provided to New Parent's Board, provided that it is understood that the projections are based on assumptions made in good faith but are subject to significant uncertainties and contingencies and that actual results may differ significantly and no assurances are provided by Borrower for any projections made or given.

5.8 Tax Matters. Except to the extent contested in good faith with adequate reserves under GAAP, (a) each Borrower has filed all material federal and state income tax returns and other tax returns that it is required to file, (b) each Borrower has duly paid or fully reserved for all federal and state income Taxes and other material Taxes or installments thereof (including any interest or penalties) as and when due, which have or may become due pursuant to such returns, and (c) each Borrower has paid or fully reserved for any material Tax assessment received by such Borrower for the three (3) years preceding the Fourth Amendment Effective Date, if any (including any material Taxes being contested in good faith and by appropriate proceedings).

5.9 Intellectual Property Claims. To Borrowers' knowledge, each Platform Company is the sole owner of, or otherwise has the right to use, the Intellectual Property material to such Platform Company's business. To Borrowers' knowledge, each of the material Copyrights, Trademarks and Patents is valid and enforceable, no material part of the Intellectual Property of a Platform Company has been judged invalid or unenforceable, in whole or in part, and no claim has been made to a Borrower or, to Borrower's knowledge, to a Platform Company, that any material part of the Intellectual Property of a Platform Company violates the rights of any third party. Exhibit D is a true, correct and complete list of all registered Trademarks, Copyrights, Patents of each Borrower, Qualified Subsidiary and, to the best of Borrower's knowledge, each Platform Company, together with application or registration numbers, as applicable, and of all material agreements under which a Borrower, Qualified Subsidiary or Platform Company licenses Intellectual Property from third parties (other than shrink-wrap software licenses or software licenses available in the ordinary course of business), in each case as of the Closing Date. No Borrower, Qualified Subsidiary or, to Borrowers' knowledge, no Platform Company is in material breach of, nor has such Person failed to perform any material obligations under, any material contracts, licenses or agreements and, to Borrowers' knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Intellectual Property. To Borrowers' knowledge, each Platform Company has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of such Person's business as currently conducted and proposed to be conducted. Without limiting the

generality of the foregoing, and in the case of licenses, except for restrictions that are unenforceable under Division 9 of the UCC, to Borrowers' knowledge, each Platform Companies have the right, to the extent required to operate such Platform Company's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of such Platform Company's business as currently conducted and proposed to be conducted, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and, to Borrowers' knowledge, each Platform Company owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to such Platform Company's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Products except customary covenants in inbound license agreements and equipment leases where a Platform Company is the licensee or lessee.

5.11 Products. No material Intellectual Property owned by a Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company or Product has been or is subject to any actual or, to the knowledge of any Borrower, threatened litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner the use, transfer or licensing thereof by the owner thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company to grant licenses or ownership interest in any future material Intellectual Property related to the operation or conduct of the business of any Borrower, Qualified Subsidiary or Platform Company or to any Products. Except as disclosed on Schedule 5.11, no Borrower or, to Borrowers' knowledge, Platform Company has received any written notice or claim, or, to the knowledge of any Borrower, oral notice or claim, challenging or questioning any Borrower's, Qualified Subsidiary's or Platform Company's ownership in any material Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to any Borrower's knowledge, is there a reasonable basis for any such claim. Neither any use by any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, by Platform Company, of its respective material Intellectual Property nor the production and sale of Products infringes in any material respect on the Intellectual Property or other rights of others.

5.12 Financial Accounts. Exhibit E, as may be updated by Borrowers in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which a Borrower or any Qualified Subsidiary maintains Deposit Accounts and (b) all institutions at which a Borrower or any Qualified Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name and address of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Other than loans constituting Permitted Investments, no Borrower has any outstanding loans to any employee, officer, manager or director of a Borrower, nor has a Borrower guaranteed the payment of any loan made to an employee, officer, manager or director of such Borrower by a third party.

5.14 Capitalization and Subsidiaries. Parent's capitalization as of the Closing Date is set forth on Schedule 5.14 annexed hereto. As of the Closing Date, no Equity Interests of a Qualified Subsidiary or a Platform Company are owned by a Borrower indirectly through a Subsidiary of such Borrower. No Borrower owns any stock, partnership interest or other securities of any Person, except for Permitted Investments.

5.15 Pledged Collateral; Instruments. All Equity Interests constituting Pledged Collateral are validly issued, fully paid and non-assessable in all material respects. The execution, delivery and performance thereof and the pledge of and granting of a security interest in the Pledged Collateral under

this Agreement do not contravene any provision of the Organizational Documents of the issuer of such Equity Interests. All certificates representing a Borrower's interest in Pledged Collateral have been delivered to Agent, together with duly executed transfer powers or other appropriate instruments of transfer (each in form and substance satisfactory to Agent), duly executed in blank by the applicable Borrower. As of the Closing Date, Schedule 5.15 sets forth (i) a true and accurate schedule of all Pledged Collateral and all Instruments owned by Borrowers, and (ii) a complete and accurate list of all consents, waivers, amendment or modification or other action to be taken in connection with the grant of the security interest pursuant to the terms of this Agreement in the Pledged Collateral.

5.16 Restricted Foreign Subsidiary Voting Rights. No decision or action in any governing document of any Restricted Foreign Subsidiary requires a vote of greater than 50.1% of the Equity Interests or voting rights of such Restricted Foreign Subsidiary.

SECTION 6. INSURANCE; INDEMNIFICATION

6.1 Coverage. Each Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrowers' line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrowers must maintain a minimum of $2,000,000 of commercial general liability insurance for each occurrence. Borrowers have and agree to maintain a minimum of $2,000,000 of directors' and officers' insurance for each occurrence and $5,000,000 in the aggregate. So long as there are any Secured Obligations outstanding, Borrowers shall also cause to be carried and maintained insurance upon the business and assets of Borrower and each of its Subsidiaries, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

6.2 Certificates. Borrowers shall deliver to Agent certificates of insurance that evidence Borrowers' compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrowers' insurance certificate shall state Agent (shown as "Hercules Capital, Inc.", as "Agent") is an additional insured for commercial general liability, a lender loss payee for all risk property damage insurance, subject to the insurer's approval, and promptly following any purchase of new or replacement insurance, Borrower shall deliver to Agent certificates of insurance showing Agent as additional insured and a lender loss payee for property insurance and additional insured for liability insurance for any future insurance that Borrowers may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. At Agent's reasonable request, Borrowers shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder, Borrowers shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.

6.3 Indemnity. Borrowers agree to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral,

excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement, in each case subject to the applicable statute of limitations. Furthermore, this Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

SECTION 7. COVENANTS OF BORROWERS

Each Borrower agrees as follows:

7.1 Financial Reports. Borrower Representative shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements"):

(a) if Borrower's Market Capitalization is less than Seven Hundred Million Dollars ($700,000,000) as of the last day of any calendar month, as soon as practicable after the end of each month (and in any event within forty-five (45) days of such month (sixty (60) days for the months ending March, June, September and December)), unaudited interim and year-to-date financial statements of each Borrower as of the end of such month, including balance sheet and related statements of income and cash flows, all certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (i) except for the absence of footnotes, (ii) subject to normal year-end adjustments, and (iii) except for certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) (i) as soon as practicable (and in any event within sixty (60) days or for any fiscal quarter with respect to which a later time period as may be provided by the SEC pursuant to any releases and extensions thereof in connection with reporting delays caused by COVID-19) after the end of each calendar quarter, unaudited interim and year-to-date financial statements as of the end of such calendar quarter, including balance sheet and related statements of income and cash flows certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (A) except for the absence of footnotes, and (B) subject to normal year-end adjustments; and (ii) if Parent changes its accounting practices to perform a quarterly fair value analysis of its Equity Interests, copies of such valuations when completed, if any; and

(c) as soon as practicable (and in any event within one hundred eighty (180) days) after the end of each fiscal year, unqualified audited financial statements (other than a as going concern qualification), prepared on a consolidated basis, including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrowers and reasonably acceptable to Agent, provided that to the extent not required by the Board of New Parent, audited financial statements shall not be required;

(d) (i) if Borrower's Market Capitalization is less than Seven Hundred Million Dollars ($700,000,000) as soon as practicable (and in any event within forty-five (45) days or sixty (60) days for the months ending March, June, September and December) after the end of each calendar month in which financial statements are delivered pursuant to Section 7.1(a) and (ii) if Borrower's Market Capitalization is more than Seven Hundred Million Dollars ($700,000,000) as soon as practicable (and in any event within sixty (60) days) after the end of each calendar quarter in which financial statements are delivered pursuant to Section 7.1(b), a Compliance Certificate in the form of Exhibit F;

(e) promptly after the filing thereof, copies of any regular, periodic and special reports or registration statements that New Parent files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(f) at the same time and in the same manner as provided to the members of the Board, (i) a report of any new Investments (by a Borrower or otherwise) made in Platform Companies, (ii) copies of all notices, minutes, consents and other materials that New Parent provides to the members of its Board in connection with meetings of the Board, and (iii) within 30 days after each such meeting, minutes of such meeting, provided that in all cases New Parent may exclude (w) any information that constitutes non-financial trade secrets or non-financial proprietary information, (x) confidential compensation information, (y) any information or materials referred to in clauses (ii) and (iii) that are confidential, and (z) any information or materials referred to in clauses (i) through (iii) that are subject to attorney-client or similar privilege, constitute attorney work product or would potentially create a conflict of interest with Agent or Lender;

