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

FORM 10-K

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

For the fiscal year ended December 31, 2019

or

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

For the transition period from to

Commission File Number 001-35945

EPIZYME, INC.

(Exact name of registrant as specified in its charter)

Delaware	**26-1349956**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
400 Technology Square, Cambridge, Massachusetts	**02139**
(Address of principal executive offices)	**(Zip code)**

617-229-5872
(Registrant's telephone number, including area code)

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

Common stock, $0.0001 par value	**Trading symbol(s)**	**Nasdaq Global Select Market**
(Title of each class)	**EPZM**	**(Name of exchange on which registered)**

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 Exchange 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, a smaller reporting company, or an emerging growth company. See definitions of "accelerated filer," "large 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

The aggregate market value of the registrant's common stock, par value $0.0001 per share, held by non-affiliates of the registrant on June 28, 2019, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $992.1 million based on the closing price of the registrant's common stock on the Nasdaq Global Select Market on that date.

The number of outstanding shares of the registrant's common stock, par value $0.0001 per share, as of February 19, 2020 was 100,771,384.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement that the registrant intends to file with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the registrant's 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent stated herein.

Epizyme, Inc.

Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2019

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Forward-looking Information

This Annual Report on Form 10-K contains forward-looking statements that involve substantial risks and uncertainties. These statements may be identified by such forward-looking terminology as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar statements or variations of such terms. Our forward-looking statements are based on a series of expectations, assumptions, estimates and projections about our company, are not guarantees of future results or performance and involve substantial risks and uncertainty. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements. Our business and our forward-looking statements involve substantial known and unknown risks and uncertainties, including the risks and uncertainties inherent in our statements regarding:

- our plans to develop and commercialize novel epigenetic therapies for patients with cancer and other serious diseases, including our ability to successfully commercialize TAZVERIK (tazemetostat);
- our ongoing and planned clinical trials, including the timing of initiation and enrollment in the trials, the timing of availability of data from the trials and the anticipated results of the trials;
- our ability to achieve anticipated milestones under our collaborations;
- the timing of and our ability to apply for, obtain and maintain regulatory approvals for our product candidates, including the new drug application that we submitted in December 2019 to the U.S. Food and Drug Administration for the accelerated approval of TAZVERIK (tazemetostat) for patients with relapsed or refractory follicular lymphoma who have received at least two prior lines of systemic therapy;
- the rate and degree of market acceptance and clinical utility of TAZVERIK;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position; and
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

All of our forward-looking statements are made as of the date of this Annual Report on Form 10-K only. In each case, actual results may differ materially from such forward-looking information. We can give no assurance that such expectations or forward-looking statements will prove to be correct. An occurrence of or any material adverse change in one or more of the risk factors or risks and uncertainties referred to in this Annual Report on Form 10-K or included in our other public disclosures or our other periodic reports or other documents or filings filed with or furnished to the Securities and Exchange Commission, or the SEC, could materially and adversely affect our business, prospects, financial condition and results of operations. Except as required by law, we do not undertake or plan to update or revise any such forward-looking statements to reflect actual results, changes in plans, assumptions, estimates or projections or other circumstances affecting such forward-looking statements occurring after the date of this Annual Report on Form 10-K, even if such results, changes or circumstances make it clear that any forward-looking information will not be realized. Any public statements or disclosures by us following this Annual Report on Form 10-K which modify or impact any of the forward-looking statements contained in this Annual Report on Form 10-K will be deemed to modify or supersede such statements in this Annual Report on Form 10-K.

PART I

Item 1. Business

Overview

We are a biopharmaceutical company that is committed to rewriting treatment for people with cancer and other serious diseases through the discovery, development, and commercialization of novel epigenetic medicines. By focusing on the genetic drivers of disease, our science seeks to match targeted medicines with the patients who need them.

In January 2020, the U.S. Food and Drug Administration, or FDA, granted accelerated approval of TAZVERIK™ (tazemetostat) for the treatment of adult and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection. This approval was based on overall response rate and duration of response shown in the epithelioid sarcoma cohort of our Phase 2 trial in patients with INI1-negative tumors. The commercial launch is underway, and we have made TAZVERIK available to eligible patients and their physicians in the United States.

As part of the accelerated approval for epithelioid sarcoma, continued approval for this indication is contingent upon verification and description of clinical benefit in a confirmatory trial. To provide this confirmatory evidence to support a full approval of tazemetostat for this indication, we are conducting a global, randomized, controlled Phase 1b/3 confirmatory trial assessing TAZVERIK in combination with doxorubicin compared with doxorubicin plus placebo as a front-line treatment for epithelioid sarcoma. The safety run-in portion of the trial is underway, and we expect to advance the trial into the Phase 3 portion in 2020.

In December 2019, we submitted a New Drug Application, or NDA, to the FDA for accelerated approval of TAZVERIK for patients with relapsed or refractory follicular lymphoma, or FL, who have received at least two prior lines of systemic therapy. In February 2020, the NDA was accepted for filing by the FDA. The FDA granted priority review and has designated the application as a supplemental NDA, or sNDA, with a Prescription Drug User Fee Act, or PDUFA, target action date of June 18, 2020. Priority review is granted to investigational therapies that, if approved, may offer significant improvements in the treatment, prevention or diagnosis of a serious condition. The sNDA submission is based primarily on efficacy and safety data from the cohorts evaluating TAZVERIK as a monotherapy for patients with relapsed or refractory FL, both with and without EZH2 activating mutations, who have received two or more prior systemic therapies in our multi-cohort Phase 2 trial in patients with relapsed or refractory non-Hodgkin's lymphoma, or NHL.

As part of our accelerated approval strategy for FL, we have initiated a single trial to provide confirmatory evidence to support a full approval submission of TAZVERIK for this indication. The trial is a global, randomized, controlled Phase 1b/3 clinical trial comparing TAZVERIK in combination with the FDA-approved chemotherapeutic-free regimen known as R^2 (REVLIMID plus rituximab) compared with R^2 plus placebo in FL patients who have been treated with at least one prior systemic therapy. The safety run-in portion of the trial is underway, and we expect to advance it into the Phase 3 portion in 2020.

Through our planned development efforts, our intention is to make TAZVERIK available in all lines of treatment for patients with FL. We plan to leverage the confirmatory trial to expand TAZVERIK into the second-line treatment setting. In collaboration with The Lymphoma Study Association, or LYSA, and based on clinical activity observed with TAZVERIK in combination with R-CHOP as a front-line treatment for patients with high risk diffuse large B-cell lymphoma, or DLBCL, we plan to investigate this combination as a front-line treatment for high-risk patients with FL. In addition, we are finalizing plans for investigator-sponsored studies to evaluate TAZVERIK in combination with rituximab, venetoclax or BTK inhibitors for the treatment of patients with FL in the third-line or later treatment settings.

Tazemetostat is an oral, first in class, selective small molecule inhibitor of the EZH2 histone methyltransferase, or HMT, that we are developing for the treatment of a broad range of cancer types in multiple treatment settings. Tazemetostat has shown meaningful clinical activity as an investigational monotherapy in multiple cancer indications and has been generally well-tolerated across clinical trials to date. We believe tazemetostat is a "pipeline in a product" opportunity and plan to explore its utility as a monotherapy and in combinations through both company and investigator-sponsored studies in additional indications, including:

- Lymphomas and B-cell malignancies, such as DLBCL, mantle cell lymphoma, or MCL, chronic lymphocytic leukemia, or CLL, chronic myeloid leukaemia, or CML, and others;
- Mutationally defined solid tumors, such as chordoma, melanoma, mesothelioma, and tumors harboring an EZH2 or SWI/SNF alteration;
- Chemotherapy or treatment-resistant tumors, such as triple-negative breast cancer, small cell lung cancer, ovarian cancer, and metastatic castration-resistant prostate cancer; and,
- Immuno-oncology-sensitive tumors, such as colorectal cancer, bladder cancer, soft tissue sarcomas and non-small cell lung cancer.

We own the global development and commercialization rights to tazemetostat outside of Japan. Eisai Co. Ltd, or Eisai, holds the rights to develop and commercialize tazemetostat in Japan.

TAZVERIK is available to eligible patients in the United States via a specialty distribution network. To commercialize TAZVERIK for the epithelioid sarcoma indication in the United States, we have built a focused field presence and marketing capabilities. This includes an efficiently sized field-based organization of 19 individuals. We have initiated our FL launch readiness activities and are expanding our infrastructure to support the launch and marketing of tazemetostat for FL in the United States, if approved. Our sales leadership team is in place, and we have completed our hiring of our sales representatives. For geographies outside the United States, we are evaluating the most efficient path to reach patients, including through potential collaborations.

Tazemetostat is covered by claims of U.S. and European composition of matter patents, which are expected to expire in 2032, exclusive of any patent term or other extensions. Tazemetostat has been granted Fast Track designation by the FDA in patients with relapsed or refractory FL, relapsed or refractory DLBCL with EZH2 activating mutations and metastatic or locally advanced epithelioid sarcoma who have progressed on or following an anthracycline-based treatment regimen. The FDA has also granted orphan drug designation to tazemetostat for the treatment of patients with FL, malignant rhabdoid tumors, or MRT, soft tissue sarcoma, or STS, and mesothelioma. The orphan drug designation for the treatment of MRT applies to INI1-negative MRT as well as SMARCA4-negative malignant rhabdoid tumor of ovary, or MRTO.

Beyond tazemetostat, we are progressing preclinical efforts to pursue additional development candidates for our pipeline and to further support our leadership position in epigenetics.

In November 2018, we entered a strategic collaboration with Boehringer Ingelheim International GmbH, or Boehringer Ingelheim, focused on the research, development and commercialization of novel small molecule inhibitors, discovered by us, directed toward two previously unaddressed epigenetic targets as potential therapies for people with cancer. Specifically, these targets are enzymes within the helicase and histone acetyltransferase, or HAT, families that when dysregulated have been linked to the development of cancers that currently lack therapeutic options. We also have collaborations with Glaxo Group Limited (an affiliate of GlaxoSmithKline), or GSK, focused on the development of PRMT inhibitors discovered by us, and with Celgene Corporation, which was recently acquired by Bristol-Myers Squibb, and Celgene RIVOT Ltd., an affiliate of Celgene Corporation, which we collectively refer to as Celgene, focused on the development of pinometostat and small molecule inhibitors directed to three HMT targets.

Our Corporate Strategy

Our goal is to become a biopharmaceutical company developing and commercializing novel epigenetic therapies for people with cancer and other serious diseases. With the launch of TAZVERIK in the United States, we have transitioned to a fully integrated biopharmaceutical company commercializing our first product.

The key elements of our corporate strategy are to:

- successfully commercialize TAZVERIK in the United States for the treatment of epithelioid sarcoma and to gain FDA approval and to successfully commercialize TAZVERIK for FL patients in the United States;
- advance life-cycle development for tazemetostat to support its potential utility in additional indications and combinations;
- utilize our drug discovery platform to progress preclinical efforts and pursue additional development candidates to expand our pipeline of inhibitors against chromatin modifying proteins, or CMPs; and
- leverage strategic collaborations that can contribute to our ability to rapidly advance and commercialize our product candidates.

TAZVERIK™ (tazemetostat) for Epithelioid Sarcoma

In January 2020, the FDA granted accelerated approval of TAZVERIK (tazemetostat) for the treatment of adults and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection. This approval was based on overall response rate and duration of response shown in an open-label, single-arm cohort of a multi-cohort, global Phase 2 trial of tazemetostat in adults with INI1-negative tumors. The cohort was conducted in 62 patients with histologically confirmed, metastatic or locally advanced epithelioid sarcoma. Patients were required to have INI1 loss, detected using local tests, and an Eastern Cooperative Oncology Group performance status, or ECOG PS, of 0-2. Patients in the cohort received TAZVERIK 800 mg orally twice daily until disease progression or unacceptable toxicity. Tumor response assessments were performed every eight weeks. The major efficacy outcome measures were confirmed overall response rate, or ORR, according to Response Evaluation Criteria in Solid Tumors, or RECIST, v1.1, as assessed by blinded independent central review and duration of response. Median duration of follow-up was 14 months (range 0.4 to 31).

Among the 62 patients who received TAZVERIK, the median age was 34 years (range 16 to 79); 63% were male, 76% were White, 11% were Asian, 44% had proximal disease, 92% had an Eastern Cooperative Oncology Group performance status (ECOG PS) of 0 or 1, and 8% had an ECOG PS of 2. Prior surgery occurred in 77% of patients; 61% received prior systemic chemotherapy.

In the total 62 patients treated, the overall response rate (95% confidence interval) was 15% (7%, 26%), with 1.6% of patients achieving a complete response and 13% achieving a partial response. Among responders in the trial, 67% had a duration of response of six months or longer as of the data cutoff date of September 17, 2018.

Serious adverse reactions occurred in 37% of patients receiving TAZVERIK. The serious adverse reactions in ≥3% of patients who received TAZVERIK were hemorrhage, pleural effusion, skin infection, dyspnea, pain, and respiratory distress.

One patient (2%) permanently discontinued TAZVERIK due to an adverse reaction of altered mood.

Dosage interruptions due to an adverse reaction occurred in 34% of patients who received TAZVERIK. The most frequent adverse reactions requiring dosage interruptions in ≥3% of patients were hemorrhage, increased alanine aminotransferase (ALT), and increased aspartate aminotransferase (AST). Dose reduction due to an adverse reaction occurred in one (2%) patient who received TAZVERIK due to decreased appetite.

The most common adverse reactions (≥20%, any grade) were pain, fatigue, nausea, decreased appetite, vomiting, and constipation.

The label for TAZVERIK includes warning and precautions for the increase in risk of developing secondary malignancies following treatment with TAZVERIK and the risk of embryo fetal toxicity when administered to pregnant women.

TAZVERIK for Epithelioid Sarcoma Post-Marketing Requirements

As part of the accelerated approval for epithelioid sarcoma, continued approval for this indication is contingent upon verification and description of clinical benefit in a confirmatory trial. To provide this confirmatory evidence to support a full approval of tazemetostat for this indication, we are conducting a global 1:1 randomized, controlled Phase 1b/3 clinical trial in the front-line treatment setting comparing TAZVERIK in combination with doxorubicin, a commonly used systemic treatment in this setting, versus placebo plus doxorubicin in approximately 150 ES patients. The primary efficacy endpoint is progression-free survival, and secondary efficacy endpoints include overall survival, disease control rate, overall response rate, duration of response and health-related quality of life. The safety run-in portion of the trial is underway, and we expect to advance into the Phase 3 portion in 2020.

We have several additional post-marketing activities underway, intended to address aspects of the label in the future. These include clinical pharmacology evaluations to assess the effect of TAZVERIK on liver function and the effect of CYP3A inhibitors and inducers on TAZVERIK. We have also expanded enrollment in a cohort of our Phase 2 study in adults with INI1-negative tumors, to enroll a total of at least 60 epithelioid sarcoma patients. The cohort is a paired biopsy cohort designed to assess potential immune biomarkers, and the expansion is intended to provide more patient experience in our label.

Disease Background: Epithelioid sarcoma is an ultra-rare and aggressive type of soft tissue sarcoma, comprising less than 1 percent of all soft tissue sarcoma cases, and is characterized by a loss of the INI1 protein. It is most commonly diagnosed in young adults (20-40 years old) and is often fatal. There is no established standard-of-care for treating these patients, who are typically resistant to chemotherapy. Patients diagnosed with metastatic disease have a 5-year overall survival rate of 0 percent and there are no currently approved treatment options specifically indicated for epithelioid sarcoma. Typically, once patients have been deemed appropriate for systemic therapy, most are treated with chemotherapy. There are an estimated 800 patients in the United States living with epithelioid sarcoma with approximately 300 patients with metastatic or locally advanced disease that are eligible for systemic therapy.