(g) financial and business projections and budget promptly following their approval by New Parent's Board, and in any event, within ninety (90) days after the end of New Parent's fiscal year and promptly after any material update to such projections or budget is approved by New Parent's Board, in each case as well as any other budgets, operating plans and other financial information or information with respect to the Collateral or the Platform Companies as may be reasonably requested by Agent;

(h) within twenty (20) Business Days of the acquisition of Collateral consisting of Equity Interests or Instruments, notification thereof, together with such originals and other documents as required pursuant to Section 7.18;

(i) within ten (10) Business Days of (i) the formation of a new Platform Company, (ii) any material amendment, restatement, supplement or other modification of or to any Organizational Document of a Platform Company, and (iii) the entering into of any new material Equity Documents with respect to a Platform Company's Equity Interests, any material amendment, restatement, supplement or other modification of or to any such Equity Document, copies of such Organizational Documents, Equity Documents or applicable amendment, restatement, supplement or modification, as the case may be;

(j) together with the quarterly financial statements, copies of any loan documents entered into by a Platform Company or any Subsidiary thereof with respect to secured Indebtedness for borrowed money of a Platform Company or such Subsidiary, and any material amendment or other modification thereto, in each case to the extent permitted by law or contract;

(k) promptly after any material amendment, restatement, supplement or other modification to or of any Organizational Document or Equity Document of a Borrower or Qualified Subsidiary, a copy thereof;

(l) within five (5) Business Day of the occurrence of a Prepayment Event, a notification thereof, together with a description of such Prepayment Event, copies of such documents entered into in connection with the transaction giving rise to the Prepayment Event as Agent may reasonably request and calculations in form reasonably acceptable to Agent of the amount of Net Cash Proceeds, if any, arising from such Prepayment Event;

(m) promptly upon any legal process in an amount greater than $2,000,000 affecting the Collateral, a notification thereof;

(n) within three (3) Business Days of the occurrence of any Event of Default, a notification thereof; and

(o) promptly (and in any event within three (3) Business Days), notice if a Borrower or any Subsidiary has knowledge that a Borrower, or any Subsidiary or Affiliate of a Borrower, is listed on the OFAC Lists or (a) is convicted of, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Notwithstanding the foregoing, documents required to be delivered under this Article 7 may be delivered electronically and shall be deemed delivered when Borrower posts a link to such publicly disclosed documents on its website.

No Borrower shall make any change in its (a) accounting policies or reporting practices other than to the extent required or otherwise contemplated by GAAP or other applicable regulatory requirements, or (b) fiscal years or fiscal quarters. The fiscal year of each Borrower shall end on December 31.

The executed Compliance Certificate may be sent via email to Agent at legal@herculestech.com with a copy to hbhalla@htgc.com and nshah@htgc.com. All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financialstatements@herculestech.com with a copy to legal@herculestech.com with a copy to hbhalla@htgc.com; and nshah@htgc.com, provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: BridgeBio Pharma LLC.

7.2 Management Rights. Borrowers shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of such Borrowers at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than twice per fiscal year. In addition, any such representative shall have the right to meet with management and officers of such Borrowers to discuss such books of account and records at reasonable times and upon reasonable notice. In addition, Agent or Lender shall be entitled at reasonable times and intervals to consult with and advise the management and officers of such Borrowers concerning significant business issues affecting such Borrowers. Such consultations shall not unreasonably interfere with such Borrowers' business operations. The parties intend that the rights under this paragraph shall permit Agent or Lender solely the right to provide advice or recommendations and not be deemed to give Agent or Lender any right to exercise control or any rights of operations with respect to Borrower or its business.

7.3 Further Assurances. Each Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral. Each Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, each Borrower hereby authorizes Agent to execute and deliver on behalf of such Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of such Borrower in accordance with Section 9-504 of the UCC), and each Borrower hereby authorizes Agent, at any time during the existence of an Event of Default, to execute and deliver on behalf of such Borrower any collateral assignments, notices, control agreements, security agreements and other documents without the signature of such Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for such Borrower if such Borrower does not deliver the same within three (3) Business Days of Agent's request. Each Borrower shall protect and defend such Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to such Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. No Borrower shall create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on any Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of Cash in lieu of fractional shares in connection with such conversion, (b) with respect to purchase money Indebtedness permitted hereunder to the extent the outright purchase of such equipment would constitute an Investment in a capital asset that is permitted, (c) the foregoing to the extent refinanced with similar Permitted Indebtedness, (d) Indebtedness to the extent permitted pursuant to the terms of any subordination or intercreditor agreement executed by Agent, or (e) as otherwise permitted hereunder or approved in writing by Agent.

Notwithstanding anything to the contrary in the foregoing, the issuance of, performance of obligations under (including any payments of interest), and conversion, exercise, repurchase, redemption (including, for the avoidance of doubt, a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt), settlement or early termination or cancellation of (whether in whole or in part and including by netting or set-off) (in each case, whether in Cash, common stock of New Parent, Permitted Convertible Debt or, following a merger event or other change of the common stock of New Parent, other securities or property), or the satisfaction of any condition that would permit or require any of the foregoing, any Permitted Convertible Debt shall not constitute a prepayment of Indebtedness by New Parent for the purposes of this Section 7.4; *provided* that New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversion in connection with such redemption with consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and Cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of Cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of Cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Permitted Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Permitted Bond Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess Cash shall not be permitted by the preceding sentence, unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration.

7.5 Liens. Each Borrower shall at all times keep the Collateral and all other property and assets used in Borrowers' business or in which such Borrower now or hereafter holds any interest free and clear from any Liens whatsoever (except for Permitted Liens). No Borrower shall agree with any Person other than Agent or Lender not to encumber the Collateral, other than pursuant to Permitted Indebtedness and except for restrictions on the granting of Liens (other than Permitted Liens and the Liens pursuant to the Loan Documents) in a Borrower's Organizational Documents.

7.6 Investments. No Borrower shall, directly or indirectly acquire or own, or make any Investment in or to any Person other than Permitted Investments.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.6 shall not prohibit the conversion by holders of (including any payment upon conversion, whether in Cash, common stock or a combination thereof), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture (or other agreement) governing such Permitted Convertible Debt; provided that, New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversions in connection with such redemption with consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and Cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of Cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Permitted Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Permitted Bond Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess Cash shall not be permitted by the

preceding sentence, unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration.

Notwithstanding the foregoing, New Parent may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of New Parent's common stock and/or a different series of Permitted Convertible Debt and/or by payment of Cash (in an amount that does not exceed the proceeds received by New Parent from the substantially concurrent issuance of shares of New Parent's common stock and/or Permitted Convertible Debt plus the net cash proceeds, if any, received by New Parent pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); provided that, for the avoidance of doubt, New Parent may exercise or unwind or terminate early (whether in Cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

Notwithstanding the foregoing, New Parent may repurchase its common stock with a portion of the proceeds from the sale of Permitted Convertible Debt; provided that, the aggregate purchase price of such common stock, shall not exceed 21.75% of the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) to New Parent from the sale of such Permitted Convertible Debt; provided further that for purposes of this calculation New Parent may assume any option granted to purchase additional Permitted Convertible Debt granted to initial purchasers or underwriters pursuant to a customary purchase or underwriting agreement is exercised in full and the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) therefrom are received by New Parent.

7.7 Distributions. No Borrower shall (a) repurchase or redeem any class of stock or other Equity Interest of Borrower or a Qualified Subsidiary other than repurchases described in clauses (c), (t), and (u) of the defined term "Permitted Investments"; (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other Equity Interest, except for (i) distributions of Net Cash Proceeds, to the extent Agent shall have waived the application of any portion of such Net Cash Proceeds to the mandatory prepayment and to the extent Agent has consented to the distribution in respect of any portion of such Net Cash Proceeds to Parent's members, (ii) distributions of proceeds received by Parent from an initial public offering of Parent's common stock on a recognized national or international exchange, (iii) payments and distributions to Parent and/or New Parent, on or prior to each estimated tax payment date as well as each other applicable due date, in an amount that permits the payment of any Tax liabilities (including estimated Taxes) of New Parent, Parent and its Subsidiaries during the relevant period, including any Tax liabilities of any consolidated, affiliated, or unitary group of which New Parent, Parent or any of its Subsidiaries are a member (including a consolidated group within the meaning of Section 1504 of the Code), (iv) any payments made by a Borrower to New Parent pursuant to the Board-approved tax sharing agreement between New Parent and such Borrower in effect as of the Fourth Amendment Effective Date, or (v) subject to satisfaction of the Equity Cash Payment Conditions, any payments made by New Parent related to a tender offer as permitted in accordance with any equity exchange program involving the issuance of equity awards under New Parent's equity incentive plans; (c) lend money to any employees, officers, managers or directors or guarantee the payment of any such loans granted by a third party in excess of $500,000 in the aggregate; or (d) waive, release or forgive any Indebtedness owed by any employees, officers, managers or directors in excess of $250,000 in the aggregate.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.7 shall not prohibit (i) the conversion by holders of (including any Cash payment upon conversion), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a redemption of Permitted Convertible Debt upon satisfaction of a condition, if any, related to the stock price of New Parent's common stock set forth in the indenture (or other agreement) governing the Permitted Convertible Debt) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture (or other agreement) governing such Permitted Convertible Debt; *provided* that, New Parent shall not be permitted to issue a redemption notice in respect of Permitted Convertible Debt pursuant to which New Parent elects to settle (or settles) conversions in connection with such redemption with

consideration other than common stock of New Parent (or other securities or property following a merger event or other change of the common stock of New Parent) and Cash in lieu of fractional shares, unless the Redemption Conditions are satisfied at the time of the issuance of such redemption notice; provided further that, to the extent both (a) the aggregate amount of Cash payable upon conversion or payment of any Permitted Convertible Debt (excluding any required payment of interest with respect to such Permitted Convertible Debt and excluding any payment of Cash in lieu of a fractional share due upon conversion thereof) exceeds the aggregate principal amount thereof and (b) such conversion or payment does not trigger or correspond to an exercise or early unwind or settlement of a corresponding portion of the Permitted Bond Hedge Transactions relating to such Permitted Convertible Debt (including, for the avoidance of doubt, the case where there is no Permitted Bond Hedge Transaction relating to such Permitted Convertible Debt), the payment of such excess Cash shall not be permitted by this clause (i), unless the Cash Settlement Conditions are satisfied at the time of the delivery of the conversion consideration, or (ii) the entry into (including the payment of premiums in connection therewith) or any required payment with respect to, or required early unwind or settlement of, any Permitted Bond Hedge Transaction or Permitted Warrant Transaction, in each case, in accordance with the terms of the agreement governing such Permitted Bond Hedge Transaction or Permitted Warrant Transaction; provided that, to the extent Cash is required to be paid under a Permitted Warrant Transaction as a result of the election of "cash settlement" (or substantially equivalent term) as the "settlement method" (or substantially equivalent term) thereunder by New Parent (or its Affiliate) (including in connection with the exercise and/or early unwind or settlement thereof), the payment of such Cash shall not be permitted by this clause (ii), unless the Cash Payment Conditions are satisfied at the time of the payment.

Notwithstanding the foregoing, New Parent may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of New Parent's common stock and/or a different series of Permitted Convertible Debt and/or by payment of Cash (in an amount that does not exceed the proceeds received by New Parent from the substantially concurrent issuance of shares of New Parent's common stock and/or Permitted Convertible Debt plus the net Cash proceeds, if any, received by Borrower pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); provided that, for the avoidance of doubt, New Parent may exercise or unwind or terminate early (whether in Cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

Notwithstanding the foregoing, New Parent may repurchase its common stock with a portion of the proceeds from the sale of Permitted Convertible Debt; provided that, the aggregate purchase price of such common stock shall not exceed 21.75% of the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) to New Parent from the sale of such Permitted Convertible Debt; provided that for purposes of this calculation New Parent may assume any option granted to purchase additional Permitted Convertible Debt granted to initial purchasers or underwriters pursuant to a customary purchase or underwriting agreement is exercised in full and the gross proceeds (without deducting initial purchaser or underwriter discounts or expenses) therefrom are received by New Parent.

7.8 Transfers. Except for Permitted Transfers, no Borrower shall voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets.

7.9 Mergers or Acquisitions. No Borrower shall merge or consolidate with or into any other Person, except (i) that any Subsidiary of a Borrower may merge with, consolidate with or into, dissolve or liquidated into a Borrower, provided, that such Borrower shall be the continuing or surviving entity and all actions reasonably required by Agent, including actions required to maintain perfected Liens on the Equity Interests of the surviving entity and other Pledged Collateral in favor of Agent shall have been completed in accordance with the terms of this Agreement, provided, further, that such Borrower must be the continuing or surviving entity and (ii) any Borrower may merge with, consolidate with or into, dissolve or liquidated into another Borrower.

7.10 Taxes. Each Borrower and each Qualified Subsidiary shall pay when due all material Taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against a Borrower or the Collateral or upon a Borrower's ownership, possession, use, operation or disposition thereof or upon a Borrower's rents, receipts or earnings arising therefrom, unless the same are being contested in good faith and by appropriate proceedings and adequate reserves in accordance with GAAP are being maintained by such Borrower or such Qualified Subsidiary. Each Borrower shall file on or before the due date therefor all material personal property Tax returns in respect of the Collateral.

7.11 Certain Changes. No Borrower shall:

(a) suffer a Change in Control;

(b) change its jurisdiction of organization, organizational form or legal name without twenty (20) days' prior written notice to Agent;

(c) relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America;

(d) amend, restate, supplement or otherwise modify the terms of the Organizational Documents of a Borrower or Qualified Subsidiary if the effect of such change could be expected to be materially adverse to the interests of Agent or Lender; or

(e) suffer any Investments in Equity Interests of a Platform Company to be held, directly or indirectly by a Subsidiary of New Parent that is not organized under the laws of the United States or any state or territory thereof.

7.12 Deposit Accounts. No Borrower shall maintain any Deposit Accounts, or accounts holding Investment Property, except for Excluded Accounts and accounts with respect to which Agent has an Account Control Agreement, provided, that Borrowers shall have sixty (60) days following the establishment or acquisition of any new Deposit Account or account holding Investment Property (other than Excluded Accounts) to enter into and cause each applicable depository or securities intermediary to enter into, an Account Control Agreement.

7.13 Qualified Subsidiaries; Platform Companies.

(a) Borrower Representative shall, within thirty (30) days of formation, cause any Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement. Prior to the execution and delivery of a Joinder Agreement, Borrowers shall cause any Qualified Subsidiary to comply with the terms of this Agreement applicable to Borrowers.

(b) No Borrower shall suffer the Organizational Documents of any Platform Company or any Qualified Subsidiary, or any of its Equity Document to contain any provision, unless waived, which would restrict, delay or condition the grant of the security interest in the Pledged Collateral as set forth in this Agreement or the exercise of any remedy with respect to the Pledged Collateral, including, without limitation, the exercise of voting rights by Agent or the disposition of the Pledged Collateral after the occurrence and during the continuation of an Event of Default.

(c) Notwithstanding anything to the contrary herein, Borrower Representative shall, within sixty (60) days of the drawing the Tranche IV (Discretionary I) Advance, cause any Qualified Subsidiary which was not a Qualified Subsidiary immediately prior to such Advance Date to execute and deliver to Agent a Joinder Agreement and take all steps reasonably requested by Agent with respect to such Joinder Agreement and the granting of security thereunder, including, without limitation, providing deliverables for

each Qualified Subsidiary comparable to those provided on the Closing Date with respect to the Borrowers on the Closing Date, including deliverables of the type described in Section 4.1.

7.14 Use of Proceeds. Each Borrower agrees that the proceeds of the Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general business purposes, including Investments in Platform Companies. The proceeds of the Loans will not be used in violation of Anti-Corruption Laws or applicable Sanctions.

7.15 Compliance with Laws.

(a) Each Borrower shall maintain compliance in all material respect with all applicable laws, rules or regulations, and shall, or cause its Subsidiaries to, obtain and maintain all required governmental authorizations, approvals, licenses, franchises, permits or registrations reasonably necessary in connection with the conduct of Borrowers' business; and no Borrower shall become an "investment company" or a company controlled by an "investment company", under the Investment Company Act.

(b) No Borrower shall, nor shall a Borrower permit any controlled Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. No Borrower shall (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law, nor shall a Borrower knowingly permit any controlled Affiliate to, directly or indirectly do any of the foregoing.

(c) Each Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by a Borrower, and their respective directors, officers, managers, employees, and agents with Anti-Corruption Laws and applicable Sanctions, and each Borrower, and their respective officers and employees and to the knowledge of each Borrower its directors, managers and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects.

(d) None of Borrowers, or any of their respective directors, officers, managers or employees, or to the knowledge of Borrowers, any agent for Borrowers that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

7.16 Intellectual Property. Each Borrower shall (i) protect, defend and maintain the validity and enforceability of its Intellectual Property necessary for its continued operations; (ii) promptly advise Agent in writing of material infringements of material Intellectual Property of a Borrower; and Borrower shall use commercially reasonable efforts to prevent any Intellectual Property material to Borrowers' business from being abandoned, forfeited or dedicated to the public. If a Borrower (i) obtains any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, or (ii) applies for any Patent or the registration of any Trademark, then such Borrower shall on the next Compliance Certificate required to be delivered hereunder provide written notice thereof to Agent and shall execute such intellectual property security agreements and other documents and take such other actions as Agent may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent in such property. Borrowers shall, together with the delivery of the next Compliance Certificate required to be delivered hereunder, provide to Agent copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement required for Agent to perfect and maintain a first priority perfected security interest in such property.

7.17 Transactions with Affiliates. No Borrower shall, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of any Borrower on terms that are less favorable to Borrowers, other than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of a Borrower, except that Borrower shall not be subject to the foregoing limitation with respect to (i) issuance of Subordinated Indebtedness or Equity Interests, including to existing investors, (ii) entrance into customary compensation arrangements in the ordinary course of business and approved by the Board, (iii) consummation of any Permitted Transfer expressly contemplated to be entered into between a Borrower and an Affiliate, or (iv) any distribution permitted pursuant to Section 7.7.