TAZVERIK for Follicular Lymphoma

In December 2019, we submitted an NDA, for accelerated approval of TAZVERIK for patients with relapsed or refractory FL, who have received at least two prior lines of systemic therapy. In February 2020, the NDA was accepted for filing by the FDA. The FDA granted priority review and has designated the application as an sNDA with a PDUFA target action date of June 18, 2020. Priority review is granted to investigational therapies that, if approved, may offer significant improvements in the treatment, prevention or diagnosis of a serious condition.

The sNDA submission is based primarily on efficacy and safety data from two FL cohorts of our Phase 2 trial in NHL evaluating tazemetostat as a monotherapy for patients with relapsed or refractory FL, who have received two or more prior systemic therapies. One cohort enrolled 45 patients with EZH2 activating mutations and a second enrolled 54 patients with wild-type EZH2. All patients were treated with 800 mg of tazemetostat, administered orally twice a day. The primary endpoint of the trial in these cohorts is ORR, as assessed by the investigator, and defined as a complete response or partial response according to 2007 Cheson criteria. Secondary endpoints include duration of response, progression free survival, overall survival and safety. Data were also assessed by an independent review committee, or IRC, for inclusion in the NDA submission.

At the 2019 American Society of Hematology, or ASH, Annual Meeting in December 2019, we reported mature data from the FL cohorts. The data showed that treatment with tazemetostat demonstrated meaningful clinical activity and was generally well tolerated in both FL patient populations. As assessed by the IRC, as of an August 9, 2019 data cutoff date, tazemetostat treatment resulted in:

- Objective response rate, or ORR, of 69% for patients with an EZH2 mutation and 35% for patients with wild-type EZH2;
- Median duration of response of 10.9 months for patients with an EZH2 mutation and 13 months for patients with wild-type EZH2;

- Median progression-free survival of 13.8 months for patients with an EZH2 mutation and 11.1 months for patients with wild-type EZH2; and
- Overall survival has not yet been reached for either FL patient population.

Tazemetostat was generally well-tolerated in patients treated in the Phase 2 study cohorts. The most frequently reported treatment-related treatment-emergent adverse events, or TEAEs, of Grade 3 or higher included thrombocytopenia (3%), anemia (2%), asthenia (1%) and fatigue (1%). TEAEs led to 8% of patients discontinuing tazemetostat treatment and 9% of patients requiring a dose reduction. There were no treatment-related deaths while on study.

Confirmatory trial: We are conducting a Phase 1b/3 clinical trial to support full approval of TAZVERIK for the FL indication. The trial is a double-blind, global, randomized trial comparing TAZVERIK plus R2 (Revlimid in combination with a rituximab product) with placebo plus R2 in approximately 500 FL patients who have received one or more prior systemic therapies. The trial includes a maintenance therapy stage, and has an adaptive design with pre-specific interim assessments to enable adjustments to the trial based on TAZVERIK activity. The primary efficacy endpoint of the trial is progression-free survival, and secondary efficacy endpoints include overall survival, disease control rate, objective response rate, duration of response and health-related quality of life. The safety run-in portion of the trial is underway, and we expect to advance the trial into the Phase 3 portion in 2020.

FL Development Expansion: Through our planned development efforts, our intention is to make TAZVERIK available in all lines of treatment for patients with FL. We plan to leverage the confirmatory trial to expand TAZVERIK into the second-line treatment setting. In collaboration with The Lymphoma Study Association, or LYSA, a premier cooperative group in France dedicated to clinical and translational research for lymphoma, and based on clinical activity observed with TAZVERIK in an ongoing combination study with R-CHOP as a front-line treatment for patients with high risk diffuse large B-cell lymphoma, or DLBCL, we plan to expand this trial to also assess the combination as a front-line treatment for high-risk patients with FL. In addition, we are finalizing plans for investigator-sponsored studies to evaluate TAZVERIK in combination with rituximab, venetoclax or BTK inhibitors for the treatment of patients with FL in the third-line or later treatment settings.

Background on FL: Follicular lymphoma is the most common indolent lymphoma and the second most common non-Hodgkin lymphoma – accounting for about 10-20% of all lymphomas in Western countries. FL is considered to be incurable with existing treatments and is characterized by cycles of relapse that become increasingly difficult to treat with each disease progression. We estimate that approximately 14,000 patients are diagnosed with follicular lymphoma in the United States annually, of whom the majority have advanced disease at diagnosis. We estimate that there are approximately 10,000 to 12,000 patients with relapsed and/or refractory disease in the United States. Based on literature and an extensive natural history study that we conducted, we believe that approximately 20% of FL tumors carry an EZH2 activating mutation. Common treatments for FL include multi-agent chemotherapy, usually combined with rituximab (RITUXAN®), including R-CHOP and R-Bendamustine. Upon clinical progression, salvage treatment regimens are typically other combinations of rituximab, and other chemotherapy regimens, utilization of off-label agents, clinical trials or one of the three approved PI3k inhibitors: duvelisib, idealisib or copanlisib.

Tazemetostat Life-Cycle Development

Tazemetostat has shown meaningful clinical activity as an investigational monotherapy in multiple cancer indications and has been generally well-tolerated across clinical trials to date. We believe tazemetostat is a “pipeline in a product” opportunity and plan to explore its utility in additional indications and combinations through company and investigator sponsored studies. There are four areas where we see the greatest potential for tazemetostat, all of which are based on strong scientific hypothesis and for diseases that need a new effective and safe treatment option.

Lymphomas and B-Cell Malignancies

The first of these tumor types is hematological malignancies, particularly in lymphomas and B-cell malignancies, including DLBCL, chronic lymphocytic leukemia, or CLL, and chronic myeloid leukemia, or CML, because of the role EZH2 plays in B-cell biology. When oncogenic mutations occur, they can "lock" B-cells in the germinal center state, leading to a variety of hematologic cancers. Regardless of the oncogenic mutation, these cancer cells are governed by EZH2 expression, which enables their growth and proliferation. By inhibiting EZH2, we believe we can inhibit tumor proliferation, leading to anti-tumor activity, as seen in FL patients with wild-type EZH2.

DLBCL Combination with R-CHOP. We are studying tazemetostat in combination with R-CHOP, in collaboration with LYSA. This multi-center Phase 1b/2 trial in front-line, elderly high-risk patients with DLBCL is enrolling up to 133 patients. Primary endpoints in the trial include complete response rate, safety and tolerability of the combination. Secondary endpoints include ORR and progression-free survival, or PFS. The trial was initiated in the fourth quarter of 2016. At ASH 2018, LYSA reported interim data from 17 patients in the trial as of March 2018 showing that the combination of the two agents had been generally well-tolerated and confirming the recommended tazemetostat dose for the combination to be 800 mg twice-daily. Clinical activity was observed, with 87 percent of patients experiencing a metabolic complete response.

Mutationally Defined Solid Tumors

We are exploring multiple different mutationally defined solid tumors, such as chordoma, melanoma and tumors with a SWI/SNF alteration or other mutations. In these tumors, a loss of certain proteins or the presence of a certain mutation can result in abnormal EZH2 activity or exaggerated dependence on EZH2, which leads to cancer cell growth. By inhibiting EZH2 with tazemetostat, we believe we can inhibit that abnormal function, thereby in directly restoring cells to their natural state, which could result in a therapeutic benefit.

Adults with INI1-Negative Tumors: We are assessing tazemetostat for the treatment of adults with chordoma in a cohort of our ongoing global Phase 2 trial in adults with INI1-negative tumors. Patients in the cohort are dosed at 800 mg twice daily with tablets taken orally. The primary endpoint for the trial is overall response rate. The cohort is open for enrollment.

Pediatrics with INI1-Negative Tumors: We are conducting a global Phase 1 clinical trial of tazemetostat in approximately 110 children with INI1-negative solid tumors. In the trial, we used an oral suspension formula of tazemetostat. The primary endpoint of the trial is safety, with the objective of establishing the recommended Phase 2 dose in pediatric patients. Secondary endpoints include pharmacokinetics, objective response rate, duration of response, PFS and overall survival. We have completed the dose-escalation portion of the trial and have advanced to the dose-expansion stage of this trial.

Chemotherapeutic/Treatment-Resistant Tumors

We are assessing the use of tazemetostat for solid tumors that are resistant to chemotherapy or other treatments, such as triple negative breast, small cell lung and ovarian cancers, castration-resistant prostate cancer, and mesothelioma. When chemotherapy is given, DNA becomes damaged, resulting in abnormal or overactive EZH2 activity. This prevents transcription of certain genetic markers, which leads to cancer cell growth. By adding an EZH2 inhibitor, like tazemetostat, we believe we can turn that disease-targeting genetic marker back on, resulting in a re-sensitization of the tumor to chemotherapy or other treatments. In addition, EZH2 plays a role in the resistance to poly adenosine diphosphate ribose polymerase, or PARP, inhibitors. When PARP inhibitors are given, DNA is damaged, which leads to increased EZH2 activity and limits the responsiveness to the PARP inhibitor. By blocking EZH2 with tazemetostat, we believe we can also re-sensitize tumors to PARP inhibition treatment.

Castration-Resistant Prostate Cancer: Prostate cancer is the most frequently diagnosed and second most frequent cause of cancer deaths among men in the United States. We believe, based on published literature, that EZH2 protein expression has been correlated with progression of castration-resistant prostate cancer, or CRPC; moderate to high EZH2 expression has been associated with worse survival; and, treatment with an EZH2 inhibitor after

resistance to the standards-of-care may result in recovery of sensitivity to these agents. We have begun a global, multi-center, randomized Phase 1b/2 trial evaluating tazemetostat in combination with enzalutamide or abiraterone, the standard of care treatments for this disease, plus prednisone in chemo-naïve patients with metastatic castration resistant prostate cancer. We are actively enrolling patients into the Phase 1b portion, and expect the Phase 2 portion to begin later this year.

Platinum-Resistant Solid Tumors: We are planning to investigate the therapeutic potential of tazemetostat as a combination therapy with a PARP inhibitor for the treatment of platinum-resistant tumors, such as small-cell lung cancer, triple-negative breast cancer and ovarian cancer. In platinum-resistant cancers, PARP inhibitors have shown modest monotherapy activity, and we believe tazemetostat may have the potential to enhance the clinical response to PARP inhibitors. We are currently completing preclinical development to determine the design of a clinical study, which includes selecting the PARP inhibitor to administer in combination with tazemetostat. We plan to begin this trial in 2020.

Immuno-oncology-sensitive Tumors

We believe tazemetostat may enhance the antitumor immune response by interfering with multiple EZH2 functions in the cell. EZH2 inhibition results in tumor-intrinsic and tumor-extrinsic effects that reshape the tumor microenvironment to favor antitumor immunity, including increasing antigen presentation, increasing effector T cell trafficking, modulating the adaptive anti-tumor response, impairing regulatory T cells, inducing the expression of tumor antigens and endogenous retroviruses, and increasing NK cell maturation and killing. By inhibiting EZH2, we believe we can influence biologic activity in the tumor microenvironment, which could enable tumors to be more sensitive or re-sensitized to immune-oncology therapies.

CRADA with NCI

In October 2016, we announced a Cooperative Research and Development Agreement, or CRADA, with the National Cancer Institute, or NCI, to evaluate tazemetostat in clinical trials in a variety of hematologic malignancies and solid tumors. Under this CRADA, we are evaluating tazemetostat in a Phase 2 clinical trial in adult patients with ovarian cancer and in a Phase 2 trial in pediatric patients with solid tumors and lymphoma. As part of the CRADA, we may undertake additional clinical trials. NCI will predominantly fund the studies and manage trial operations.

The NCI's Pediatric MATCH trial includes a Phase 2 evaluation of tazemetostat as one of its treatment cohorts. Conducted under our CRADA executed with NCI in 2016, this multi-institutional trial is evaluating tazemetostat as a monotherapy for pediatric patients with advanced solid tumors, including CNS tumors, NHL or histiocytic disorders that harbor EZH2 activating mutations, or loss of function mutations in the SWI/SNF complex subunits SMARCB1 or SMARCA4. The Pediatric MATCH trial, conducted by the Children's Oncology Group, aims to match targeted agents, such as tazemetostat, with specific molecular changes identified through genomic sequencing of refractory or recurrent tumors from children and adolescents with cancer is now enrolling patients.

Research Pipeline

We have a pipeline of drug discovery programs that target other prioritized chromatin modifying proteins, or CMPs. These programs are directed against both hematological malignancies and solid tumors and include biomarker approaches to patient stratification.

We are evaluating potential development candidates in our G9a program.

In November 2018, we entered into a global collaboration with Boehringer Ingelheim focused on the research, development and commercialization of novel small molecules, directed toward two previously undisclosed epigenetic targets as potential therapies for people with cancer. Specifically, these targets are enzymes within the

helicase and histone acetyltransferase, or HAT, families that when dysregulated have been linked to the development of cancers that currently lack therapeutic options.

Under our collaboration with GSK, GSK is developing two small molecule inhibitors against novel HMT targets, that were discovered by us using our proprietary drug discovery platform. In September 2016, GSK advanced the first of these programs into clinical testing. This drug candidate, GSK3326595, a PRMT5 inhibitor, is currently being tested in a Phase 2 clinical trial in patients with solid tumors and NHL. In 2018, GSK initiated patient dosing in a Phase 1 clinical trial of GSK3368715, a PRMT1 inhibitor.

Under our collaboration with Celgene, we are developing small molecule inhibitors directed to three HMT targets, in addition to pinometostat. Under the collaboration, we are responsible for all preclinical discovery work as well as Phase 1 clinical development for all three targets. Celgene has the option to acquire worldwide rights to inhibitors directed at two of the three targets, and the option to acquire ex-U.S. rights to inhibitors directed to the third target. We retain rights to develop and commercialize inhibitors directed at the third target in the United States.

Pinometostat for DOT1L Cancers

DOT1L is an HMT that can become oncogenic and cause certain subtypes of acute leukemia, such as MLL-r. We discovered pinometostat using our proprietary drug discovery product platform.

Through external collaborators, the ability to enhance pinometostat's efficacy in leukemia through combinations with other anti-cancer agents is being explored in preclinical studies. We retain all U.S. rights to pinometostat and have granted Celgene an exclusive license to pinometostat outside of the United States. Pinometostat has been granted orphan drug designation by the FDA and the European Commission for the treatment of acute myeloid leukemia, or AML, and acute lymphoblastic leukemia, or ALL.

Under the CRADA that we entered with the NCI in October 2016 for pinometostat, the NCI has agreed to evaluate the safety and efficacy of pinometostat in patients with acute leukemias. Initial studies will evaluate the combination of pinometostat with standard-of-care therapies or targeted agents in acute leukemia. As part of the agreement, additional clinical trials will be considered. NCI will predominantly fund the studies and manage trial operations.

Our Epigenetic Approach

Epigenetics refers to a broad regulatory system that controls gene expression without altering the sequence of the genes themselves. Genes are composed of DNA, and in nature, this DNA is wrapped around a core of proteins known as histones. Together, the DNA and histone proteins form a complex known as chromatin that is the basic structural component of chromosomes.

Gene regulation is determined by chromatin structure. The dynamics of chromatin structure are regulated through multiple mechanisms by chromatin modifying proteins, or CMPs. Some CMPs place chemical groups onto specific sites on histones or DNA, some remove these marks in site-specific ways, others recognize the uniquely marked sites on histones and bind to these marked sites, and still other CMPs drive topological changes to histone-DNA interactions within chromatin. Where, when and how such chromatin structure changes occur, determines which genes in a cell are turned "on" or "off" at any particular time. When the function of these CMPs is altered, the program of gene expression is changed in ways that can lead to disease.

We are discovering and developing inhibitors of CMPs as novel therapeutics for patients with cancer and other diseases. Our focus is on the discovery, development and commercialization of small molecule inhibitors of CMPs for applications in diseases that are uniquely dependent on the enzyme activity of a specific CMP. Among the CMP target classes, we have had a particular emphasis on the HMTs, which have been shown to play pathogenic roles in a number of human diseases. Today, we have programs in HMTs as well as the newer target classes, histone acetyltransferases, or HATs, and helicases, which are the subject of our 2018 collaboration with Boehringer Ingelheim. Beyond cancer, however, HMTs and other CMPs have been implicated as pathogenic drivers of a number of diseases with significant unmet medical need. Targeting pathogenic CMPs affords us multiple opportunities to create, develop and commercialize novel therapeutics.

Our Collaborations

We have entered into several key strategic collaborations. These therapeutic collaborations have provided us with $242.1 million in non-equity funding through December 31, 2019. Our Celgene, GSK, and Boehringer Ingelheim collaborations provide us with the potential for significant research, development, regulatory and sales-based milestone payments as well as royalties or profit sharing on net product sales. Our Boehringer Ingelheim collaboration provides for research funding and our Celgene and Boehringer Ingelheim collaborations also provide for potential development co-funding. In addition, we have entered into a collaboration to develop a companion or complementary diagnostic with Roche Molecular Systems, Inc., or Roche Molecular. Key terms of these collaborations are summarized below.

GSK

Overview. In January 2011, we entered into a collaboration and license agreement with GSK to discover, develop and commercialize novel small molecule HMT inhibitors directed to available targets from our product platform. Under the terms of the agreement, we granted GSK exclusive worldwide license rights to HMT inhibitors directed to three targets. Additionally, as part of the research collaboration, we agreed to provide research and development services related to the licensed targets pursuant to agreed-upon research plans during a research term that ended January 8, 2015. In March 2014, we and GSK amended certain terms of this agreement for the third licensed target, revising the license terms with respect to candidate compounds and amending the corresponding financial terms, including reallocating milestone payments and increasing royalty rates as to the third target. Subsequent to a GSK strategic portfolio prioritization, we received notice in October 2017 that GSK terminated the agreement with respect to the third target, effective December 31, 2017, which returned all rights to that target to us. The two other targets, PRMT5 and PRMT1, continue to be subject to the agreement and were not impacted by the termination with respect to the third target. We substantially completed all research obligations under this agreement by the end of the first quarter of 2015 and completed the transfer of the remaining data and material for these programs to GSK in the second quarter of 2015. GSK is responsible for all future development and commercialization.

Under the agreement, we have received and recognized collaboration revenue totaling $89.0 million, consisting of upfront payments, fixed research funding, research and development services and preclinical and research milestone payments. As of December 31, 2019, for the two remaining targets, we are eligible to earn up to $50.0 million in clinical development milestone payments, up to $197.0 million in regulatory milestone payments and up to $128.0 million in sales-based milestone payments. As a result of the termination of the agreement as it relates to the third target, we will receive no additional payments related to that target. In addition, GSK is required to pay us royalties, at percentages from the mid-single digits to the low double-digits, on a licensed product-by-licensed product basis, on worldwide net product sales, subject to reduction in specified circumstances. Due to the uncertainty of pharmaceutical development and the high historical failure rates generally associated with drug development, the Company may not receive any additional milestone payments or royalty payments from GSK.

Exclusivity Provisions. Subject to exceptions specified in the agreement, during the term of the agreement, we may not research, develop or commercialize HMT inhibitors directed to the two targets selected by GSK, other than pursuant to the agreement.

Term and Termination. The agreement will expire in its entirety upon the expiration of all applicable royalty terms for all licensed products in all countries. The royalty term for each licensed product in each country is the period commencing with first commercial sale of the applicable licensed product in the applicable country and ending on the later of expiration of specified patent coverage or ten years following the first commercial sale. GSK has the right to terminate the agreement at any time with respect to one or more selected targets or in its entirety, upon 90 days' prior written notice to us. The agreement may also be terminated with respect to one or more selected targets or in its entirety by either GSK or us in the event of a material breach by the other party. The agreement may be terminated with respect to selected targets by us in the event GSK participates or actively assists in a legal challenge to one of the patents exclusively licensed to GSK under the agreement with respect to the applicable selected target.

Boehringer Ingelheim

Overview. In November 2018, we entered into a collaboration and license agreement with Boehringer Ingelheim to discover, research, develop and commercialize small molecule compounds that are inhibitors of an undisclosed histone acetyl transferase, or HAT, target and an undisclosed helicase target, along with associated predictive biomarkers.

During a defined research period, we will perform research activities aimed at achieving certain criteria with respect to a HAT inhibiting compound and a helicase inhibiting compound. The research period expired on December 31, 2019, as Boehringer Ingelheim did not elect to extend the research period through December 31, 2020.

Following satisfaction of certain criteria with respect to a HAT inhibiting compound, Boehringer Ingelheim shall be solely responsible for the development and commercialization of such compound and products containing such compound throughout the world. Boehringer Ingelheim shall bear the costs of such development and commercialization.

Following satisfaction of certain criteria with respect to the helicase inhibiting compound, Boehringer Ingelheim shall be responsible for the development and commercialization of such compound and products containing such compound in all countries throughout the world other than the United States, whereas we and Boehringer Ingelheim will work together through a joint steering committee to develop and commercialize the helicase inhibiting compound in the United States. With respect to commercializing the helicase inhibiting compound in the United States, we and Boehringer Ingelheim will equally share (50:50) such commercialization costs and activities.

Upon execution of the collaboration agreement, Boehringer Ingelheim agreed to pay us a $15.0 million upfront payment. Boehringer Ingelheim also agreed to pay us research funding of $5.0 million; up to $280.5 million in development, regulatory, and sales milestone payments; and tiered royalties in the mid-single digits to low-double digits on sales of the HAT inhibiting compound throughout the world and on sales of the helicase inhibiting compound in all countries other than the United States. We will equally share profits and losses with Boehringer Ingelheim with respect to the helicase inhibiting compound in the United States.

Governance. We will work together with Boehringer Ingelheim through a joint steering committee to provide oversight over the development and commercialization of the helicase inhibiting compound in the United States.

Exclusivity Provisions. Subject to exceptions specified in the agreement, neither we nor Boehringer Ingelheim may research, develop, manufacture or commercialize any product directed against the HAT or helicase targets that are the subject of the agreement, until a compound directed against the target that is developed under the agreement reaches a specified stage of development, other than pursuant to the agreement.

Opt out. We may opt-out of its participation in the development and commercialization of the joint product upon written notice to Boehringer Ingelheim, except under certain circumstances.

In the event that we elect to opt-out of the development and commercialization of the helicase product or subject to a limited exception, detailed below, Boehringer Ingelheim elects to assume our development and commercialization rights with respect to the helicase product in the United States following a change in control of our company, Boehringer Ingelheim will pay us tiered royalties in the mid-single digits to mid-teens, depending on the stage of development of the helicase product at the time of such election, on sales of the joint product in the United States.

Following a change in control of our company, so long as the helicase product has not reached a certain stage of development, Boehringer Ingelheim may, upon written notice to us, elect to assume our development and commercialization rights, responsibilities and obligations with respect to the helicase product in the United States and we will be deemed to have given Boehringer Ingelheim an opt-out notice. However, if Boehringer Ingelheim elects to assume our development and commercialization rights with respect to the joint product in the United States following a change in control of Epizyme that occurs after a certain stage of development with respect to the helicase product, then the sharing of costs and profits may continue.

Term and Termination. Generally, the collaboration agreement remains in effect, on a product-by-product basis, until the last to expire royalty term for a product, but the collaboration agreement shall remain in effect with respect to the joint product in the United States until both parties mutually agree to cease commercialization of the joint product in the United States. Either party may terminate the collaboration agreement for cause following notice and a failure to cure by the defaulting party, if the other party initiates a patent challenge against the other party's patents or if the other party becomes insolvent, and Boehringer Ingelheim may terminate the collaboration agreement without cause, subject to appropriate notice periods.

Eisai

Overview. In March 2015, we entered into an amended and restated collaboration and license agreement with Eisai, under which we reacquired worldwide rights, excluding Japan, to our EZH2 program, including tazemetostat. Under the amended and restated collaboration and license agreement, we will be responsible for global development, manufacturing and commercialization outside of Japan of tazemetostat and any other EZH2 product candidates, with Eisai retaining development and commercialization rights in Japan, as well as a right to elect to manufacture tazemetostat and any other EZH2 product candidates in Japan, including the right of first negotiation for the rest of Asia. Eisai waived its right of first negotiation for the rest of Asia in 2018. Under the original collaboration and license agreement, we had granted Eisai an exclusive worldwide license to our small molecule HMT inhibitors directed to EZH2, including tazemetostat, while retaining an opt-in right to co-develop, co-commercialize and share profits with Eisai as to licensed products in the United States.

Upon the execution of the amended and restated collaboration agreement in March 2015, we agreed to pay Eisai a $40.0 million upfront payment. We also agreed to pay Eisai up to $20.0 million in clinical development milestone payments, including a $10.0 million milestone payment upon the earlier of initiation of a first phase 3 clinical trial of any EZH2 product or the first submission of an NDA or Market Authorization Application, or MAA, and a $10.0 million milestone upon the earlier of initiation of a first phase 3 clinical trial of any EZH2 product or the first submission of an NDA or MAA for a second indication, and up to $50.0 million in regulatory milestone payments, including a $25.0 million milestone payment upon regulatory approval of the first NDA or MAA, and a $25.0 million milestone payment upon regulatory approval of the NDA or MAA for the second indication. We are obligated to pay royalties at a percentage in the mid-teens on worldwide net sales of any EZH2 product, excluding net sales in Japan. In 2019, Eisai sold its rights to these royalties to RPI Finance Trust, which has agreed to certain reductions in these royalties in the event certain net sales thresholds are achieved. We are eligible to receive from Eisai royalties at a percentage in the mid-teens on net sales of any EZH2 product in Japan. In November 2019, we sold our rights to these royalties to RPI Finance Trust. In 2019 we triggered the payment of the two $10.0 million milestone payments upon the submission of the NDAs for accelerated approval of tazemetostat for epithelioid sarcoma and follicular lymphoma and, in January 2020, we triggered the payment of the $25.0 million milestone payment upon regulatory approval of tazemetostat for epithelioid sarcoma.

Under the original agreement, Eisai was solely responsible for funding all research, development and commercialization costs for licensed compounds. Under the amended agreement, we are solely responsible for funding global development, manufacturing and commercialization costs for EZH2 compounds outside of Japan, and Eisai is solely responsible for funding Japan-specific development and commercialization costs for EZH2 compounds. In connection with the amendment and restatement of our collaboration and license agreement with Eisai, we and Eisai agreed to the transition to us of ongoing development and manufacturing activities that were being conducted by or on behalf of Eisai. In January 2017, as part of Eisai's obligations under the amended and restated collaboration agreement, Eisai enrolled and dosed the first patient in a Phase 1 study of tazemetostat in patients with relapsed or refractory B-cell NHL in Japan.

In the event that we are awarded a priority review voucher from the FDA with respect to an EZH2 product, Eisai is entitled to specified compensation if we use the voucher on a non-EZH2 program or sell the voucher to a third party.

Governance. Under the amended and restated collaboration and license agreement, development will be guided by a joint steering committee, with Epizyme retaining final decision-making authority with respect to global development.

Exclusivity Restrictions. Subject to exceptions specified in the agreement, for an exclusivity period extending until eight years after the first commercial sale of a product covered by the agreement, neither we nor Eisai may research, develop or commercialize HMT inhibitors directed to EZH2, other than pursuant to the agreement.

Term and Termination. Our agreement with Eisai will remain in effect until the expiration of all payment obligations under the agreement with respect to all licensed products. The royalty term for each licensed product in each country commences on the first commercial sale of the applicable licensed product in the applicable country and ends on the latest of expiration of specified patent coverage, expiration of specified regulatory exclusivity or ten years following the first commercial sale. We or Eisai may terminate the agreement for convenience as to our respective territories, upon 90 days' prior written notice. The agreement will also terminate as to our territory if we cease all development and commercialization activities for the United States and specified major countries in Europe and as to Eisai's territory if Eisai ceases all development and commercialization activities for Japan. The agreement may also be terminated by either party in the event of an uncured material breach by the other party or by us in the event Eisai, or an affiliate or sublicensee, participates or actively assists in an action or proceeding challenging or denying the validity of one of our patents. If we terminate the agreement for our convenience, the agreement terminates as a result of our cessation of development and commercialization activities or Eisai terminates the agreement for our uncured material breach, Eisai may elect to have worldwide development and commercialization rights revert to Eisai, and if Eisai so elects, Eisai will be required to pay us specified royalties on net sales of the licensed products and reimburse certain development expenses incurred by us. If Eisai terminates the agreement for its convenience, the agreement terminates as a result of Eisai's cessation of development and commercialization activities or we terminate the agreement for Eisai's uncured material breach or Eisai's, or its affiliate's or sublicensee's, participation in, or assistance with, an action or proceeding challenging or denying the validity of one of our patents, Japanese development and commercialization rights to the licensed products revert to us, and we will be required to pay Eisai specified royalties on net sales of licensed products in Japan.

Celgene (a subsidiary of Bristol-Myers Squibb)

In July 2015, we entered into an amendment and restatement of our collaboration and license agreement dated April 2012 with Celgene. Under the amended and restated collaboration and license agreement:

- Celgene has an exclusive license, for all countries other than the United States, to small molecule HMT inhibitors targeting the DOT1L HMT, including pinometostat,
- Celgene has an option, on a target by target basis, to exclusively license small molecule HMT inhibitors targeting three predefined targets, which we refer to as the Option Targets,
- The exclusive licenses to HMT inhibitors targeting two of the Option Targets that Celgene may acquire, are worldwide, with the exclusive license to HMT inhibitors targeting the third Option Target being granted for all countries other than the United States,
- Celgene's option is exercisable at the time of our investigational new drug application, or IND, filing for an HMT inhibitor targeting the applicable Option Target, upon the payment by Celgene at such time of a pre-specified development milestone-based license payment,
- Celgene's license may be maintained beyond the end of Phase 1 clinical development for each of the Option Targets, upon payment by Celgene at such time of a pre-specified development milestone-based license payment, and
- Our research and development obligations with respect to each Option Target under the amended agreement continue for at least an additional three years, subject to Celgene exercising its option with respect to such Option Target at IND filing. Subject to our opt-out rights, our research and development obligations include the completion of a Phase 1 clinical trial as to each Option Target following Celgene's exercise of its option at IND filing.

Through December 31, 2019, we have recognized $99.2 million in total collaboration revenue. To date, we have received $75.0 million in upfront payments (including $10.0 million as part of the amended and restated agreement) and $25.0 million from the sale of our series C preferred stock to an affiliate of Celgene, of which $3.0 million was considered a premium and included as collaboration arrangement consideration for total upfront payments of $78.0 million. In addition, we have received a $25.0 million clinical development milestone payment in 2014 and $7.0 million in global development co-funding through December 31, 2019. We are eligible to earn an aggregate of up to $75.0 million in development milestones and license payments, up to $365.0 million in regulatory milestone payments and up to $170.0 million in sales milestone payments related to the three Option Targets. We are eligible to earn $35.0 million in an additional clinical development milestone payment and up to $100.0 million in regulatory milestone payments related to DOT1L.