7.18 Pledged Collateral. Any Borrower shall, (a) at such Borrower's expense, promptly execute, acknowledge and deliver all such instruments and take all such actions as Agent from time to time may reasonably request in order to ensure to Agent the benefits of the pledge intended to be created by Section 3.3, shall maintain, preserve and defend the title to the Pledged Collateral and the Lien of the Agent thereon against the claim of any other Person (other than Permitted Liens); (b) with respect to any Equity Interests of an issuer owned by such Borrower constituting limited liability company membership interests, shall, to the extent it controls such issuer, cause Article 8 of the Uniform Commercial Code of such issuer's jurisdiction of organization to govern the Equity Interests of such issuer, such Equity Interests to be certificated or otherwise evidenced by an instrument, and shall deliver such certificate or instrument, together with a duly executed transfer power or other instrument of transfer (in form and substance reasonably satisfactory to the Agent) executed in blank, promptly (but in any event within three (3) Business Days after receipt thereof by Borrower) to the Agent; (c) upon acquiring any new Equity Interests constituting Pledged Collateral or Instruments constituting Collateral, within twenty (20) Business Days (i) deliver to Agent an updated Schedule 5.15 hereto, in form reasonably satisfactory to Agent, identifying such additional Equity Interests, which shall be attached to this Agreement, (ii) either deliver or otherwise cause the transfer of such additional Equity Interests or Instruments (including any certificates and duly executed transfer powers or other instruments of transfer executed in blank and in form and substance satisfactory to Agent) to Agent as required under this Agreement or any Loan Document or enter into a control agreement in favor of Agent in form acceptable to Agent with respect thereto, provided that with respect to Equity Interests of a Borrower other than New Parent, to the extent the Organizational Documents of such Borrower do not provide for the issuance of physical stock certificates and as long as no physical stock certificates are issued, Borrowers shall not be required to deliver stock certificates, stock powers or control agreements, and (iii) to the extent related to an Investment in a new Platform Company, deliver an acknowledgement, consent and waiver in substantially the form delivered by the Platform Companies as of the Closing Date. No Borrower shall enter into any agreement restricting its ability to vote the Equity Interests or assigning or otherwise transferring or restricting its ability to vote the Equity Interests owned by such Borrower other than pursuant to any Loan Document or in connection with voting agreements entered into by holders of Equity Interests in each Platform Company on customary terms for venture capital financings, in each case, which are not designed to impair the pledge or Agent's exercise of remedies with respect to Pledged Collateral.

7.19 Post-Closing Deliveries. Borrower shall deliver the documents or take the actions as set forth in Schedule 7.19 hereto.

7.20 Introductions. When any Platform Company is considering a secured loan facility, Borrower shall use commercially reasonable efforts to introduce a representative of Agent to the chief financial officer or other appropriate officer of such Platform Company to allow Agent's representative to present possible lending options to such Platform Company.

7.21 Minimum Cash. If the Tranche III Advance is made, at all times after September 15, 2019 (or if earlier, the date a Qualified IPO is effective), Borrowers shall maintain Qualified Cash in an aggregate amount not less than $20,000,000, provided that if a Qualified IPO is effective on or prior to September 15, 2019, the foregoing covenant shall not apply during any period which the Market Capitalization is at least $750,000,000, provided further that upon the achievement of the Achievement Milestone, this Section 7.21 shall cease to apply.

7.22 Restricted Foreign Subsidiary Voting Rights. Borrower shall not, and shall not permit any Subsidiary, to amend or modify any governing document of any Restricted Foreign Subsidiary of Borrower, the effect of which is to require a vote of greater than 50.1% of the Equity Interests or voting rights of such entity for any decision or action of such entity.

SECTION 8. RIGHT TO INVEST

8.1 Lender or its assignee or nominee shall have the right, in its discretion, to participate in the next Subsequent Financing in an amount of up to $2,000,000 on the same terms, conditions and pricing afforded to others participating in any such Subsequent Financing, provided that with respect to an initial public offering of Parent, Parent shall use commercially reasonable efforts to allow such participation. Parent shall provide written notice to Lender at least five (5) Business Days prior to the consummation of each Subsequent Financing, and if Lender desires to exercise its right to participate in such Subsequent Financing, Lender shall cooperate to consummate its Investment in such closing within five (5) days of receipt of documentation with respect thereto. Parent shall not take any action to avoid or seek to avoid the observance or performance of any of the obligations pursuant to this Section 8.1, but will at all times in good faith assist in the carrying out the same and take all such action as may be necessary or appropriate to protect the rights of Lender hereunder against impairment. Without limiting the generality of the foregoing, Parent will obtain all such authorizations, exemptions or consents from any third party or any governmental authority having jurisdiction thereof as may be necessary to enable Parent to perform its obligations under this Agreement.

SECTION 9. EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrowers fail to pay principal, interest and regularly scheduled fee when due under this Agreement or any other Loan Document, or shall pay any other amount due hereunder within three (3) Business Days of the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or a Borrower's bank if such Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following such Borrowers' knowledge of such failure to pay; or

9.2 Covenants. A Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among any Borrower, Agent and Lender, and (a) with respect to a Default under any covenant under this Agreement other than the Sections specifically identified in clause (b) hereof, any other Loan Document or any other agreement between any Borrower and Agent or Lender, and such Default continues for more than twenty (20) days, or (b) with respect to a default under any of Sections 6, 7.1, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.17, 7.18, 7.19, 7.21 or 7.22 the occurrence of such Default; or

9.3 Material Adverse Effect. A circumstance has occurred that would reasonably be expected to have a Material Adverse Effect or a "change of control", "fundamental change" or any comparable term under and as defined in any indenture governing any Permitted Convertible Debt (but not "make-whole fundamental change" unless it results in a put right for holders of such Permitted Convertible Debt) has occurred; or

9.4 Representations. Any representation or warranty made by any Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Any Borrower or Qualified Subsidiary (i) (A) shall make an assignment for the benefit of creditors; or (B) shall be unable to pay its debts as they become due, or shall become insolvent; or (C) shall file a voluntary petition in bankruptcy; or (D) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation,

dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (E) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of such Person or of all or any part of the assets or property of such Person; or (F) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (G) any Borrower or Qualified Subsidiary or the Board or majority of the holders of the Equity Interests of the foregoing shall take any action initiating any of the foregoing actions described in clauses (A) through (F); or (ii) either (A) forty-five (45) days shall have expired after the commencement of an involuntary action against any Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of a Borrower, or a Qualified Subsidiary being stayed; or (B) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be appealed within twenty (20) days; or (C) any Borrower, or Qualified Subsidiary shall file any answer admitting or not contesting the material allegations of a petition filed against such Borrower or Qualified Subsidiary in any such proceedings; or (D) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (E) thirty (30) days shall have expired after the appointment, without the consent or acquiescence of the applicable Borrower or Qualified Subsidiary, of any trustee, receiver or liquidator of such Person or of all or any material part of the properties of such Person without such appointment being vacated; or

9.6 Attachments; Judgments. Any material portion of the assets of any Borrower or Qualified Subsidiary is attached or seized, or a levy is filed against any such assets, or a final judgment or judgments is/are entered (in each case to the extent not paid and not covered by independent third party insurance) for the payment of money individually or in the aggregate, of at least $500,000, and there is a period of forty-five (45) consecutive days during which a stay of enforcement of such judgment, by reason of a pending appeal, bond or otherwise, is not in effect, or any Borrower or Qualified Subsidiary is enjoined or in any way prevented by court order from conducting any material part its business; or

9.7 Other Obligations. The occurrence of any Default under any agreement or obligation of any Borrower or Qualified Subsidiary involving any Indebtedness in excess of $10,000,000, which could entitle or permit any Person to accelerate such Indebtedness or any early cash payment in excess of $10,000,000 by New Parent or its Affiliate is required, or unwinding or termination occurs with respect to either any Permitted Bond Hedge Transaction or any Permitted Warrant Transaction that requires New Parent or its Affiliate to make net cash payments in excess of $10,000,000 in the aggregate, or any condition giving rise to the foregoing is met, in each case, with respect to which New Parent or its Affiliate is the "defaulting party" under the terms of such Permitted Bond Hedge Transaction or Permitted Warrant Transaction.

SECTION 10. REMEDIES

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in any Borrower's name, any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, each Borrower hereby grants Agent an irrevocable power of attorney coupled with an interest, and (iii) Agent may notify any of any Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on such Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of

all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent shall at the direction of the Required Lenders, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Each Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower Representative. Agent may require any Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, subject to increase in accordance with Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrowers or each of its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of any Borrower or any other Person, and each Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Pledged Collateral. Upon the occurrence and during the continuation of an Event of Default, (a) at Agent's election and upon notice to the applicable Borrower, Agent may vote any or all Equity Interests (whether or not the same shall have been transferred into its name or the name of its nominee or nominees) for any lawful purpose, including, without limitation, for the liquidation of the assets of the issuer thereof, and give all consents, waivers and ratifications in respect of the Equity Interests and otherwise act with respect thereto as though it were the outright owner thereof (hereby irrevocably constituting and appointing Agent the proxy and attorney-in-fact of such Borrower, with full power of substitution, to do so); (b) Agent may demand, sue for, collect or make any compromise or settlement Agent deems suitable in respect of any Equity Interests; (c) Agent may sell, resell, assign and deliver, or otherwise dispose of any or all of the Pledged Collateral, for Cash or credit or both and upon such terms at such place or places, at such time or times and to such entities or other persons as Agent deems expedient, all without demand for performance by any Borrower or any notice or advertisement whatsoever except as expressly provided herein or as may otherwise be required by law; (d) Agent may cause all or any part of the Pledged Collateral to be transferred into its name or the name of its nominee or nominees; and (e) at Agent's election and upon notice thereof to the applicable Borrower, Agent may exercise all membership or partnership, as applicable, rights, powers and privileges to the same extent as the applicable Borrower is entitled to exercise such rights, powers and privileges. Agent may enforce its rights hereunder without any other notice and without compliance with any other condition precedent now or hereunder imposed by statute, rule of law or otherwise (all of which are hereby expressly waived by each Borrower, to the fullest extent permitted by law). Each Borrower recognizes that the Agent may be unable to effect a public sale or other disposition of its Equity Interests by reason of certain prohibitions contained in securities laws and other applicable laws, but may be compelled to resort to one or more private sales thereof to a restricted group of purchasers. Each Borrower agrees that any such private sales may be at prices and other terms less favorable to the seller than if sold at public sales and that such private sales shall not by reason thereof

be deemed not to have been made in a commercially reasonable manner. Agent shall be under no obligation to delay a sale of any of the Pledged Collateral for the period of time necessary to permit the issuer of Equity Interests to register such securities for public sale under securities laws or other applicable laws, even if such issuer would agree to do so. In connection with the sale of Pledged Collateral by Agent during the continuation of an Event of Default, each Borrower agrees to use its commercially reasonable efforts to cause each issuer of the Equity Interests contemplated to be sold, to execute and deliver, and cause the directors and officers of such issuer to execute and deliver, all at such Borrower's expense, all such instruments and documents, and to do or cause to be done all such other acts and things as may be necessary or, in the reasonable opinion of Agent, advisable to exempt such Equity Interests from registration under the provisions of applicable laws, and to make all amendments to such instruments and documents which, in the opinion of Agent, are necessary or advisable, all in conformity with the requirements of applicable laws and the rules and regulations of the Securities and Exchange Commission applicable thereto.