We are also eligible to receive royalties as follows:

- As to DOT1L, we retain all product rights in the United States and are eligible to receive royalties at defined percentages ranging from the mid-single digits to the mid-teens on annual net product sales outside of the United States, subject to reductions in specified circumstances;
- As to the Option Target for which Celgene's option rights do not include the United States, if Celgene exercises its option as to such Option Target, we will retain all product rights in the United States and will be eligible to receive royalties, once an initial threshold of net product sales (for which we will not receive royalties) is exceeded, at defined percentages ranging from the mid-single digits to the low-double digits on net product sales outside of the United States, subject to reductions in specified circumstances; and
- As to the other two Option Targets, if Celgene exercises its option as to those Option Targets, we will be eligible to receive royalties, once an initial threshold of net product sales (for which we will not receive royalties) is exceeded, for each such Option Target at defined percentages ranging from the mid-single digits to the low-double digits on net product sales on a worldwide basis, subject to reductions in specified circumstances.

For DOT1L and, after Celgene's payment of the specified IND filing license payment for each Option Target, for each such Option Target, we are responsible for the conduct and funding of Phase 1 clinical trials, subject to our right to opt-out of such responsibilities as described below. Celgene may obtain a license to small molecule HMT inhibitors targeting each Option Target at the time of our IND filing for an HMT inhibitor for such target by exercising its option and paying us a specified license payment. Celgene may maintain its license with respect to an Option Target at the conclusion of the Phase 1 clinical trial of the Option Target by paying us a specified additional license payment. If Celgene does not elect to obtain a license during the option exercise period applicable to an Option Target, or to pay the specified IND license payment or end of Phase 1 license payment, we will retain worldwide rights to HMT inhibitors directed to the Option Target, other than HMT inhibitors that may be provided by Celgene if we were to agree to their introduction into the collaboration.

Research Obligations. We are primarily responsible for the research strategy under the collaboration. During each applicable option period we are required to use commercially reasonable efforts to carry out an agreed research plan for each Option Target, subject to our Opt-Out right described below. For the DOT1L target and each of the Option Targets, we are required to conduct and solely fund development costs of the Phase 1 clinical trials for HMT inhibitors directed to such targets, including for pinometostat. After completion of Phase 1 development, as to DOT1L and the Option Target for which we retain U.S. rights, we and Celgene will equally co-fund global development and each party will solely fund territory-specific development costs for its territory; and, as to the other two Option Targets, after completion of Phase 1 development, Celgene will solely fund all development costs on a worldwide basis.

Opt-Out Right. On an Option Target-by-Option Target basis, we have the right, in our sole discretion, to opt-out of further participation in any research and/or development activities after completion of the initial research plan and prior to the filing of an IND for an HMT inhibitor directed to the applicable Option Target, or the Pre-IND Opt-Out. Following exercise of a Pre-IND Opt-Out, if Celgene exercises its option as to the Option Target, Celgene will no longer be required, to the extent not already paid, to make the specified IND license payment or end of Phase 1 license payment to us, specified sales milestone payments will no longer be payable and all royalties on net product sales of applicable licensed products that become payable to us will be reduced by a specified percentage. Additionally, if Celgene exercises its option as to such Option Target, we are obligated to grant Celgene an exclusive worldwide license to HMT inhibitors directed to the applicable Option Target, even if we would otherwise retain U.S. rights to HMT inhibitors directed to the applicable Option Target. Additionally, on a licensed program-by-licensed program basis, we have the right, in our sole discretion, to opt-out of further participation in and co-funding of development, other than specified costs necessary to complete development activities in process at the time we exercise our opt-out right. We can exercise our licensed program opt-out right at specified times: (a) when the clinical trial stopping rules set forth in a clinical trial protocol for DOT1L or the Option Target for which the we retain U.S. rights dictate that such clinical trial be stopped, or the Post-EOP1 Clinical Opt-Out; or (b) for any or no reason, in a licensed program for DOT1L or the Option Target for which we retain U.S. rights, during specified periods before the scheduled initiation of the first pivotal clinical trial or before the estimated date of filing of the first NDA for an HMT inhibitor directed to the licensed target or any time after regulatory approval of an HMT inhibitor directed to the licensed target, or the Late Stage Opt-Out. In the event of a Post-EOP1 Clinical Opt-Out, the royalties that become payable to us on net product sales of licensed products directed to DOT1L or the Option Target for which we retain U.S. rights, as applicable, will be reduced by a specified percentage. Following a Post-EOP1 Clinical Opt-Out or a Late Stage Opt-Out, we are no longer required to co-fund global development for the applicable program other than specified costs necessary to complete development activities in process at the time we exercise our opt-out right, and we are obligated to grant Celgene an exclusive license to HMT inhibitors directed to the applicable target in the United States. Following our exercise of a Post-EOP1 Clinical Opt-Out or a Late Stage Opt-Out, if any, we would be eligible to receive specified milestone payments and royalties based on net product sales in the United States of HMT inhibitors directed to the licensed target in the event that Celgene develops and commercializes a product in the United States.

Exclusivity Restrictions. Subject to exceptions specified in the amended agreement, during the option period, we may not research, develop or commercialize HMT inhibitors directed to DOT1L and the three Option Targets. Subject to exceptions specified in the amended agreement, following each applicable option period, we may not research, develop or commercialize HMT inhibitors directed to DOT1L or any target licensed by Celgene.

Term and Termination. The amended and restated agreement with Celgene will expire on a product-by-product and country-by-country basis on the date of the expiration of the applicable royalty term with respect to each licensed product in each country and in its entirety upon the expiration of all applicable royalty terms for all licensed products in all countries. The royalty term for each licensed product in each country is the period commencing with first commercial sale of the applicable licensed product in the applicable country and ending on the latest of expiration of specified patent coverage, specified regulatory exclusivity or 15 years following the first commercial sale in the applicable country. Celgene has the right to terminate the amended agreement in its entirety, upon 60 or 120 days' notice depending on the timing of such termination. The amended agreement may also be terminated in its entirety during the option period, and on a licensed target-by-licensed target basis after the option period, by either Celgene or us in the event of a material breach by the other party. The amended agreement may be terminated on a licensed target-by-licensed target basis by either Celgene or us in the event the other party, or an affiliate or sublicensee of the other party, participates or actively assists in a legal challenge to specified patents of the terminating party or in its entirety in the event the other party becomes subject to specified bankruptcy, insolvency or similar circumstances.

LYSA

In May 2016, we entered into a collaboration agreement with the Lymphoma Academic Research Organization, or LYSARC, to conduct a combination trial of tazemetostat. LYSARC is the operational arm of the Lymphoma Study Association, or LYSA, a premier cooperative group in France dedicated to clinical and translational research for lymphoma. This Phase 1b/2 study is evaluating tazemetostat in combination with R-CHOP, the standard of care first line combination treatment for diffuse large B-cell lymphoma, or DLBCL, as a first line treatment in elderly, high-risk patients with DLBCL and is being sponsored by LYSARC. LYSA is managing the study operations for the trial, and we are recognizing our share of the related expenses as those costs are incurred over the duration of the trial. Primary endpoints in the trial include complete response rate, safety and tolerability of the combination. Secondary endpoints include ORR and PFS. In addition, we are planning an expansion of this trial to include a cohort of patients with high-risk front-line FL.

Genentech

In June 2016, we entered into a collaboration agreement with Genentech, a member of the Roche Group, to conduct a Phase 1b clinical trial to investigate the anti-cancer effects of our EZH2 inhibitor, tazemetostat, and Genentech's anti-PD-L1 cancer immunotherapy, atezolizumab, when used in combination. The trial is evaluating this combination regimen for the treatment of patients with relapsed or refractory DLBCL. Under the agreement, each company is supplying its respective anti-cancer agent to support the trial and sharing equally in the trial costs. Genentech is managing the study operations for the trial, and we are recognizing our share of the related expenses as those costs are incurred over the duration of the trial.

In June 2017, we announced an expansion of our clinical collaboration with Genentech to investigate the combination of tazemetostat with atezolizumab in a Phase 1b/2 clinical trial for the treatment of patients with relapsed or refractory metastatic non-small cell lung cancer, or NSCLC. The trial was to be part of MORPHEUS, Genentech's open-label, multi-center, randomized umbrella trial evaluating the efficacy and safety of multiple immunotherapy-based treatment combinations for metastatic NSCLC. This trial was initiated at the end of 2017, but before patients had been enrolled in the study, recruitment was halted due to the partial hold placed on tazemetostat studies by the FDA in April 2018 following a safety report from one patient in the dose-ranging portion of the Phase 1 study who developed a secondary case of T-cell lymphoblastic lymphoma, or T-LBL. Due to the hold and strategic reprioritizations, in early 2019 the companies announced that they jointly opted not to move forward with the NSCLC combination study.

Companion Diagnostics

Roche Molecular

In December 2012, Eisai and we entered into an agreement with Roche Molecular under which Eisai and we engaged Roche Molecular to develop a companion diagnostic to identify patients who possess certain activating mutations of EZH2. In October 2013, this agreement was amended to include additional mutations in EZH2. The development costs due under the amended agreement with Roche Molecular were the responsibility of Eisai until the execution of the amended and restated collaboration and license agreement with Eisai in March 2015, at which time we assumed responsibility for the remaining development costs due under the agreement. In December 2015, we entered into a second amendment to the companion diagnostics agreement with Roche Molecular. The agreement was further amended in March 2018. Before the additional amendment, we were responsible for the remaining development costs of $10.4 million due under the agreement and Eisai had agreed to reimburse us $0.9 million of this amount related to a regulatory milestone for Japan. In July 2019, we entered into a fourth amendment to the companion diagnostics agreement. Under the amended agreement, we and Roche Molecular agreed to divide a $1.0 million regulatory milestone for the United States into two separate milestone payments, of which $0.5 million was paid to us as part of the signed amendment, with the remaining $0.5 million to be paid by us upon the satisfaction of certain conditions set forth in the fourth amendment to the companion diagnostics agreement. We expect the remaining development costs under the amended agreement to be incurred and paid through 2020.

Under our agreement with Roche Molecular, Roche Molecular is obligated to use commercially reasonable efforts to develop and to make commercially available the companion diagnostic. Roche Molecular has exclusive rights to commercialize the companion diagnostic.

Our agreement with Roche Molecular will expire when we are no longer developing or commercializing tazemetostat. We may terminate the agreement by giving Roche Molecular 90 days' written notice if we discontinue development and commercialization of tazemetostat or determine, in conjunction with Roche Molecular, that the companion diagnostic is not needed for use with tazemetostat. Either we or Roche Molecular may also terminate the agreement in the event of a material breach by the other party, in the event of material changes in circumstances that are contrary to key assumptions specified in the agreement or in the event of specified bankruptcy or similar circumstances. Under specified termination circumstances, Roche Molecular may become entitled to specified termination fees.

Intellectual Property

We strive to protect the proprietary compounds and technologies that we believe are important to our business, including seeking and maintaining patent protection intended to cover the composition of matter of our product candidates, their methods of use, related technologies, diagnostics and other inventions. Our patent portfolio is currently composed of over 275 issued patents and allowed patent applications and over 500 pending patent applications in the major pharmaceutical markets, that we own as well as license from other parties. In addition to patent protection, we also rely on trade secrets and careful monitoring of our proprietary information 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 significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, defend and enforce our patents, maintain our licenses to use intellectual property owned by third parties, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in the field of HMTs, as well as to develop a proprietary position for new target classes, such as HATs and helicases.

We plan to continue to expand our intellectual property estate by filing patent applications directed to dosage forms, methods of treatment and additional CMP and HMT inhibitor compounds and their derivatives, and to other new target classes. Specifically, we seek patent protection in the United States and internationally for novel compositions of matter covering the compounds, the chemistries and processes for manufacturing these compounds and the use of these compounds in a variety of therapies.

The patent portfolios for our most advanced programs are summarized below.

EZH2. Our EZH2 patent portfolio includes U.S. Patent No. 8,410,088 covering the composition of matter of tazemetostat. This patent issued on April 2, 2013 and is expected to expire in 2032, not including extensions. Our EZH2 portfolio also includes 45 additional U.S. patents and more than 200 foreign patents, expected to expire between 2031 and 2036, not including extensions. The claims of these patents cover the composition of matter of EZH2 inhibitor compounds and various methods of their making and use. Patent applications in the same families as these patents are pending in a variety of worldwide jurisdictions, including the United States. The EZH2 program portfolio encompasses more than 40 patent families with pending patent applications relating to compositions of matter and methods of making and use of EZH2 inhibitors. The patent families in this portfolio are in various stages of prosecution and include patent applications filed in a variety of worldwide jurisdictions, including the United States; Patent Cooperation Treaty, or PCT, applications that are eligible for filing in most worldwide jurisdictions, including the United States, and at least one U.S. provisional application that may be used as the basis for non-provisional U.S. applications, PCT applications and other national filings worldwide. Our patent applications in the EZH2 portfolio, if issued, would be expected to expire between 2031 and 2040, not including extensions.

DOT1L. Our DOT1L patent portfolio includes U.S. Patent No. 8,580,762 covering the composition of matter of pinometostat. The patent issued on November 12, 2013 and is expected to expire in 2032, not including extensions. Our DOT1L portfolio also includes 15 additional U.S. patents and more than 45 foreign patents, expected to expire between 2031 and 2034, not including extensions. The DOT1L program portfolio encompasses more than fifteen patent families relating to compositions of matter of DOT1L inhibitor compounds and methods of their making and use. The patent families in this portfolio are in various stages of prosecution and include patent families with applications filed in a variety of worldwide jurisdictions including the United States. These patents and patent applications are wholly owned by us. Our patent applications in the DOT1L portfolio, if issued, would be expected to expire between 2031 and 2036, not including extensions.

EHMT2. Our EHMT2 patent portfolio includes more than eight patent families directed to various product candidates and methods of use, with applications filed in the United States and internationally. The portfolio includes PCT applications that are eligible for filing in most jurisdictions worldwide. Patents, if issued from currently pending applications in the EHMT2 portfolio are expected to expire between 2037 and 2038, not including extensions.

Other Targets. We also have patent portfolios directed to targets other than EZH2, DOT1L, and EHMT2, including the HMT targets PRMT1, PRMT3, CARM1 (also known as PRMT4), PRMT5, PRMT6, PRMT8, SMYD2 and SMYD3. These patent portfolios have more than 35 patent families directed to various product candidates with applications filed in the United States, PCT applications that are eligible for filing in most worldwide jurisdictions, including the United States, and U.S. provisional applications that may be used to establish non-provisional U.S. applications, PCT applications and other national filings worldwide. Patents, if issued in these portfolios are expected to expire between 2033 and 2039. We have 20 granted US patents that cover PRMT5 inhibitors and their methods of use. These patents are expected to expire in 2033, not including extensions.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application.

In the United States, the patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other non-United States jurisdictions to extend the term of a patent that covers an approved drug. With respect to the FDA-approval of TAZVERIK for the treatment of adult and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection, we expect to apply for patent term extension on a patent that covers TAZVERIK. In the future, if and when any additional pharmaceutical products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We intend to seek patent term extensions to any of our issued patents in any jurisdiction where these are available, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

We also rely on trade secret protection for our confidential and proprietary information. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements also provide that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property.

Manufacturing

We do not have any manufacturing facilities and currently rely, and expect to continue to rely, on third parties for the manufacture of our development-stage product candidates as well as our commercial products. We have entered into clinical and commercial supply agreements with contract manufacturers for all products and product candidates we have in clinical development and for the commercialization of tazemetostat and any other product candidate we develop that receive marketing approval.

All of our product candidates are small molecules and are manufactured in third-party facilities that are equipped, staffed, and experienced in the manufacture of such pharmaceutical products. All such facilities have successful track-records manufacturing products for the U.S., EU, and ROW markets, meeting regulatory and compliance requirements as appropriate. We expect to continue to develop product candidates that can be produced cost-effectively at contract manufacturing facilities.

We rely on third parties for the manufacture of any diagnostics we may need or if required. We are currently collaborating with Roche Molecular for a diagnostic for its potential use with tazemetostat, and we expect to rely on Roche Molecular for the manufacture of the diagnostic it is developing. We may enter into similar agreements for the manufacture of other diagnostics.

Commercialization

TAZVERIK is available to eligible patients in the United States via a specialty distribution network. To commercialize TAZVERIK for the epithelioid sarcoma indication in the United States, we have built a focused field presence and marketing capabilities. This includes an efficiently sized field-based organization of 19 individuals. We have initiated our FL launch readiness activities and are expanding our infrastructure to support the launch and marketing of tazemetostat for FL in the United States, if approved. Our sales leadership team is in place, and we have completed our hiring of our sales representatives expand that organization to support a launch of TAZVERIK for follicular lymphoma, if approved.

We have three strategic imperatives that we believe are integral to a successful U.S. launch:

- help ensure eligible patients have access to TAZVERIK, including ensuring that our TAZVERIK commercial infrastructure will reach all appropriate ES patients and provide these patients and their prescribers with a positive first experience with the product,
- ensure that TAZVERIK is widely adopted by physicians as the standard-of-care and an essential treatment option for each labeled indication, and
- ensure our EpizymeNOW patient support programs provide seamless access to TAZVERIK. EpizymeNOW is fully active and has been facilitating patient access to new TAZVERIK prescriptions.

We have retained commercial rights in the United States to all of our product candidates for which we may receive marketing approvals, except for two programs that are the subject of our collaboration with GSK, two of the preclinical programs that are the subject of our collaboration with Celgene, and the preclinical histone acetyltransferase inhibitor program that is the subject of our collaboration with Boehringer Ingelheim. For the preclinical helicase inhibitor program, we will share U.S. commercialization responsibilities with Boehringer Ingelheim, with Boehringer Ingelheim assuming responsibility for commercialization outside of the U.S. We plan to retain commercialization rights in the United States and possibly in select foreign jurisdictions in connection with any future collaborations.

Subject to receiving marketing approvals, for additional indications or products, we expect to use our existing sales organization in the United States or to seek to expand our sales organization in the United States to sell our products. We believe that such an organization will be able to address the hematologists and oncologists who are the key specialists in treating the patient populations for which our clinical stage product candidates are being developed. Outside the United States, we may choose to enter into distribution and other marketing arrangements with third parties for any of our product candidates that obtain marketing approval, or may choose to commercialize our products in certain markets, depending upon many factors, including the target market size, availability of reimbursement, and our financial resources at the time.

We own the global development and commercialization rights to tazemetostat outside of Japan. Eisai holds the rights to develop and commercialize tazemetostat in Japan. For geographies outside the United States, we are evaluating the most efficient path to reaching patients, including through potential collaborations.

We expect that our collaborators for any companion or complementary diagnostics we may develop in the future for use with our therapeutic products will hold the commercial rights to these diagnostic products, as is the case for our collaboration with Roche Molecular. We expect to coordinate closely with any diagnostic collaborators in connection with the marketing and sale of any related therapeutic products.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technology, knowledge, experience and scientific resources provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

There are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. Companies that are developing new epigenetic treatments for cancer that target histone methyltransferases, or HMTs, and protein arginine methyltransferases, or PRMTs, include GSK, Johnson & Johnson, Pfizer, Inc., Daiichi Sankyo Company Limited, and Constellation Pharmaceuticals. Further, companies which are known to have EZH2 inhibitor programs or related programs include: Constellation Pharmaceuticals, developing an EZH2 inhibitor (CPI-1205, Phase 1/2 castration-resistant prostate cancer, solid tumors; CPI-0209, Phase 1/2, solid tumors), Novartis AG, developing an EED inhibitor which indirectly blocks EZH2 (MAK683, Phase 1/2, advanced malignancies), Daiichi Sankyo, developing a EZH1/EZH2 dual inhibitor (valemetostat, DS-3201, Phase 1, relapsed or refractory non-Hodgkin lymphomas, AML, ALL, as well as Phase 2 for small cell lung cancer and relapsed or refractory adult T-cell leukemia/lymphoma), and Pfizer, developing EZH2 inhibitor PF-06821497, Phase 1, relapsed or refractory SCLC, castration-resistant prostate cancer, follicular lymphoma and diffuse large B-cell lymphoma. In July 2017, GSK discontinued their EZH2 inhibitor program, GSK2816126, which had been in Phase 1 development in solid tumors and hematological malignancies. In addition, many companies are developing cancer therapeutics that work by targeting epigenetic mechanisms other than HMTs, and some, including Celgene, Merck & Co., Inc., Secura Bio, Spectrum Pharmaceuticals, and Otsuka, are now marketing cancer treatments that work by targeting epigenetic mechanisms other than HMTs.

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

The key competitive factors affecting the success of all of our therapeutic product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics in guiding the use of related therapeutics, the level of generic competition and the availability of reimbursement from government and other third-party payors.

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. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products. Generic products that broadly address these indications are currently on the market for the indications that we are pursuing, and additional products are expected to become available on a generic basis over the coming years. If our product candidates achieve marketing approval, we expect that they will be priced at a significant premium over competitive generic products.

The most common methods of treating patients with cancer are surgery, radiation and drug therapy. There are a variety of available drug therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. While our product candidates may compete with many existing drugs and other therapies, to the extent they are ultimately used in combination with or as an adjunct to these therapies, our product candidates will not be competitive with them. Some of the currently approved drug therapies are branded and subject to patent protection, and others are available on a generic basis. Many of these approved drugs are well established therapies and are widely accepted by physicians, patients and third-party payors.

In addition to currently marketed therapies, there are also a number of products in late stage clinical development to treat cancer. These products in development may provide efficacy, safety, convenience and other benefits that are not provided by currently marketed therapies. As a result, they may provide significant competition for any of our product candidates for which we obtain marketing approval.

If our lead product candidates are approved for the indications for which we are currently undertaking clinical trials, they will compete with the therapies and currently marketed drugs discussed below.

Tazemetostat. The most common treatments for FL are chemotherapies, usually combined with the monoclonal antibody Rituxan, or more recently, in the case of FL, Gazyva, which is a next-generation antibody that acts against the same target as Rituxan, CD20. While Rituxan and a number of other widely used anti-cancer agents are labeled either broadly for NHL, no therapies are approved specifically for the treatment of tumors associated with EZH2 activating mutations. There are a number of companies currently evaluating investigational agents in the relapsed and refractory follicular lymphoma patient setting.

In the relapsed and refractory follicular lymphoma patient setting, both current and near term competition exists. Current competition includes CD20 combinations along with multiple Pi3K inhibitors. Near term competition includes a number of companies currently evaluating investigational agents with varying mechanisms of action.

No therapies are approved specifically for the treatment of epithelioid sarcoma. Epithelioid sarcoma, an INI1-negative tumor, is typically treated with surgical resection when it presents as localized disease. When epithelioid sarcoma recurs or metastasizes, it may be treated with systemic chemotherapy or investigational agents since there are no approved systemic therapies specifically indicated for this disease. To the best of our knowledge there are no competitive products in development specifically for epithelioid sarcoma. However, we are aware of several clinical trials run by competitors that recruit patients with soft tissue sarcoma, which is inclusive of epithelioid sarcoma.

Government Regulation and Product Approval

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

United States Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. It is the responsibility of the company seeking to market a drug to test it and submit evidence that the drug is safe and effective. The failure to comply with the applicable United States regulatory requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

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

- completion of preclinical laboratory tests and animal studies in compliance with the FDA's good laboratory practice regulations;
- submission to the FDA of an IND which must become effective before human clinical trials may begin;
- manufacture of drug substance and drug product to support clinical trials in compliance with FDA's cGMP regulations;
- approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- performance of human clinical trials, including adequate and well-controlled clinical trials, in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug product for each indication;

- submission to the FDA of an NDA or sNDA;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with current good manufacturing practices, or cGMP, and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity, as well as satisfactory completion of an FDA inspection of selected clinical sites to determine GCP compliance;
- satisfactory completion of an FDA inspection of Epizyme to assess compliance with GxPs;
- payment of user fees per published Prescription Drug User Fee Act, or PDUFA, guidelines for that year, if applicable;
- FDA review and approval of the NDA or sNDA; and
- commitment to comply with any post-approval requirements, including the potential requirements, to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

Preclinical Studies and an IND. Before an applicant begins testing a compound with potential therapeutic value in humans, the product candidate enters the preclinical testing stage. Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as animal studies to assess its potential safety and efficacy. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the FDA as part of an IND. An IND is an exemption from the FDCA that allows an unapproved product candidate to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational product to humans. Such authorization must be secured prior to interstate shipment and administration of any product candidate that is not the subject of an approved NDA. An IND automatically becomes effective 30 days after submission and receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the clinical trial on a clinical hold or partial 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 a clinical trial to commence.

Clinical Trials. Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, an IRB at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must continue to oversee the clinical trial while it is being conducted. Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee, or DSMB.

Human clinical trials are typically conducted in four sequential phases, which may overlap or be combined. In Phase 1, the candidate drug is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an initial indication of its effectiveness. In Phase 2, the investigational drug typically is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. In Phase 3, the candidate drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product. In Phase 4, post-approval studies may be conducted to gain additional experience from the treatment of patients in the intended therapeutic indication.

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

In general, the FDA accepts foreign safety and efficacy studies that were not conducted under an IND provided that they are well designed, well conducted, performed by qualified investigators, and conducted in accordance with ethical principles acceptable to the international community. The conduct of these studies must meet at least minimum standards for assuring human subject protection. Therefore, for studies submitted in support of an NDA that were conducted outside the United States and not under an IND, the agency requires demonstration that such studies were conducted in accordance with GCP.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on the ClinicalTrials.gov website.

Expanded Access to an Investigational Drug for Treatment Use.

Expanded access, sometimes called "compassionate use," is the use of investigational new drug products outside of clinical trials to treat patients with serious or immediately life-threatening diseases or conditions when there are no comparable or satisfactory alternative treatment options. The rules and regulations related to expanded access are intended to improve access to investigational drugs for patients who may benefit from investigational therapies. FDA regulations allow access to investigational drugs under an IND by the company or the treating physician for treatment purposes on a case-by-case basis for: individual patients (single-patient IND applications for treatment in emergency settings and non-emergency settings); intermediate-size patient populations; and larger populations for use of the drug under a treatment protocol or Treatment IND Application.

When considering an IND application for expanded access to an investigational product with the purpose of treating a patient or a group of patients, the sponsor and treating physicians or investigators will determine suitability when all of the following criteria apply: patient(s) have a serious or immediately life-threatening disease or condition, and there is no comparable or satisfactory alternative therapy to diagnose, monitor, or treat the disease or condition; the potential patient benefit justifies the potential risks of the treatment and the potential risks are not unreasonable in the context or condition to be treated; and the expanded use of the investigational drug for the requested treatment will not interfere initiation, conduct, or completion of clinical investigations that could support marketing approval of the product or otherwise compromise the potential development of the product.

On December 13, 2016, the 21st Century Cures Act established, and the 2017 Food and Drug Administration Reauthorization Act later amended, a requirement that sponsors of one or more investigational drugs for the treatment of a serious disease(s) or condition(s) make publicly available their policy for evaluating and responding to requests for expanded access for individual patients. Although these requirements were rolled out over time, they have now come into full effect. This provision requires drug and biologic companies to make publicly available their policies for expanded access for individual patient access to products intended for serious diseases. Sponsors are required to make such policies publicly available upon the earlier of initiation of a Phase 2 or Phase 3 study; or 15 days after the drug or biologic receives designation as a breakthrough therapy, fast track product, or regenerative medicine advanced therapy.

In addition, on May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a drug manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act, but the manufacturer must develop an internal policy and respond to patient requests according to that policy.

Marketing Approval. Assuming successful completion of the required clinical testing, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs is subject to an application user fee, which for federal fiscal year 2020 is $2,942,965 for an application requiring clinical data. The sponsor of an approved NDA is also subject to an annual program fee, which for fiscal year 2020 is $325,424. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for products with orphan drug designation and a waiver for certain small businesses.

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

The FDA requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within sixty days of an end-of-phase 2 meeting or as may be agreed between the sponsor and FDA. 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. FDA and the sponsor must reach 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 nonclinical studies, early phase clinical trials, or other clinical development programs.

The FDA also may require submission of a REMS plan to mitigate any identified or suspected serious risks. The REMS plan could include medication guides, physician communication plans, assessment plans, and elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools.

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

The FDA has the option to refer questions regarding their review of a marketing application for a New Molecular Entity, or NME, to an external advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA uses approximately 50 advisory committees and panels to obtain independent expert advice on scientific, technical, and policy matters. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

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

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

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

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

Orphan Drug Designation. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug (including a biologic) 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 available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA or biologics license application, 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 qualifies the sponsor of the drug for various development incentives. For example, a marketing application for a prescription drug product that has received orphan drug designation is not subject to a prescription drug user fee unless the application includes an indication other than for the rare disease or condition for which the drug was designated. Furthermore, federal law establishes certain tax credits designed to encourage the development of orphan drugs. With passage of the Tax Cuts and Jobs Act of 2017, that tax credit was halved from 50% to 25%. The granting of an orphan drug designation request does not alter the standard regulatory requirements and process for obtaining marketing approval. Safety and effectiveness of a drug must be established through adequate and well-controlled studies.

Special FDA Expedited Review and Approval Programs. The FDA has various programs, including Fast Track designation, Accelerated Approval, Priority Review and Breakthrough Designation, that are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

Breakthrough Therapy Designation. Under the provisions of the Food and Drug Administration Safety and Innovation Act, or FDASIA, enacted in 2012, a sponsor can request designation of a product candidate as a "breakthrough therapy." The FDA may grant breakthrough therapy designation to a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA must take certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy. For drugs and biologics that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Fast Track Designation. To be eligible for a Fast Track Designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. For Fast Track products, sponsors may have greater interactions with the FDA regarding drug development and may submit sections of a Fast Track product's NDA on a rolling basis before the entire application is complete.

Priority Review. The FDA may give a priority review designation to drugs that offer major advances in treatment, or provide a treatment where no adequate therapy exists. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months under current PDUFA guidelines. These six- and ten-month review periods are measured from the "filing" date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review and decision from the date of submission. Most products that are eligible for Fast Track designation are also likely to be considered appropriate to receive a priority review.

Accelerated Approval. In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval and may be approved on the basis of well-conducted clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA may require a sponsor to perform post-marketing confirmatory study(ies) to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug may be subject to accelerated withdrawal procedures. Although a drug may be designated as "breakthrough" or "fast track", the determination of accelerated approval is based on the clinical endpoint and not on the expeditious manner in which it is being developed.

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

FDA Regulation of Companion Diagnostics. Safe and effective use of a drug may rely upon an *in vitro* companion diagnostic for use in selecting the patients that we believe will be more likely to respond to the product. FDA officials have issued guidance that addresses issues critical to developing *in vitro* companion diagnostics, such as when the FDA will require that the diagnostic and the drug be approved simultaneously. The guidance issued in August 2014 states that if safe and effective use of a therapeutic product depends on an *in vitro* diagnostic, then the FDA generally will require approval or clearance of the diagnostic at the same time that the FDA approves the therapeutic product.

The FDA requires that devices, or *in vitro* companion diagnostics, intended to select the patients who will respond to the cancer treatment to obtain Pre-Market Approval, or PMA, simultaneously with approval of the drug. Based on the guidance, and the FDA's past treatment of companion diagnostics, we believe that the FDA will require PMA approval of one or more *in vitro* companion diagnostics to identify patient populations suitable for our cancer therapies. The review of these *in vitro* companion diagnostics in conjunction with the review of our cancer treatments involves coordination of review by the FDA's Center for Drug Evaluation and Research, or CDER, and by the FDA's Center for Devices and Radiological Health, or CDRH, Office of In Vitro Diagnostics Device Evaluation and Safety.