10.5 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11. MISCELLANEOUS

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(b) If to Lender:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah

400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(c) If to Borrowers:

BridgeBio Pharma LLC
Attention:
421 Kipling Street
Palo Alto, CA 94301

email: nk@bridgebio.com
Telephone: 650-391-9740

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated April 12, 2018 and the Non-Disclosure Agreement).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrowers party to the relevant Loan Document may, or, with the written consent of the Required Lenders, Agent and Borrowers party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of Lender or of Borrowers hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any Default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder, or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Borrowers of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrowers, Lender, Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrowers at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and Borrowers and shall survive the execution and delivery of this Agreement. Section 2.9, Section 6.3 and Section 11.14 shall survive the termination of this Agreement.

11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on each Borrower and its permitted assigns (if any). No Borrower shall assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrowers, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrowers or a distressed debt or vulture investor (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to a Controlled Investment Affiliate of any Lender or Agent shall be allowed. Agent, acting solely for this purpose as an agent of Borrowers, shall maintain at one of its offices in the State of California a copy of each assignment delivered to it in connection with any assignment by a Lender, and a register for the recordation of the names and addresses of each Lender, and the Term Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrowers, Agent and Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrowers and Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrowers of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents following the exhaustion of all rights with respects to appeals relating thereto. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.10 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWERS, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWERS AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST A BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrowers and Lender; Claims that arise out of or are in any way connected to the relationship among Borrowers, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.11 Professional Fees. Each Borrower promises to pay Agent's and Lender's reasonable fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys' fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, each Borrower promises to pay any and all reasonable attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to a Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to a Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of a Borrower's estate, and any appeal or review thereof.

11.12 Confidentiality. Agent and Lender acknowledge that certain items of Collateral and information provided to Agent and Lender by a Borrower are confidential and proprietary information of Borrowers, if and to the extent such information either (i) is marked as confidential by such Borrower at the time of disclosure, or (ii) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain in the course of acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrowers, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their reasonable discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be

bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after Default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of any Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of any Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and Lender's obligations under this Section 11.12 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

11.13 Assignment of Rights. Each Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve any Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Term Note(s) (if any), it will endorse thereon a notation as to the portion of the principal of the Term Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.14 Revival of Secured Obligations; Termination. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against any Borrower for liquidation or reorganization, if any Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of any Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations (other than obligations that survive termination) shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and payment in cash to Agent or Lender in cash. This Agreement and the Loan Documents shall terminate on the payment in full in cash of the Secured Obligations (other than any obligations that specifically survive termination).

11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrowers unless specifically provided otherwise herein, and,

except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, Lender and Borrowers.

11.17 Agency.

(a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as Agent hereunder and under the other Loan Documents and authorizes Agent to take such actions on its behalf and to exercise such powers as are delegated to Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Lender agrees to indemnify Agent in its capacity as such (to the extent not reimbursed by Borrowers and without limiting the obligation of Borrowers to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any Default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Agent is required to exercise as directed in writing by Lender, provided that Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Agent to liability or that is contrary to any Loan Document or applicable law; and

(iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and Agent shall not be liable for the failure to disclose, any information relating to Borrowers or any of its Affiliates that is communicated to or obtained by any Person serving as Agent or any of its Affiliates in any capacity.

(e) Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of Lender or as Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other

Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.

11.19 Multiple Borrowers.

(a) Borrowers' Agent. Each of Borrowers hereby irrevocably appoints Borrower Representative as its agent, attorney-in-fact and legal representative for all purposes, including requesting disbursement of the Term Loan Advance and receiving account statements and other notices and communications to Borrowers (or any of them) from Agent or any Lender. Agent may rely, and shall be fully protected in relying, on any request for the Term Loan Advance, disbursement instruction, report, information or any other notice or communication made or given by Borrower Representative, whether in its own name or on behalf of one or more of the other Borrowers, and Agent shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrowers' obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require Agent to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other Person, or to proceed against any property of any kind which secures all or any part of the Secured Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with Agent or any Indebtedness of Agent or any Lender to any other Borrower, or to exercise any other right or power, or pursue any other remedy Agent or any Lender may have; (ii) any defense arising by reason of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other Person, or by reason of the cessation from any cause whatsoever of any liability of any

other Borrower or any guarantor or any endorser, co-maker or other Person, with respect to all or any part of the Secured Obligations, or by reason of any act or omission of Agent or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other Person or any Secured Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of Agent to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other Person; (iv) any defense based upon or arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against any other Borrower or any guarantor or any endorser, co-maker or other Person, including without limitation any discharge of, or bar against collecting, any of the Secured Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Secured Obligations have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of any Borrower hereunder except the full performance and payment of all of the Secured Obligations. If any claim is ever made upon Agent for repayment or recovery of any amount or amounts received by Agent in payment of or on account of any of the Secured Obligations, because of any claim that any such payment constituted a preferential transfer or fraudulent conveyance, or for any other reason whatsoever, and Agent repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over Agent or any of its property, or by reason of any settlement or compromise of any such claim effected by Agent with any such claimant (including without limitation the any other Borrower), then and in any such event, each Borrower agrees that any such judgment, decree, order, settlement and compromise shall be binding upon such Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Secured Obligations, or any release of any of the Secured Obligations, and each Borrower shall be and remain liable to Agent and Lender under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by Agent or any Lender, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Secured Obligations, including (but not limited to) any of the foregoing rights which a Borrower may have under any present or future document or agreement with any other Borrower or other Person, and including (but not limited to) any of the foregoing rights which any Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by such Borrower and without affecting or impairing in any way the obligations or liability of such Borrower hereunder, Agent may, from time to time before or after revocation of this Agreement, do any one or more of the following in its sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Secured Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Secured Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Secured Obligations or any guaranty of any or all of the Secured Obligations, or on which Agent at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or any part of the Secured Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of such Borrower; (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any Indebtedness whatsoever owing from such Person or secured by such Collateral or security, in such manner and order as Agent determines in its sole discretion, and regardless of whether such Indebtedness is part of the Secured Obligations, is secured, or is due and payable. Each Borrower consents and agrees that Agent shall be under no obligation to marshal any assets in favor of Borrower, or against or in payment of any or all of the Secured Obligations. Each Borrower further

consents and agrees that Agent shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Secured Obligations. Without limiting the generality of the foregoing, Agent shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Secured Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against such Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by Agent. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and such Borrower is not relying in any manner upon any representation or statement of Agent or any Lender with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower's financial condition and any other matter pertinent hereto as such Borrower may desire, and such Borrower is not relying upon or expecting Agent to furnish to it any information now or hereafter in Agent's possession concerning the same or any other matter.

(e) Subordination. All Indebtedness of any Borrower now or hereafter arising held by another Borrower is subordinated to the Secured Obligations and any Borrower holding the Indebtedness shall take all actions reasonably requested by Agent to effect, to enforce and to give notice of such subordination.

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IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

BORROWERS:

BRIDGEBIO PHARMA, INC.

Signature: _____

Print Name: _____

Title: _____

BRIDGEBIO PHARMA LLC

Signature: _____

Print Name: _____

Title: _____

BRIDGEBIO SERVICES INC.

Signature: _____

Print Name: _____

Title: _____

SUB20, INC.

Signature: _____

Print Name: _____

Title: _____

[SIGNATURE PAGE TO LOAN AND SECURITY AGREEMENT]

IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

Accepted in Palo Alto, California:

AGENT:

HERCULES CAPITAL, INC.

Signature: _____

Print Name: Zhuo Huang

Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: _____

Print Name: Zhuo Huang

Title: Associate General Counsel

Table of Exhibits and Schedules

EXHIBIT A

ADVANCE REQUEST

To: Agent:Date: , 20__

Hercules Capital, Inc. (the "Agent")
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Attn: Legal Department; Himani Bhalla; Nimesh Shah

Re: Loan and Security Agreement dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Agreement"), by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Borrower Representative, on behalf of Borrowers, hereby requests Agent to cause Lender to make an Advance in the amount of _____ Dollars ($_____) on _____, _____ (the "Advance Date") pursuant to the Agreement. Capitalized words and other terms used but not otherwise defined herein are used with the same meanings as defined in the Agreement.