The PMA process, including the gathering of clinical and preclinical data and the submission to and review by the FDA involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee. For federal fiscal year 2020, the standard fee is $340,995 and the small business fee is $85,249.

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

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

The FDA may impose a number of post-approval requirements as a condition of approval of an NDA. For example, the FDA may require post-marketing testing, including Phase 4 clinical trials and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

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

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

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

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

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off label uses, and a company that is found to have improperly promoted off label uses may be subject to significant liability. If a company is found to have promoted off label uses, it may become subject to adverse public relations and administrative and judicial enforcement by the FDA, the Department of Justice, or the Office of the Inspector General of the Department of Health and Human Services, as well as state authorities. This could subject a company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes drug products.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, and its implementing regulations, as well as the Drug Supply Chain Security Act, or DSCA, which regulate the distribution and tracing of prescription drugs and prescription drug samples at the federal level, and set minimum standards for the regulation of drug distributors by the states. The PDMA, its implementing regulations and state laws limit the distribution of prescription pharmaceutical product samples, and the DSCA imposes requirements to ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market.

Federal and State Fraud and Abuse and Data Privacy and Security Laws and Regulations. In addition to FDA restrictions on marketing of pharmaceutical products, federal and state fraud and abuse laws restrict business practices in the biopharmaceutical industry. These laws include anti-kickback and false claims laws and regulations as well as data privacy and security laws and regulations.

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

The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively PPACA, which, among other things, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA 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 civil False Claims Act or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. PPACA also created new federal requirements for reporting, by applicable manufacturers of covered drugs, payments and other transfers of value to physicians and teaching hospitals.

The federal False Claims Act prohibits any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes “any request or demand” for money or property presented to the U.S. government. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies’ marketing of products for unapproved, and thus non-reimbursable, uses. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

We may also be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and its implementing regulations, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

In addition, federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or the Affordable Care Act, require certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services, within the United States Department of Health and Human Services, information related to payments and other transfers of value made by that entity to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures

To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

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

Third-party payors are increasingly imposing additional requirements and restrictions on coverage and limiting reimbursement levels for medical products. For example, federal and state governments reimburse covered prescription drugs at varying rates generally below average wholesale price. These restrictions and limitations influence the purchase of healthcare services and products. Legislative proposals to reform healthcare or reduce costs under government insurance programs may result in lower reimbursement for our products and product candidates or exclusion of our products and product candidates from coverage. The cost containment measures that healthcare payors and providers are instituting and any healthcare reform could significantly reduce our revenues from the sale of any approved product candidates. We cannot provide any assurances that we will be able to obtain and maintain third-party coverage or adequate reimbursement for our product candidates in whole or in part.

Impact of Healthcare Reform on Coverage, Reimbursement, and Pricing. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposed new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Part D plans include both standalone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Part 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. 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 any products for which we receive marketing approval. However, any negotiated prices for our future 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 Medicare Part D may result in a similar reduction in payments from non-governmental payors.

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. A plan for the research will be developed by the Department of Health and Human Services, 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 will be 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 any product, if any such product or the condition that it is intended to treat is the subject of a study. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's product could adversely affect the sales of our product candidates. If third-party payors do not consider our product candidates to be cost-effective compared to other available therapies, they may not cover our product candidates, once approved, as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

The United States and some foreign jurisdictions are considering enacting or have enacted a number of additional legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives, including, most recently, PPACA, which became law in March 2010 and substantially changed the way healthcare is financed by both governmental and private insurers. Among the provisions of the Affordable Care Act of importance to potential product candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices and extending rebate liability to prescriptions for individuals enrolled in Medicare Advantage plans;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;

- expanded the types of entities eligible for the 340B drug discount program;
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- 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 Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. However, the IPAB implementation has been not been clearly defined. PPACA provided that under certain circumstances, IPAB recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings; and
- 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. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation from 2011 to 2019.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. For example, 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 2012 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 up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2029 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 became law, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

These healthcare reforms, 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, new payment methodologies and additional downward pressure on the price for any approved product and/or the level of reimbursement physicians receive for administering any approved product. Reductions in reimbursement levels may negatively impact the prices or the frequency with which products are prescribed or administered. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Since enactment of the PPACA, there have been numerous legal challenges and Congressional actions to repeal and replace provisions of the law.

Since enactment of the PPACA, there have been, and continue to be, numerous legal challenges and Congressional actions to repeal and replace provisions of the law. For example, with enactment of the Tax Cuts and Jobs Act of 2017, which was signed by President Trump on December 22, 2017, Congress repealed the "individual mandate." The repeal of this provision, which requires most Americans to carry a minimal level of health insurance, became effective in 2019. Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the PPACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. Further, the Bipartisan Budget Act of 2018, among other things, amended the PPACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." The Congress may consider other legislation to replace elements of the PPACA during the next Congressional session.

The Trump Administration has also taken executive actions to undermine or delay implementation of the PPACA. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of certain provisions of the PPACA or otherwise circumvent some of the requirements for health insurance mandated by the PPACA. One Executive Order directs federal agencies with authorities and responsibilities under the PPACA to waive, defer, grant exemptions from, or delay the implementation of any

provision of the PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. The second Executive Order terminates the cost-sharing subsidies that reimburse insurers under the PPACA. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. In addition, CMS has recently proposed regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the PPACA for plans sold through such marketplaces. Further, on June 14, 2018, U.S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay more than $12 billion in PPACA risk corridor payments to third-party payors who argued were owed to them. This decision is under review by the U.S. Supreme Court during its current term. The full effects of this gap in reimbursement on third-party payors, the viability of the PPACA marketplace, providers, and potentially our business, are not yet known.

In addition, on December 14, 2018, a U.S. District Court judge in the Northern District of Texas ruled that the individual mandate portion of the PPACA is an essential and inseverable feature of the PPACA, and therefore because the mandate was repealed as part of the Tax Cuts and Jobs Act, the remaining provisions of the PPACA are invalid as well. The Trump administration and CMS have both stated that the ruling will have no immediate effect, and on December 30, 2018 the same judge issued an order staying the judgment pending appeal. The Trump Administration recently represented to the Court of Appeals considering this judgment that it does not oppose the lower court's ruling. On July 10, 2019, the Court of Appeals for the Fifth Circuit heard oral argument in this case. On December 18, 2019, that court affirmed the lower court's ruling that the individual mandate portion of the PPACA is unconstitutional and it remanded the case to the district court for reconsideration of the severability question and additional analysis of the provisions of the PPACA. On January 21, 2020, the U.S. Supreme Court declined to review this decision on an expedited basis. Litigation and legislation over the PPACA are likely to continue, with unpredictable and uncertain results.

Further, there have been several recent U.S. congressional inquiries and proposed federal and proposed and enacted state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare and reform government program reimbursement methodologies for drug products. For example, there have been several recent U.S. congressional inquiries and proposed federal and proposed and enacted state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare and reform government program reimbursement methodologies for drug products. At the federal level, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. For example, on May 11, 2018, the Administration issued a plan to lower drug prices. Under this blueprint for action, the Administration indicated that the Department of Health and Human Services (HHS) will: take steps to end the gaming of regulatory and patent processes by drug makers to unfairly protect monopolies; advance biosimilars and generics to boost price competition; evaluate the inclusion of prices in drug makers' ads to enhance price competition; speed access to and lower the cost of new drugs by clarifying policies for sharing information between insurers and drug makers; avoid excessive pricing by relying more on value-based pricing by expanding outcome-based payments in Medicare and Medicaid; work to give Part D plan sponsors more negotiation power with drug makers; examine which Medicare Part B drugs could be negotiated for a lower price by Part D plans, and improving the design of the Part B Competitive Acquisition Program; update Medicare's drug-pricing dashboard to increase transparency; prohibit Part D contracts that include "gag rules" that prevent pharmacists from informing patients when they could pay less out-of-pocket by not using insurance; and require that Part D plan members be provided with an annual statement of plan payments, out-of-pocket spending, and drug price increases. In addition, on December 23, 2019, the Trump Administration published a proposed rulemaking that, if finalized, would allow states or certain other non-federal government entities to submit importation program proposals to the FDA for review and approval. Applicants would be required to demonstrate their importation plans pose no additional risk to public health and safety and will result in significant cost savings for consumers. At the same time, the FDA issued draft guidance that would allow manufacturers to import their own FDA-approved drugs that are authorized for sale in other countries (multi-market approved products).

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In

addition, regional health care authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other health care programs. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

Exclusivity and Approval of Competing Products

Patent Term Restoration and Extension. A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch-Waxman Act, which permits a patent restoration of up to five years for patent term lost during product development and the FDA regulatory review. The restoration period granted is typically one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved drug product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple drugs for which approval is sought can only be extended in connection with one of the approvals. The United States Patent and Trademark Office, or USPTO, reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Hatch-Waxman Patent Exclusivity. In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's product or a method of using the product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application, or ANDA, or 505(b)(2) NDA.

Generally, an ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths, dosage form and route of administration as the listed drug and has been shown to be bioequivalent through *in vitro* or *in vivo* testing or otherwise to the listed drug. ANDA applicants are not required to conduct or submit results of preclinical or clinical tests to prove the safety or effectiveness of their drug product, other than the requirement for bioequivalence testing. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

A 505(b)(2) application applies to a drug for which the investigations made to show whether or not the drug is safe for use and effective in use and relied upon by the applicant for approval of the application "were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted." As with an ANDA, Section 505(b)(2) authorizes the FDA to approve an NDA based on safety and effectiveness data that were not developed by the applicant. 505(b)(2) NDAs generally are submitted for changes to a previously approved drug product, such as a new dosage form or indication.

The ANDA or 505(b)(2) NDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable, or will not be infringed by the new product.

Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except when the ANDA or 505(b)(2) NDA applicant challenges a listed drug. A certification that the proposed product will not infringe the already approved product's listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicate that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all the listed patents claiming the referenced product have expired.

If the ANDA or 505(b)(2) NDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days after the receipt of notice of the Paragraph IV certification automatically prevents the FDA from approving the ANDA or 505(b)(2) NDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit or a decision in the infringement case that is favorable to the ANDA applicant.

Hatch—Waxman Non-Patent Exclusivity. Market and data exclusivity provisions under the FDCA also can delay the submission or the approval of ANDAs and 505(b)(2) NDAs for competing products. The FDCA provides a five-year period of non-patent data 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 activity 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 that contains the previously approved active moiety. However, an ANDA or 505(b)(2) NDA 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 or 505(b)(2) 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 or supplement. Three-year exclusivity may be awarded for changes to a previously approved drug product, such as new indications, dosages, strengths or dosage forms of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and, as a general matter, does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for generic versions of the original, unmodified drug product. 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.

The FDA must establish a priority review track for certain generic drugs, requiring the FDA to review a drug application within eight months for a drug that has three or fewer approved drugs listed in the Orange Book and is no longer protected by any patent or regulatory exclusivities, or is on the FDA's drug shortage list. The new legislation also authorizes FDA to expedite review of ‘‘competitor generic therapies’’ or drugs with inadequate generic competition, including holding meetings with or providing advice to the drug sponsor prior to submission of the application.

Orphan Drug Exclusivity. Under the Orphan Drug Act, a drug that is approved for the orphan drug designated indication is granted seven years of orphan drug exclusivity. Orphan drug exclusivity means that the FDA may not approve another sponsor's marketing application for the same drug for the same indication for seven years, except in certain limited circumstances. Orphan exclusivity does not block the approval of a different product for the same rare disease or condition, nor does it block the approval of the same product for different indications. If a drug or biologic designated as an orphan drug ultimately receives marketing approval for an indication broader than what was designated in its orphan drug application, it may not be entitled to exclusivity.

Orphan drug exclusivity will also not bar approval of another product under certain circumstances, including if a subsequent product with the same drug or biologic for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand. This is the case despite an earlier court opinion holding that the Orphan Drug Act unambiguously required the FDA to recognize orphan exclusivity regardless of a showing of clinical superiority.

We intend to seek orphan drug designation and exclusivity for our products whenever it is available. We have been granted orphan drug designation in the United States and the European Union for pinometostat, and orphan drug designation in the United States for tazemetostat for the treatment of patients with FL, MRT, soft tissue sarcoma and mesothelioma.

Pediatric Exclusivity. Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan drug exclusivity periods described above, and any listed patent. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or Orange Book listed patent protection cover the drug are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve an ANDA or 505(b)(2) application owing to regulatory exclusivity or listed patents. When any of our products is approved, we anticipate seeking pediatric exclusivity when it is appropriate.

European Union Drug Approval Process

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we would need to obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others.

Clinical Trial Approval in the EU. Pursuant to the currently applicable Clinical Trials Directives, an applicant must obtain approval from the competent national authority of the EU Member State in which the clinical trial is to be conducted. If the clinical trial is conducted in different EU Member States, the competent authorities in each of these EU Member States must provide their approval for the conduct of the clinical trial. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. In April 2014, the EU adopted a new Clinical Trials Regulation, which is set to replace the current Clinical Trials Directive. The new Clinical Trials Regulation will be directly applicable to and binding in all 27 EU Member States without the need for any national implementing legislation. Under the new coordinated procedure for the approval of clinical trials, the sponsor of a clinical trial will be required to submit a single application for approval of a clinical trial to a reporting EU Member State (RMS) through an EU Portal. The submission procedure will be the same irrespective of whether the clinical trial is to be conducted in a single EU Member State or in more than one EU Member State. The Clinical Trials Regulation also aims to streamline and simplify the rules on safety reporting for clinical trials.

As of January 1, 2020, the website of the European Commission reported that the implementation of the Clinical Trials Regulation was dependent on the development of a fully functional clinical trials portal and database, which would be confirmed by an independent audit, and that the new legislation would come into effect six months after the European Commission publishes a notice of this confirmation. The website indicated that the audit was expected to commence in December 2020.

As in the United States, information about certain clinical trials must be submitted within specific timeframes to the European Union (EudraCT) website: https://eudract.ema.europa.eu/ and other countries.

Marketing Authorization. To obtain marketing approval of a drug under European Union regulatory systems, we may submit marketing authorization applications, or MAAs, either under a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all EU member states. The centralized procedure is compulsory for medicines produced by specified biotechnological processes, products designated as orphan medicinal products, and products with a new active substance indicated for the treatment of specified diseases, and optional for those products that are highly innovative or for which a centralized process is in the interest of patients. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA 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 Scientific Advice Working Party of the Committee of Medicinal Products for Human Use, or the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, defined by three cumulative criteria: the seriousness of the disease, such as heavy disabling or life-threatening diseases, to be treated; the absence or insufficiency of an appropriate alternative therapeutic approach; and anticipation of high therapeutic benefit. In this circumstance, the European Medicines Agency, or EMA, ensures that the opinion of the CHMP is given within 150 days.

The decentralized procedure provides for approval by one or more other, or concerned, member states of an assessment of an application performed by one-member state, known as the reference member state. Under this procedure, an applicant submits an application, or dossier, and related materials, including a draft summary of product characteristics, and draft labeling and package leaflet, to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points may eventually be referred to the European Commission, whose decision is binding on all member states. For the EMA, a Pediatric Investigation Plan, or a request for waiver or deferral, is required for submission prior to submitting an MAA for use for drugs in pediatric populations.

Data and Market Exclusivity. In the European Union, new chemical entities qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. This data exclusivity, if granted, prevents regulatory authorities in the European Union from assessing a generic (abbreviated) application for eight years, after which generic marketing authorization can be submitted but not approved for two years. The overall ten-year period will be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity and the sponsor is able to gain the prescribed period of data exclusivity, another company nevertheless could also market another version of the drug if such company can complete a full MAA with a complete human clinical trial database and obtain marketing approval of its product.

***General Data Protection Regulation*.** The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the EU General Data Protection Regulation, or GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the United States and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Compliance with the GDPR will be a rigorous and time-intensive process that may increase the cost of doing business or require companies to change their business practices to ensure full compliance.

Orphan Drug Exclusivity. The EMA grants orphan drug designation to promote the development of products that may offer therapeutic benefits for life-threatening or chronically debilitating conditions affecting not more than five in 10,000 people in the European Union. In addition, orphan drug designation can be granted if the drug is intended for a life threatening, seriously debilitating or serious and chronic condition in the European Union and without incentives it is unlikely that sales of the drug in the European Union would be sufficient to justify developing the drug. Orphan drug designation is only available if there is no other satisfactory method approved in the European Union of diagnosing, preventing or treating the condition, or if such a method exists, the proposed orphan drug will be of significant benefit to patients. Orphan drug designation provides opportunities for free protocol assistance, fee reductions for access to the centralized regulatory procedures before and during the first year after marketing authorization and 10 years of market exclusivity following drug approval. Fee reductions are not limited to the first year after authorization for small and medium enterprises. The exclusivity period may be reduced to six years if the designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Priority Medicines, or PRIME, Drug Designation. EMA may grant prime drug designation to medicine developers to treat an unmet medical need upon selection. Medicines eligible for PRIME must address an unmet medical need, have data available showing the potential to address this need and bring a major therapeutic advantage to patients, and provide early and enhanced support to optimize the development of eligible medicines speed up their evaluation and contribute to timely patients' access. Once a candidate is selected for PRIME designation the EMA will provide scientific advice at key development milestones and confirm potential for accelerated assessment at the time of an application for marketing authorization. These medicines are considered priority medicines by EMA.

Brexit and the Regulatory Framework in the United Kingdom. Additionally, on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. Following protracted negotiations, the United Kingdom left the European Union on January 31, 2020. Under the withdrawal agreement, there is a transitional period until December 31, 2020 (extendable up to two years). Discussions between the United Kingdom and the European Union have so far mainly focused on finalizing withdrawal issues and transition agreements but have been extremely difficult to date. To date, only an outline of a trade agreement has been reached. Much remains open but the Prime Minister has indicated that the United Kingdom will not seek to extend the transitional period beyond the end of 2020. If no trade agreement has been reached before the end of the transitional period, there may be significant market and economic disruption. The Prime Minister has also indicated that the UK will not accept high regulatory alignment with the EU.

Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety, and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales, and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime that applies to products and the approval of product candidates in the United Kingdom. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, may force us to restrict or delay efforts to seek regulatory approval in the United Kingdom and/or European Union for our product candidates, which could significantly and materially harm our business.

Employees

As of February 14, 2020, we had 203 full-time employees, 96 of whom were primarily engaged in research and development activities.

Executive Officers of the Company

The following table sets forth the name, age and position of each of our executive officers as of February 27, 2020.

Name	Age	Position
Robert B. Bazemore	52	President, Chief Executive Officer and Director
Paolo Tombesi	56	Chief Financial Officer
Shefali Agarwal	46	Chief Medical Officer
Matthew E. Ros	53	Chief Strategy and Business Officer

Robert B. Bazemore has served as a director and our President and Chief Executive Officer since joining us in September 2015. Prior to joining us, from September 2014 to July 2015, Mr. Bazemore served as the Chief Operating Officer of Synageva BioPharma Corp., a biopharmaceutical company developing therapeutic products for rare disorders. Prior to joining Synageva, Mr. Bazemore served in increasing levels of responsibility at Johnson & Johnson, a healthcare company, including Vice President, Centocor Ortho Biotech Sales & Marketing from 2008 to 2010, President of Janssen Biotech from March 2010 to October 2013 and Vice President of Global Surgery at Ethicon from October 2013 to September 2014. Prior to Johnson & Johnson, Mr. Bazemore worked at Merck & Co., Inc. for eleven years, where he served in a variety of roles in medical affairs, sales and marketing. Mr. Bazemore is a director of Ardelyx, Inc., a biopharmaceutical company. He received a B.S. in biochemistry from the University of Georgia.

Paolo Tombesi has served as our Chief Financial Officer since joining us in August 2019. Prior to joining us, from June 2017 to June 2019 Mr. Tombesi served as the Chief Financial Officer for Insmed Incorporated, or Insmed, a global biopharmaceutical company. Prior to joining Insmed, Mr. Tombesi was Chief Financial and Administrative Officer of Novartis Pharmaceuticals Corporation, a U.S. subsidiary of multinational pharmaceutical company Novartis AG, or Novartis, a position he held from December 2014 through May 2017. Mr. Tombesi was Managing Director and Chief Financial Officer of Novartis Pharma K.K., a Japanese subsidiary of Novartis, from April 2009 to November 2014 and held various finance roles at Novartis from September 2006 to March 2009. Mr. Tombesi held several finance director positions at Bristol-Myers Squibb, a multinational biopharmaceutical company, from August 1996 to September 2006. From January 1988 to July 1996, Mr. Tombesi held various positions in consumer goods at Unilever NV and Johnson & Johnson. Mr. Tombesi holds a B.Ed. in Business and Managerial Economics from Sapienza Università di Roma and a B.A. in Accounting from Duca degli Abruzzi Roma.

Dr. Shefali Agarwal has served as our Chief Medical Officer since joining us in June 2018. Prior to joining us, Dr. Agarwal held leadership positions across medical research, clinical development, clinical operations and medical affairs. She most recently served as chief medical officer at SQZ Biotech, a biotechnology company developing cell therapies for patients with a wide range of diseases, from July 2017 to May 2018 and as a non-executive advisor from May 2018 to July 2018, where she built and led the clinical development organization, which included clinical research operations and the regulatory function. Before SQZ Biotech, Dr. Agarwal also held leadership positions at Curis, Inc. a biotechnology company developing therapeutics for the treatment of cancer, from July 2016 to July 2017 and Tesaro, Inc., an oncology-focused biopharmaceutical company, from July 2013 to July 2017. At Curis, Inc., she oversaw the Phase 2 study for its dual HDAC/PI3K inhibitor in diffuse large B-cell lymphoma, and the Phase 1 study in solid tumors for its oral checkpoint inhibitor. At Tesaro, Inc., she led the NDA and EMA submissions for ZEJULA® (niraparib) in ovarian cancer. Dr. Agarwal also held positions of increasing responsibility at Covidien, a medical devices and health care products company, from April 2010 to December 2011, AVEO Pharmaceuticals, Inc., a biopharmaceutical company advancing targeted oncology medicines, from December 2011 to July 2013 and Pfizer Inc., a pharmaceutical company with a wide range of treatments, from June 2005 to April 2010. Dr. Agarwal received her MBBS medical degree from Karnataka University's Mahadevappa Rampure Medical School in India, Master's Degree in Public Health from Johns Hopkins University, where she led clinical research in the Department of Anesthesiology and Critical Care Medicine, and a Master of Science degree in Business from the University of Baltimore's Merrick School of Business.

Matthew E. Ros has served as our Chief Strategy and Business Officer since September 2018 and initially joined Epizyme as our Chief Operating Officer from May 2016 to September 2018. Prior to joining us, from September 2010 to May 2016, Mr. Ros served in increasing levels of responsibility at Sanofi, a multinational pharmaceutical company, most recently as Chief Operating Officer/Global Head of the Oncology Business unit from December 2014 to May 2016. Prior to that role, Mr. Ros served in the rare disease business of Genzyme, a Sanofi company, where he served as Vice President and Franchise Head of its Pompe disease unit from September 2012 to December 2014. From October 2007 to June 2010, Mr. Ros served at ARIAD Pharmaceuticals, Inc., a global oncology company, most recently as Senior Vice President, Commercial Operations. He started his pharmaceutical career in Bristol-Myers Squibb's Oncology Division, serving in roles with increasing responsibility from 1990-2007. He received a B.S. from the State University of New York, College at Plattsburgh and completed the Executive Education Program in Finance and Accounting for the Non-Financial Manager at Wharton School of the University of Pennsylvania.

Our Corporate Information

We were incorporated under the laws of the state of Delaware on November 1, 2007 under the name Epizyme, Inc. Our principal executive offices are located at 400 Technology Square, Cambridge, Massachusetts 02139. Our telephone number is (617) 229-5872, and our website is located at www.epizyme.com. References to our website are inactive textual references only and the content of our website should not be deemed incorporated by reference into this Annual Report on Form 10-K.

Available Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, are available free of charge on our website located at www.epizyme.com as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. These reports are also available at the SEC's Internet website at www.sec.gov.

A copy of our Corporate Governance Guidelines, Code of Business Conduct and Ethics and the charters of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are posted on our website, www.epizyme.com, under "Investor Center" and are available in print to any person who requests copies by contacting Epizyme by calling (617) 229-5872 or by writing to Epizyme, Inc., 400 Technology Square, Cambridge, Massachusetts 02139.

Item 1A. Risk Factors

Careful consideration should be given to the following risk factors, in addition to the other information set forth in this Annual Report on Form 10-K and in other documents that we file with the SEC, in evaluating our company and our business. Investing in our common stock involves a high degree of risk. If any of the following risks and uncertainties actually occurs, our business, prospects, financial condition and results of operations could be materially and adversely affected. The risks described below are not intended to be exhaustive and are not the only risks facing our company. New risk factors can emerge from time to time, and it is not possible to predict the impact that any factor or combination of factors may have on our business, prospects, financial condition and results of operations.

Risks Related to Product Development and Commercialization

We are dependent on the successful development and commercialization of tazemetostat. If we are unable to develop and obtain marketing approval of tazemetostat for additional indications, such as FL, either alone or through a collaboration, or if we experience significant delays in doing so, or we are unable to successfully commercialize tazemetostat, our business could be harmed.

Our lead product candidate tazemetostat is approved in the United States as TAZVERIK™ for the treatment of epithelioid sarcoma. We have no other products approved for sale. We are investing a significant portion of our efforts and financial resources to fund the development and commercialization of tazemetostat. In January 2020, the U.S. Food and Drug Administration, or FDA, granted accelerated approval of tazemetostat for the treatment of adults and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection.

In December 2019, we submitted an NDA for accelerated approval of tazemetostat for relapsed or refractory follicular lymphoma, or FL, patients with an EZH2 activating mutant or wild-type EZH2, following at least two prior lines of systemic therapy. The FDA may conclude after review of our data that our accepted NDA filing application is insufficient to obtain marketing approval of tazemetostat for FL on an accelerated basis or at all.

We and our collaborators are conducting clinical trials of tazemetostat in other indications and in combination with other products. However, these development programs are early stage, and all of our other product candidates are still in preclinical development. As a result, our prospects are substantially dependent on our ability, or the ability of any future collaborator, to develop, obtain marketing approval for and successfully commercialize tazemetostat in one or more disease indications.

The success of tazemetostat will depend on several factors, including the following:

- safety, tolerability and efficacy profiles that are satisfactory to the FDA, the European Medicines Agency, or EMA, or any comparable foreign regulatory authority for marketing approval;
- timely receipt of marketing approvals from applicable regulatory authorities and the patient populations for which the approvals are granted;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- successful enrollment in and completion of clinical trials;
- making arrangements with third-party manufacturers for, or establishing, clinical and commercial manufacturing capabilities;
- launching commercial sales of the products, if and when approved, whether alone or in collaboration with others;
- acceptance of the products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- protecting our rights in our intellectual property portfolio; and
- maintaining a continued acceptable safety profile of the products following approval.

Many of these factors are beyond our control, including clinical development, the regulatory review process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any collaborator. If any of these factors adversely affects the development or commercialization of tazemetostat, we may not be able to successfully develop or commercialize tazemetostat on a timely basis or at all, which would materially harm our business.

We may be unable to obtain or maintain, or may be delayed in obtaining or maintaining, marketing approval for our product candidates.

In January 2020, the FDA granted accelerated approval of TAZVERIK for the treatment of adults and pediatric patients ages 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection. In December 2019, we submitted a NDA for accelerated approval of TAZVERIK as a monotherapy for relapsed or refractory FL patients both with an EZH2 activating mutation or wild-type EZH2, who have received at least two prior systemic therapies. The FDA may not approve our NDA for FL under accelerated approval or at all. In addition, if the FDA only accepts or approves our application for the FL patient population with an EZH2 activating mutation, we may be required to study tazemetostat in additional wild-type FL patients or conduct additional clinical trials or preclinical studies and submit that data to regulators and resubmit an application for that patient population.

It is possible that the FDA or any other regulatory authority may refuse to accept any of our applications for approval for substantive review, or that the FDA or other regulatory authority may conclude after review of our data that our application is insufficient to obtain marketing approval of tazemetostat on an accelerated basis or at all. If the FDA does not agree that we have sufficient data to seek accelerated approval or does not approve our NDA for FL, we may be required to study tazemetostat in additional patients or conduct additional clinical trials, preclinical studies or manufacturing validation studies and submit that data to regulators before our application can be resubmitted or will be reconsidered. Depending on the extent of these or any other required trials or studies, approval of our FL NDA for tazemetostat may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional trials or studies, if performed and completed, may not be considered sufficient by the FDA to accept or approve any NDAs for tazemetostat. Any delay in obtaining, or

an inability to obtain, marketing approvals would prevent us from commercializing tazemetostat in the United States and/or abroad, generating revenue and achieving and sustaining profitability. In connection with approval of our ES NDA, and if the FDA grants accelerated approval for our FL NDA, we will need to conduct a confirmatory program in each indication, which will involve Phase 3 trials that may be expensive and time-consuming and may not confirm such benefit and subject the NDAs to withdrawal. If our confirmatory program does not verify clinical benefit, we may have to withdraw our accelerated approval indication. If any of these outcomes occurs, either to tazemetostat or to any future product candidate for which we may seek marketing approval, we may be forced to abandon our development efforts for tazemetostat or such future product candidates, which could significantly harm our business.

Tazemetostat or any other product candidate that we develop may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

Tazemetostat or any other product candidates that we develop may fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. If tazemetostat or any such product candidate that we develop does not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of tazemetostat or any other product candidates that we develop will depend on a number of factors, including:

- the efficacy and potential advantages compared to alternative treatments;
- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement;
- the prevalence and severity of any side effects;
- any safety events that may have occurred in connection with the development of the product candidate; and
- any restrictions on the use of our products together with other medications.

In addition, the potential market opportunity for tazemetostat is difficult to precisely estimate. Our estimates of the potential market opportunity for tazemetostat include several key assumptions based on our industry knowledge, industry publications, third-party research reports and other surveys. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions. If any of these assumptions proves to be inaccurate, then the actual market for tazemetostat could be smaller than our estimates of our potential market opportunity. If the actual market for tazemetostat is smaller than we expect, our product revenue may be limited and it may be more difficult for us to achieve or maintain profitability.

If we are unable to effectively establish sales, marketing and distribution capabilities, we may not be successful in commercializing tazemetostat or any other product candidates that we develop if and when the product candidate is approved.

To achieve commercial success for any product for which we have obtained marketing approval, we will need to establish a sales and marketing organization.

We have recently established and will continue to build the infrastructure necessary to support the successful commercial launch and marketing of tazemetostat and other product candidates that may receive marketing approval. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force 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 capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. These efforts may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future products;
- 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 sales and marketing organization.