Please:

(a) Issue a check payable to Borrower Representative ☐

or

(b) Wire Funds to Borrower Representative's account ☐

Bank:	Silicon Valley Bank
Address:	Santa Clara, CA
To the credit of:	BridgeBio Pharma LLC
Account Number:	3301428699
Routing Number:	121140399
Contact Person:	Neil Kumar
Email address:	nk@bridgebio.com

Borrower Representative represents that the conditions precedent to the Advance set forth in the Agreement are satisfied and shall be satisfied upon the making of such Advance, including but not limited to: (i) that no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing; (ii) that the representations and warranties set forth in the Agreement and in any warrant issued to Lender are and shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date; (iii) that each Borrower is in compliance with all the terms and provisions set forth in each Loan Document on its part to be observed or performed; and (iv) that as of the Advance Date, no fact or condition exists that constitutes (or could, with the passage of time, the giving of notice, or both constitute) an Event of Default under the Loan Documents. Borrower Representative understands and acknowledges that Agent has the right to review the financial information supporting this representation and, based upon such review in its reasonable discretion, Lender may decline to fund the requested Advance.

Borrower Representative hereby represents that each Borrower's jurisdiction of organization, organizational form, legal name and locations have not changed since the date of the Agreement or, if the Attachment to this Advance Request is completed, are as set forth in the Attachment to this Advance Request.

Borrower Representative agrees to notify Agent promptly before the funding of the Loan if any of the matters which have been represented above shall not be true and correct on the Advance Date and if Agent has received no such notice before the Advance Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct as of the Advance Date.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

This Advance Request is duly executed as of the date set forth above.

BRIDGEBIO PHARMA LLC

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

ATTACHMENT TO ADVANCE REQUEST

Dated: _____, 20__

Borrower Representative hereby represents and warrants to Agent, on behalf of each Borrower, that each of Borrowers' current names and organizational status is as follows:

Name:	BridgeBio Pharma, Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	7424449
Name:	BridgeBio Pharma LLC
Type of organization:	limited liability company
State of organization:	Delaware
Organization file number:	5984875
Name:	BridgeBio Services Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	6382136
Name:	SUB20, Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	6906483

Borrower Representative hereby represents and warrants to Agent, on behalf of Borrowers, that the street addresses, cities, states and postal codes of each Borrower's current locations are as follows:

BridgeBio Pharma, Inc., BridgeBio Pharma LLC, BridgeBio Services Inc., and SUB20, Inc.:

421 Kipling Street
Palo Alto, CA 94301

EXHIBIT B

SECURED TERM PROMISSORY NOTE

$[_____]

Advance Date: ____, 20__

Maturity Date: _____, 20__

FOR VALUE RECEIVED, each of BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), from time to time, hereby promises to pay to Hercules Capital, Inc., a Maryland corporation or its registered assigns (the "Lender") at 400 Hamilton Avenue, Suite 310, Palo Alto, CA 94301 or such other place of payment as the Lender may specify from time to time in writing, in lawful money of the United States of America, the principal amount of $[_____] or such other principal amount as Lender has advanced to Borrowers, together with interest at a rate as set forth in Section 2.1(c) of the Loan Agreement based upon a year consisting of 360 days, with interest computed daily based on the actual number of days in each month.

This Secured Term Promissory Note (the "Term Note") is the Term Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement dated as of June 19, 2018, by and among Borrowers, Hercules Capital, Inc., a Maryland corporation (the "Agent") and the several banks and other financial institutions or entities from time to time party thereto as lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All payments shall be made in accordance with the Loan Agreement. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. An Event of Default under the Loan Agreement shall constitute a default under this Term Note.

Each Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest under the UCC or any applicable law. Each Borrower agrees to make all payments under this Term Note without setoff, recoupment or deduction and regardless of any counterclaim or defense. Borrowers shall be jointly and severally liable with respect to all Secured Obligations pursuant to this Term Note and the Loan Agreement. This Term Note has been negotiated and delivered to Lender and is payable in the State of California. This Term Note shall be governed by and construed and enforced in accordance with, the laws of the State of California, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

The undersigned have duly executed this Term Note.

BRIDGEBIO PHARMA, INC.

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

BRIDGEBIO PHARMA, LLC.

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

BRIDGEBIO PHARMA, INC.

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

SUB20, INC.

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

EXHIBIT C

NAME, LOCATIONS, AND OTHER INFORMATION FOR BORROWERS

Legal Name:	BridgeBio Pharma LLC
Type of organization:	limited liability company
State of organization:	Delaware
Organization file number:	6382136
Prior Legal Names:	N/A
Periods of use:	August 2017
Fiscal Year End:	December 31
Federal Employer Tax Identification Number:	81-1790983
Chief Executive Office Location:	421 Kipling Street, Palo Alto, CA 94301
Legal Name:	BridgeBio Services Inc.
Type of organization:	corporation
State of organization:	Delaware
Organization file number:	5984875
Prior Legal Names:	N/A
Periods of use:	N/A
Fiscal Year End:	December 31
Federal Employer Tax Identification Number:	35-2592788
Chief Executive Office Location:	421 Kipling Street, Palo Alto, CA 94301

EXHIBIT D

PATENTS, TRADEMARKS, COPYRIGHTS AND LICENSES

See attached.

EXHIBIT E

DEPOSIT ACCOUNTS AND INVESTMENT ACCOUNTS

ACCOUNT HOLDER	DEPOSITORY / INTERMEDIARY	ADDRESS	PURPOSE	ACCOUNT NUMBER
BridgeBio Pharma LLC	Silicon Valley Bank	555 Mission St., Ste. 900, San Francisco, CA 94105	Operating Account	3301428699
BridgeBio Services Inc.	Silicon Valley Bank	555 Mission St., Ste. 900, San Francisco, CA 94105	Operating Account	3301539758

EXHIBIT F

COMPLIANCE CERTIFICATE

Hercules Capital, Inc.
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Attn: Legal Department; Himani Bhalla; Nimesh Shah

Reference is made to that certain Loan and Security Agreement dated as of June 19, 2018, by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, Inc., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and administrative agent for Lender (in such capacity "Agent"). All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Borrower Representative, knowledgeable of all Borrowers' financial matters, and is authorized to provide certification of information regarding Borrowers; hereby certifies, in such capacity, that in accordance with the terms and conditions of the Loan Agreement, each Borrower is in compliance for the period ending _____ with all covenants, conditions and terms and hereby reaffirms that all representations and warranties contained therein are true and correct in all material respects (except to the extent any representation or warranty is qualified by any applicable standard of materiality in the Loan Agreement) on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent that such representations and warranties expressly relate to an earlier date, and except that no representation and warranty related to the Platform Companies is deemed to be made except for the representations and warranties set forth in Section 5.15 with respect to the Pledged Collateral. Attached are the required documents supporting the above certification. The undersigned further certifies that all financial statements delivered herewith are prepared in accordance with GAAP (except for the absence of footnotes with respect to unaudited financial statement and subject to normal year-end adjustments) and are consistent from one period to the next except as explained below.

REPORTING REQUIREMENT	REQUIRED	CHECK IF ATTACHED
Monthly Financial Statements	If Borrower's Market Capitalization is less than $700,000,000 – Monthly, within 45 days (or 60 days for months ending March, June, September and December)	☐
Quarterly Financial Statements	Quarterly, within 60 days (or a later time period as may be provided by SEC in connection with COVID-19)	☐
Audited Financial Statements (if required by New Parent's board of directors)	Annually, within 180 days of fiscal year end	☐
Budget and Projections	Annually, within 90 days of fiscal year end, and promptly upon any Board approved material update	☐

FINANCIAL COVENANT	REQUIRED	COMPLIES
Minimum Cash	$20,000,000[1]	☐Yes ☐No

The undersigned hereby also confirms as follows:

1. Does any Borrower or Qualified Subsidiary have any deposit account or investment account not set forth on Exhibit E to the Loan Agreement, as updated to date? ☐Yes ☐No
   (*If yes, please attach updated Exhibit E.)*
2. Has any new Qualified Subsidiary been formed that has not entered into a Joinder Agreement? ☐Yes ☐No

3. Has a Borrower acquired any Equity Interests or Instruments not set forth on Schedule 5.15 to the Loan Agreement, as updated to date? ☐Yes ☐No
   (*If yes, please provide updated Schedule 5.15.)*
4. Have the Organizational Documents or financing documents or similar agreements or documents governing the Equity Interests of any Platform Company been materially amended, restated, supplemented or otherwise modified? ☐Yes ☐No
   (*If yes, please provide copies.)*
5. Has any Prepayment Event occurred of which Agent has not yet been notified? ☐Yes ☐No
   (*If yes, please provide details and calculations of Net Cash Proceeds.)*

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[1] Applicable after 9/15/2019 or upon effectiveness of Qualified IPO, if earlier; waived after effectiveness of Qualified IPO as long as Market Capitalization exceeds $750,000,000; waived after Achievement Milestone is met.

Very Truly Yours,

BRIDGEBIO PHARMA LLC

SIGNATURE: _____

TITLE: _____

PRINT NAME: _____

EXHIBIT G

FORM OF JOINDER AGREEMENT

This Joinder Agreement (the "Joinder Agreement") is made and dated as of ___, 20__, and is entered into by and between_____, a _____ corporation ("Subsidiary"), and HERCULES CAPITAL, INC., a Maryland corporation (as "Agent").

RECITALS

A. Subsidiary's Affiliate, BridgeBio Pharma LLC ("Company") has entered into that certain Loan and Security Agreement dated as of June 19, 2018, with the several banks and other financial institutions or entities from time to time party thereto as lender (collectively, the "Lender") and Agent, as such agreement may be amended (the "Loan Agreement"), together with the other agreements executed and delivered in connection therewith;

B. Subsidiary acknowledges and agrees that it will benefit both directly and indirectly from Company's execution of the Loan Agreement and the other agreements executed and delivered in connection therewith;

AGREEMENT

NOW THEREFORE, Subsidiary and Agent agree as follows:

1. The recitals set forth above are incorporated into and made part of this Joinder Agreement. Capitalized terms not defined herein shall have the meaning provided in the Loan Agreement.

2. By signing this Joinder Agreement, Subsidiary shall be bound by the terms and conditions of the Loan Agreement the same as if it were a Borrower (as defined in the Loan Agreement) under the Loan Agreement, mutatis mutandis, provided however, that (a) with respect to (i) Section 5.1 of the Loan Agreement, Subsidiary represents that it is an entity duly organized, legally existing and in good standing under the laws of [_____], (b) neither Agent nor Lender shall have any duties, responsibilities or obligations to Subsidiary arising under or related to the Loan Agreement or the other Loan Documents, (c) that if Subsidiary is covered by Company's insurance, Subsidiary shall not be required to maintain separate insurance or comply with the provisions of Sections 6.1 and 6.2 of the Loan Agreement, and (d) that as long as Company satisfies the requirements of Section 7.1 of the Loan Agreement, Subsidiary shall not have to provide Agent separate Financial Statements. To the extent that Agent or Lender has any duties, responsibilities or obligations arising under or related to the Loan Agreement or the other Loan Documents, those duties, responsibilities or obligations shall flow only to Company and not to Subsidiary or any other Person or entity. By way of example (and not an exclusive list): (i) Agent's providing notice to Company in accordance with the Loan Agreement or as otherwise agreed among Company, Agent and Lender shall be deemed provided to Subsidiary; (ii) a Lender's providing an Advance to Company shall be deemed an Advance to Subsidiary; and (iii) Subsidiary shall have no right to request an Advance or make any other demand on Lender.

3. Subsidiary agrees to deliver any equity securities to Agent in order to perfect Agent's security interest in such equity securities.

4. Subsidiary acknowledges that it benefits, both directly and indirectly, from the Loan Agreement, and hereby waives, for itself and on behalf on any and all successors in interest (including without limitation any assignee for the benefit of creditors, receiver, bankruptcy trustee or itself as debtor-in-possession under any bankruptcy proceeding) to the fullest extent provided by law, any and all claims, rights or defenses to the enforcement of this Joinder Agreement on the basis that (a) it failed to receive adequate consideration for the execution and delivery of this Joinder Agreement or (b) its obligations under this Joinder Agreement are avoidable as a fraudulent conveyance.

5. As security for the prompt, complete and indefeasible payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Subsidiary grants to Agent a security interest in all of Subsidiary's right, title, and interest in and to the Collateral.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

SUBSIDIARY:

[_____]

By: _____
Name: _____
Title: _____

Address:
[_____]
[_____]
[_____]

Telephone: [_____]
email: [_____]

AGENT:

HERCULES CAPITAL, INC.

By: _____
Name: _____
Title: _____

Address:
400 Hamilton Ave., Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

EXHIBIT H

ACH DEBIT AUTHORIZATION AGREEMENT

Hercules Capital, Inc.
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Re: Loan and Security Agreement dated as of June 19, 2018 (the "Agreement") by and among BRIDGEBIO PHARMA, INC., BRIDGEBIO PHARMA LLC, BRIDGEBIO SERVICES INC., SUB20, INC., and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers") and Hercules Capital, Inc., as administrative agent ("Agent") and the lenders party thereto (collectively, "Lender").

In connection with the above referenced Agreement, the undersigned Borrower hereby authorizes Agent to initiate debit entries for (i) the periodic payments due under the Agreement and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender pursuant to Section 11.11 of the Agreement to its account indicated below. The undersigned authorizes the depository institution named below to debit to such account.

DEPOSITORY NAME SILICON VALLEY BANK	BRANCH
CITY SANTA CLARA	STATE AND ZIP CODE CALIFORNIA 95054
TRANSIT/ABA NUMBER 121140399	ACCOUNT NUMBER 3301428699

This authority will remain in full force and effect so long as any amounts are due under the Agreement.

BRIDGEBIO PHARMA LLC

By: _____

Name: _____

Title: _____

EXHIBIT I-1

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Term Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and the Borrower Representative with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform the Borrower Representative and the Agent, and (2) the undersigned shall have at all times furnished the Borrower Representative and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

DATE: _____ __, 20[ ]

EXHIBIT I-2

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT I-3

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect to such participation, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT I-4

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to that certain Loan and Security Agreement dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among BRIDGEBIO PHARMA, INC., a Delaware corporation, BRIDGEBIO PHARMA LLC, a Delaware limited liability company, BRIDGEBIO SERVICES INC., a Delaware corporation, SUB20, INC., a Delaware corporation, and each of their Qualified Subsidiaries from time to time party to the Loan Agreement (individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to the Loan Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

Pursuant to the provisions of Section 2.9 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Term Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Term Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Loan Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished Agent and the Borrower Representative with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform the Borrower Representative and Agent, and (2) the undersigned shall have at all times furnished the Borrower Representative and Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

Date: _____ __, 20[ ]

SCHEDULE 1.1

COMMITMENTS

LENDER	TRANCHE	TERM COMMITMENT
Hercules Capital, Inc.	Tranche I	$35,000,000
Hercules Capital, Inc.	Tranche II	$20,000,000
Hercules Capital, Inc.	Tranche III	$20,000,000
Hercules Capital, Inc.	Tranche IV (Discretionary I) *	$25,000,000*
Hercules Capital, Inc.	Tranche V*	$25,000,000*
Hercules Capital, Inc.	Tranche VI*	$25,000,000*
Hercules Capital, Inc.	Discretionary Tranche II	$50,000,000*
TOTAL COMMITMENTS		$200,000,000*

* Tranche IV (Discretionary I), Tranche V, Tranche VI and Discretionary Advance II are each subject to Lender’s approval in its sole and absolute discretion.

SCHEDULE 1A

EXISTING INDEBTEDNESS

None.

SCHEDULE 1B

EXISTING INVESTMENTS

1. Equity Interests

Company	**Record Owner & Percent Ownership**
A. Adrenas Therapeutics, Inc.	BioBridge Pharma LLC – 28%
b.Aspa Therapeutics, Inc.	BioBridge Pharma LLC –31%
C. Coa Therapeutics, Inc.	BioBridge Pharma LLC – 84%
D. Dermecular Therapeutics, Inc.	BioBridge Pharma LLC – 84%
E. Eidos Therapeutics, Inc.	BioBridge Pharma LLC – 60%
F. Ferro Therapeutics, Inc.	BioBridge Pharma LLC – 52%
G. Fortify Therapeutics, Inc.	BioBridge Pharma LLC – 100%
H. Molecular Skin Therapeutics, Inc.	BioBridge Pharma LLC – 33%
I.Navire Pharma, Inc.	BioBridge Pharma LLC – 26%
J.Orfan Biotech Inc.	BioBridge Pharma LLC – 35%
K. Origin Biosciences, Inc.	BioBridge Pharma LLC – 82%
L. PellePharm, Inc.	BioBridge Pharma LLC – 50%
M. Phoenix Tissue Repair, Inc.	BioBridge Pharma LLC – 29%
N. QED Therapeutics, Inc.	BioBridge Pharma LLC – 80%
O. Quartz Therapeutics, Inc.	BioBridge Pharma LLC – 40%
P. Shift Therapeutics, Inc.	[Not Yet Funded]
Q. TheRas, Inc.	BioBridge Pharma LLC – 84%
R. Venthera, Inc.	BioBridge Pharma LLC – 39%

SCHEDULE 1C

EXISTING LIENS

None.

SCHEDULE 5.14

CAPITALIZATION

SCHEDULE 5.15

EQUITY INTERESTS; INSTRUMENTS

(i) EQUITY INTERESTS

Issuer	Type and Class of Equity Interests	Number of Pledged Equity Interests	Certificate Number
Adrenas Therapeutics, Inc.	Preferred A	1,000,000	PA-0001
Adrenas Therapeutics, Inc.	Preferred A	3,000,000	PA-0002
Aspa Therapeutics, Inc.	Preferred A	2,000,000	PA-0001
Coa Therapeutics, Inc.	Common	900,000	CS-0002
Coa Therapeutics, Inc.	Preferred A	100,000	PA-0001
Coa Therapeutics, Inc.	Preferred A	514,958	PA-0002
Coa Therapeutics, Inc.	Preferred A	400,000	PA-0003
Coa Therapeutics, Inc.	Preferred A	500,000	PA-0004
Coa Therapeutics, Inc.	Preferred A	2,000,000	PA-0005
Calcilytix Therapeutics, Inc.	Preferred A	2,000,000	PA-0001
Dermecular Therapeutics, Inc.	Preferred A	4,500,000	PA-0001
Eidos Therapeutics, Inc.	Common	18,614,655	ET 00001
Ferro Therapeutics, Inc.	Preferred A	1,500,000	PA-0001
Fortify Therapeutics, Inc.	Preferred A	150,000	PA-0001
Molecular Skin Therapeutics, Inc.	Preferred A	1,500,000	PA-1
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	800,000	PA-0001
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	480,000	PA-0002
Navire Pharma, Inc. (fka PTP Pharmaceuticals, Inc.)	Preferred A	720,000	PA-0003
Orfan Biotech Inc.	Preferred A	1,500,000	PA-0001
Origin Biosciences, Inc. (fka Origin Therapeutics, Inc.)	Preferred A	3,000,000	PA-0001
Origin Biosciences, Inc. (fka Origin Therapeutics, Inc.)	Preferred A	2,000,000	PA-0002
PellePharm, Inc.	Common	1,000,000	CS-24

Issuer	Type and Class of Equity Interests	Number of Pledged Equity Interests	Certificate Number
PellePharm, Inc.	Common	400,000	CS-25
PellePharm, Inc.	Preferred B	3,888,889	PB-2
PellePharm, Inc.	Preferred B-2	4,683,763	PB-2-35
PellePharm, Inc.	Preferred B-2	2,096,992	PB-2-15
PellePharm, Inc.	Preferred B-2	3,464,705	PB-2-24
PellePharm, Inc.	Preferred B-2	2,350,427	PB-2-34
PellePharm, Inc.	Preferred B-2	3,594,842	PB-2-36
PellePharm, Inc.	Preferred C	629,946	PC-1
Phoenix Tissue Repair, Inc.	Preferred A	3,000,000	1
Phoenix Tissue Repair, Inc.	Preferred A	1,500,000	2
QED Therapeutics, Inc.	Preferred A	20,000,000	PA-0001
QED Therapeutics, Inc.	Preferred A	15,000,000	PA-0003
Quartz Therapeutics, Inc.	Preferred A	805,256	PA-01
Quartz Therapeutics, Inc.	Preferred A	826,700	PA-02
Quartz Therapeutics, Inc.	Preferred A	805,256	PA-03
Quartz Therapeutics, Inc.	Preferred A	2,415,770	PA-04
Quartz Therapeutics, Inc.	Preferred A	1,610,513	PA-05
Quartz Therapeutics, Inc.	Voting Common	100	VCS-01
Sub20, Inc.	Common	200,000	CS-0001
TheRas, Inc.	Common	1,000	C-1
TheRas, Inc.	Series Seed Preferred	8,998,965	PS-1
TheRas, Inc.	Preferred A	500,045	PA-1
TheRas, Inc.	Preferred A	500,045	PA-2
TheRas, Inc.	Preferred A	2,000,200	PA-3
TheRas, Inc.	Preferred A	2,000,200	PA-4
Venthera, Inc.	Preferred A	1,948,051	PA-0001

(ii) REQUIRED NOTICES, CONSENTS OR WAIVERS

1. Acknowledgment, Consent and Waiver, dated as of the Closing Date, among Adrenas Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
2. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Aspa Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.

3. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Coa Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
4. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Dermecular Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
5. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Eidos Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
6. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Fortify Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
7. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Ferro Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
8. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Molecular Skin Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
9. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Navire Pharma, Inc. (Fka Ptp Pharmaceuticals, Inc.), Bridgebio Pharma LLC and Hercules Capital, Inc.
10. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Orfan Biotech Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
11. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Origin Biosciences, Inc. (Fka Origin Therapeutics, Inc.), Bridgebio Pharma LLC and Hercules Capital, Inc.
12. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among PellePharm, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
13. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Phoenix Tissue Repair, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
14. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Qed Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
15. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Quartz Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
16. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Theras, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
17. Acknowledgment, Consent and Waiver, Dated as of the Closing Date, among Venthera, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.
18. Acknowledgment, Consent and Waiver, dated as of February 27, 2019, among Calcilytix Therapeutics, Inc., Bridgebio Pharma LLC and Hercules Capital, Inc.

SCHEDULE 7.19

POST-CLOSING DELIVERIES

1. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the stock certificates representing all of Parent's ownership of Equity Interests of the following Platform Companies and other Qualified Subsidiaries, together with stock powers, in form acceptable to Agent:

- Molecular Skin Therapeutics, Inc.
- TheRas, Inc.
- Fortify Therapeutics, Inc.

2. Within 4 business days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the stock certificate(s) representing all of Parent's ownership of Equity Interests of PellePharm Inc., together with a stock power or stock powers, as applicable, duly executed and in blank, in form acceptable to Agent.

3. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), on a commercially reasonable efforts basis, either (i) a stock certificate representing all of Parent's ownership of Equity Interests of Eidos Therapeutics, Inc., together with a stock power, duly executed and in blank, in form acceptable to Agent, or (ii) a control agreement with respect to such Equity Interests (if the same are not evidenced by a certificate), in form acceptable to Agent.

4. Within 5 business days of the Closing Date (or with respect to stock certificates permitted to be delivered post-closing, within 5 business days of the due date therefore in accordance with this Schedule) (or in each case, at such later date as Agent may approve in its sole discretion), the original stock certificates together with the original stock powers.

5. Within 30 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), the insurance endorsements required to be delivered pursuant to the Agreement.

6. Within 15 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), a Joinder Agreement, duly executed by Sub20, Inc., together with corporate authority documents, a customary closing certificate and any other documents reasonably required by Agent to perfect Agent's security interest in the Collateral owned by Sub20, Inc.

7. Within 15 days of the Closing Date (or at such later date as Agent may approve in its sole discretion), a waiver, in form acceptable to Agent, of any applicable provisions in the Equity Documents of Fortify Therapeutics, Inc., with respect to the pledge of the Equity Interests of Fortify Therapeutics, Inc.

EXHIBIT B

(See Attached)

Exhibit 21

List of Subsidiaries

Entity Name	State of Incorporation
BridgeBio Pharma LLC	Delaware
TheRas, Inc.	Delaware
BridgeBio Services Inc.	Delaware
Origin Biosciences, Inc.	Delaware
Fortify Therapeutics, Inc.	Delaware
Sub20, Inc.	Delaware
Eidos Therapeutics, Inc.	Delaware
Molecular Skin Therapeutics, Inc.	Delaware
Navire Pharma, Inc.	Delaware
CoA Therapeutics, Inc.	Delaware
Phoenix Tissue Repair, Inc.	Delaware
QED Therapeutics, Inc.	Delaware
Adrenas Therapeutics, Inc.	Delaware
Orfan Biotech Inc.	Delaware
Ferro Therapeutics, Inc.	Delaware
Venthera, Inc.	Delaware
Aspa Therapeutics, Inc.	Delaware
Retinagenix Therapeutics, Inc.	Delaware
Audition Therapeutics, Inc.	Delaware
Calcilytix Therapeutics, Inc.	Delaware
BridgeBio Gene Therapy LLC	Delaware
BridgeBio Gene Therapy Research, Inc.	Delaware
ML Bio Solutions Inc.	Delaware
Cyan Therapeutics, Inc.	Delaware
Shift Therapeutics, Inc.	Delaware
Portal Therapeutics, Inc. (f/k/a Stoplight Therapeutics, Inc.)	Delaware
Contour Therapeutics LLC	Delaware
BridgeBio Chemistry, Inc.	Delaware
DTD Therapeutics, Inc.	Delaware
BridgeBio Canada ULC	Canada

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- Registration Statement No. 333-232491 on Form S-8 pertaining to the 2019 Stock Option and Incentive Plan and 2019 Employee Stock Purchase Plan
- Registration Statement No. 333-234803 on Form S-8 pertaining to the 2019 Inducement Equity Plan
- Registration Statement No. 333-236872 on Form S-8 pertaining to the 2019 Stock Option and Incentive Plan and 2019 Employee Stock Purchase Plan
- Registration Statement No. 333-239718 on Form S-8 pertaining to the Amended and Restated 2019 Stock Option and Incentive Plan
- Registration Statement No. 333-252393 on Form S-8 pertaining to the Eidos Therapeutics, Inc. Amended and Restated 2018 Stock Option and Incentive Plan and Eidos Therapeutics, Inc. Amended and Restated 2016 Equity Incentive Plan
- Registration Statement No. 333-252394 on Form S-8 pertaining to the Amended and Restated 2019 Stock Option and Incentive Plan and Amended and Restated 2019 Employee Stock Purchase Plan
- Registration Statement No. 333-239734 on Form S-3ASR
- Registration Statement No. 333-240147 on Form S-3ASR

of our report dated February 25, 2021, relating to the consolidated financial statements of BridgeBio Pharma, Inc. and the effectiveness of BridgeBio Pharma, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2020.

DELOITTE & TOUCHE LLP

San Francisco, California
February 25, 2021

Exhibit 31.1

CERTIFICATIONS

I, Neil Kumar, certify that:

1. I have reviewed this Annual Report of BridgeBio Pharma, Inc. on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report");

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(s) 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(s) 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.

February 25, 2021

/s/ Neil Kumar

Neil Kumar
Chief Executive Officer
(Principal Executive Officer)

ACTIVE/102476079.2

Exhibit 31.2

CERTIFICATIONS

I, Brian Stephenson, certify that:

1. I have reviewed this Annual Report of BridgeBio Pharma, Inc. on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report");

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(s) 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(s) 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.

February 25, 2021

/s/ Brian Stephenson
Brian Stephenson
Chief Financial Officer
(Principal Financial and Accounting Officer)

ACTIVE/102476076.2

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 BridgeBio Pharma, Inc. (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Neil Kumar, the Chief Executive Officer of BridgeBio Pharma, Inc. (the "Company"), do hereby certify in accordance with 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 that, based upon my knowledge:

1. This Annual Report on Form 10-K of the Company, to which this certification is attached as an exhibit (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 results of operations of the Company.

February 25, 2021

/s/ Neil Kumar
Neil Kumar
Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350), has been provided to BridgeBio Pharma, Inc. and will be retained by BridgeBio Pharma, Inc. and furnished to the Securities and Exchange Commission or its staff upon request. This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of BridgeBio Pharma, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

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 BridgeBio Pharma, Inc. (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Brian Stephenson, Chief Financial Officer (Principal Financial and Accounting Officer) of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 25, 2021

/s/ Brian Stephenson
Brian Stephenson
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350), has been provided to BridgeBio Pharma, Inc. and will be retained by BridgeBio Pharma, Inc. and furnished to the Securities and Exchange Commission or its staff upon request. This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of BridgeBio Pharma, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.