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

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

The development and commercialization of new drug products is highly competitive. We face competition with respect to tazemetostat, and will likely face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of many of the disease indications for which we are developing tazemetostat. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. Tazemetostat and any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. Companies that are developing new epigenetic treatments for cancer that target histone methyltransferases, or HMTs, and protein arginine methyltransferases, or PRMTs, include GSK, Johnson & Johnson, Pfizer, Inc., Daiichi Sankyo Company Limited, and Constellation Pharmaceuticals. Further, companies which are known to have EZH2 inhibitor programs or related programs include: Constellation Pharmaceuticals, developing EZH2 inhibitors (CPI-1205, Phase 1/2, castration-resistant prostate cancer, solid tumors; CPI-0209, Phase 1/2, solid tumors), Novartis AG, developing an EED inhibitor which indirectly blocks EZH2 (MAK683, Phase 1/2, advanced malignancies), Daiichi Sankyo, developing a EZH1/EZH2 dual inhibitor (valemetostat, DS-3201, Phase 1, relapsed or refractory non-Hodgkin lymphomas, AML, ALL as well as Phase 2 for small cell lung cancer and relapsed or refractory adult T-cell leukemia/lymphoma), and Pfizer, developing EZH2 inhibitor PF-06821497, Phase 1, relapsed or refractory SCLC, castration-resistant prostate cancer, FL and diffuse large B-cell lymphoma. In July 2017, GSK discontinued their EZH2 inhibitor program, GSK2816126, which had been in Phase 1 development in solid tumors and hematological malignancies. In addition, many companies are developing cancer therapeutics that work by targeting epigenetic mechanisms other than HMTs, and some including Celgene, Merck & Co., Inc., Secura Bio, Spectrum Pharmaceuticals, and Otsuka, are now marketing cancer treatments that work by targeting epigenetic mechanisms other than HMTs. In the relapsed and refractory follicular lymphoma patient setting, both current and near term competition exists. Current competition includes CD20 combinations along with multiple Pi3K inhibitors. Near term competition includes a number of companies currently evaluating investigational agents with varying mechanisms of action. In the epithelioid sarcoma patient setting, competition includes several clinical trials run by competitors that recruit patients with soft tissue sarcoma, which is inclusive of epithelioid sarcoma.

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. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products. Generic products are currently on the market for many of the indications that we are pursuing, and additional products are expected to become available on a generic basis over the coming years. We expect that tazemetostat will be priced at a significant premium over competitive generic products.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do.

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

Tazemetostat and any other product candidate that we commercialize may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which could harm our business.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future 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 revenues 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 our product candidates obtain marketing approval.

Our ability to successfully commercialize tazemetostat or any other product candidates that we develop successfully 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. 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. 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. Coverage and reimbursement may not be available for any product that we commercialize and, even if these are available, the level of reimbursement may not be satisfactory. Reimbursement may affect the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement for our products may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside of the United States. Moreover, eligibility for reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private 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.

Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

We are conducting multiple clinical trials of tazemetostat. In addition, we believe Glaxo Group Limited (an affiliate of GlaxoSmithKline), or GSK, has initiated a Phase 2 expansion clinical trial for GSK3326595, a PRMT5 inhibitor, and has initiated patient dosing in a Phase 1 clinical trial of GSK3368715, a PRMT1 inhibitor. The risk of failure is high. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development, manufacture, and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans.

Product candidates are subject to preclinical safety studies, which may be conducted prior to or concurrently with clinical testing, as well as continued clinical safety assessment throughout clinical testing. The outcomes of these safety studies or assessments may delay the launch of or enrollment in clinical studies. For example, in the course of our preclinical safety studies of tazemetostat, we observed the development of lymphoma in Sprague-Dawley rats. As a result of these findings, coupled with our limited clinical experience in FL, at the time of the IND submission in December 2015, we were unable to conduct our Phase 2 trial of tazemetostat in FL patients in the United States until the beginning of 2017. In addition, in the second quarter of 2018, following a safety report of a pediatric patient who developed a secondary T-cell lymphoma in our ongoing Phase 1 clinical trial of tazemetostat in pediatric patients, the FDA, the French National Agency for Medicines and Health Products Safety and Germany's Federal Institute for Drugs and Medical Devices each placed a partial clinical hold on new patient enrollment in our ongoing clinical trials of tazemetostat. In September 2018, the FDA lifted the partial clinical hold on new patient enrollment in the United States, in November 2018, Germany's Federal Institute for Drugs and Medical Devices lifted the partial clinical hold in Germany, and in January 2019, the partial clinical hold was lifted in France. We have subsequently resumed enrollment in our tazemetostat clinical trials in those countries. If we or our collaborators are unable to fully and adequately address matters such as the partial clinical hold when they arise, we may be unable to conduct clinical trials of our product candidates, our trials may be limited to certain patient populations or our ability to conduct other trials in the United States or in other countries may be delayed.

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products. In our FL program, we have engaged in discussions with the FDA regarding the classification of FL patients as EZH2 mutant or wild-type patients. If the FDA does not agree with our classification of patients, particularly the wild-type patients in our studies, the FDA may disagree with our data in our patient population subsets, which could affect our ability to obtain regulatory approval of tazemetostat for one or both of the FL patient populations.

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

- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- preclinical testing may produce results based on which we may decide, or regulators may require us, to conduct additional preclinical studies before we proceed with certain clinical trials, limit the scope of our clinical trials, halt ongoing clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, or patients may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we may have to limit the scope of, suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the patients are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the patients are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; and
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or institutional review boards to suspend or terminate the trials.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling or a risk evaluation mitigation strategy that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

Our product development costs may also increase if we experience delays in clinical testing or in obtaining marketing approvals such as the delays caused by the partial clinical holds in the United States, France and Germany. We do not know whether any of our preclinical studies or clinical trials will continue or begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside of the United States. In particular, because certain of our product candidates may be focused on specific patient populations, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. In addition, some of our competitors have ongoing clinical trials for product candidates that may treat the broader patient populations within which our product candidates are being developed for the treatment of a subset of identifiable patients with cancer and other diseases, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates. For instance, our ongoing clinical trials of tazemetostat in adult and pediatric patients with INI1-negative tumors are targeting rare patient populations.

Patient enrollment is affected by other factors including:

- the severity of the disease under investigation;
- the eligibility criteria for the trial in question;
- the perceived risks and benefits of the product candidate under trial;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;
- the proximity and availability of clinical trial sites for prospective patients;
- the ability to identify specific patient populations for molecularly defined study cohorts.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, and could delay or prevent our ability to obtain marketing approval, which may cause the value of our company to decline and limit our ability to obtain additional financing.

If serious adverse or unacceptable side effects are identified during the development of our product candidates, we may need to abandon or limit our development of some of our product candidates.

If our product candidates are associated with undesirable side effects in preclinical testing or clinical trials or have characteristics that are unexpected in clinical trials or preclinical testing, we may need to abandon their development or limit 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. In pharmaceutical development, many compounds that initially show promise in early-stage testing for treating cancer are later found to cause side effects that prevent further development of the compound.

Our research and development is focused on the creation of novel epigenetic therapies for patients with cancer and other diseases, which is a rapidly evolving area of science, and the approach we are taking to discover and develop drugs is novel and may never lead to marketable products.

The discovery of novel epigenetic therapies for patients with cancer and other serious diseases is an emerging field, and the scientific discoveries that form the basis for our efforts to discover and develop product candidates are relatively new. Although epigenetic regulation of gene expression plays an essential role in biological function, few drugs premised on epigenetics have been discovered. Moreover, those drugs based on an epigenetic mechanism that have received marketing approval are in different target classes than the chromatin modifying protein, or CMP, inhibitors where our research and development is principally focused. Although preclinical studies suggest that genetic alterations can result in changes to the activity of CMPs making them oncogenic, to date no company has translated these biological observations into systematic drug discovery that has yielded a drug that has received marketing approval. We believe that our first four inhibitors of histone methyltransferases, or HMTs, in the clinic are all the first molecules against these targets to enter clinical development. Therefore, we do not know if our approach of inhibiting HMTs or other CMPs to treat patients with cancer and other serious diseases will be successful.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on research programs and product candidates that we identify for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. 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 product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

If we are required to develop a companion or complementary diagnostic and if we or our collaborators are unable to successfully develop diagnostics for our therapeutic product candidates when needed, or experience significant delays in doing so, we may not achieve marketing approval or realize the full commercial potential of our therapeutic product candidates.

We may develop, or we may work with collaborators, to develop diagnostics for our therapeutic product candidates to identify patients for our clinical trials who have the specific cancers that we are seeking to treat as appropriate and when existing, available technology may not be sufficient to identify those patients. We do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions. For example, we have entered into an agreement with Roche Molecular to develop and commercialize a diagnostic for use with tazemetostat for non-Hodgkin's lymphoma, or NHL, patients with EZH2 activating mutations. Companion or complementary diagnostics are subject to regulation by the FDA and similar regulatory authorities outside of the United States as medical devices and require separate regulatory approval prior to commercialization. If any third parties that we engage to assist us are unable to successfully develop companion or complementary diagnostics that are needed for our therapeutic product candidates, or experience delays in doing so:

- the development of our therapeutic product candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our clinical trials;
- our therapeutic product candidates may not receive marketing approval if their safe and effective use depends on a companion or complementary diagnostic; and
- we may not realize the full commercial potential of any therapeutic product candidates that receive marketing approval if, among other reasons, we are unable to appropriately identify patients with the specific genetic alterations targeted by our therapeutic product candidates.

If any of these events were to occur, our business would be harmed, possibly materially.

We may not be successful in our efforts to use and expand our proprietary drug discovery platform to build a pipeline of product candidates.

A key element of our strategy is to use and expand our proprietary drug discovery platform to build a pipeline of small molecule inhibitors of HMT and other CMP targets and progress these product candidates through clinical development for the treatment of a variety of different types of cancer and other diseases. Although our research and development efforts to date have resulted in a pipeline of programs directed to specific HMT and other CMP targets, we may not be able to develop product candidates that are safe and effective CMP inhibitors. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize product candidates based upon our technological approach, we will not be able to obtain product revenues in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price.

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

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

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

We currently hold $20.0 million in product liability insurance coverage in the aggregate, with a per incident limit of $20.0 million, which may not be adequate to cover all liabilities that we may incur. We will need to increase our insurance coverage as we expand our clinical trials and as we commercialize TAZVERIK, or any other product candidate that we develop. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Enhanced governmental and private scrutiny over, or investigations or litigation involving, pharmaceutical manufacturer donations to patient assistance programs offered by charitable foundations may require us to modify our patient support programs and could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

To help patients afford tazemetostat, we are establishing a patient assistance program. These types of programs, designed to assist patients in affording pharmaceuticals, have become the subject of scrutiny. In recent years, some pharmaceutical manufacturers were named in class action lawsuits challenging the legality of their patient assistance programs and their support of independent charitable patient support foundations in connection with such programs under a variety of federal and state laws. Our patient assistance program could become the target of similar litigation. In addition, certain state and federal enforcement authorities and members of Congress have initiated inquiries about co-pay assistance programs. Some state legislatures have also been considering proposals that would restrict or ban co-pay coupons.

In addition, there has been regulatory review and enhanced government scrutiny of donations by pharmaceutical manufacturers to patient assistance programs operated by charitable foundations. For example, the Office of Inspector General of the U.S. Department of Health & Human Services, or OIG, has established specific guidelines permitting pharmaceutical manufacturers to make donations to charitable organizations which provide co-pay assistance to Medicare patients, provided that such organizations are bona fide charities, are entirely independent of and not in any way controlled by the manufacturer, provide aid to applicants on a first-come basis according to consistent financial criteria, and do not link aid to use of a donor’s product. If we establish a program to donate to independent charitable patient support foundations and our vendors or donation recipients are deemed to fail to comply with laws or regulations in the operation of these programs, we could be subject to damages, fines, penalties or other criminal, civil or administrative sanctions or enforcement actions. Further, numerous organizations, including pharmaceutical manufacturers, have received subpoenas from the U.S. Department of Justice, or DOJ, and other enforcement authorities seeking information related to their patient assistance programs and support, and certain of these organizations have entered into, or have otherwise agreed to, significant civil settlements with applicable enforcement authorities. In connection with these civil settlements, the U.S. government has and may in the future require the affected companies to enter into complex corporate integrity agreements that impose significant reporting and other requirements on those companies. We cannot ensure that our compliance controls, policies and procedures will be sufficient to protect against acts of our employees, business partners or vendors that may potentially violate the laws or regulations of the jurisdictions in which we operate. Regardless of whether we have complied with the law, a government investigation could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred significant losses since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. Our net loss was $170.3 million for the year ended December 31, 2019, $123.6 million for the year ended December 31, 2018, and $134.3 million for the year ended December 31, 2017. As of December 31, 2019, we had an accumulated deficit of $757.0 million. We have financed our operations primarily through our collaborations, our public offerings, private placements of our common and preferred stock, our loan facility with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, and other funding transactions. All of our revenue to date has been collaboration revenue. We have devoted substantially all of our financial resources and efforts to research and development, including clinical and preclinical studies. We are still in the early to middle stages of development of our product candidates, and we have not completed development of any product candidates. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year.

We anticipate that we will continue to incur significant expenses in connection with commercializing our products, seeking marketing approval for product candidates, building our commercial organization, conducting clinical trials of tazemetostat and manufacturing products. We anticipate that these expenses will continue to increase over the next several years if and as we:

- establish a sales, marketing and distribution infrastructure and scale up external manufacturing capabilities to commercialize any products for which we may obtain regulatory approval;
- grow our medical affairs organization to provide medical support for any product candidate that is approved;
- conduct our Phase 1b/3 confirmatory trials in ES and FL;
- design and conduct new monotherapy and combination trials of tazemetostat in FL;
- conduct clinical trials or support investigator-sponsored trials to evaluate tazemetostat as a monotherapy or in combinations in additional indications;
- pay any milestone payments provided for and achieved under the amended and restated collaboration and license agreement with Eisai Co Ltd, or Eisai;
- pay interest and principal associated with our loan agreement with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, or the Loan Agreement;
- assess potential development candidates in our G9a program;
- conduct research and development under our collaboration and license agreement with Boehringer Ingelheim International GmbH;
- continue the research and development of our other product candidates;
- seek to discover and develop additional product candidates or to expand our product candidates into additional lines of treatment;
- prepare NDA submissions as we seek regulatory approvals for any product candidates that successfully complete clinical trials;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, manufacturing and scientific personnel; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

To become and remain profitable, we must generate significant revenue. The ability to generate this revenue will require us to successfully commercialize tazemetostat, which will require us to be effective in a range of challenging activities, including obtaining marketing approval for tazemetostat from the FDA for FL and other indications. We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to achieve profitability. Because of the numerous risks and uncertainties, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations. A decline in the value of our company could cause our stockholders to lose all or part of their investment in our company.

We will need substantial additional funding. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect our expenses to increase in connection with our ongoing activities, particularly as we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales, and distribution. In addition, we expect our expenses to increase as we fund our tazemetostat development program; make any milestone payments provided for and achieved under the amended and restated collaboration and license agreement with Eisai; continue our collaboration with Celgene; and continue research and development and initiate clinical trials of, and seek regulatory approval for, any future product candidates. Accordingly, we may need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on acceptable terms, we could be forced to delay, reduce or eliminate our research and development programs or our commercialization efforts.

Based on our current operating plan, we expect that our existing cash, cash equivalents and marketable securities will be sufficient to fund our planned operating expenses and capital expenditure requirements into 2022, without giving effect to milestone payments we may receive under our collaboration agreements. We have based these expectations on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Our future capital requirements will depend on many factors, including:

- the costs of commercialization activities, including product manufacturing, marketing, sales and distribution for any of our product candidates for tazemetostat;
- revenue received from commercial sales of TAZVERIK;
- the progress and results of our ongoing and planned clinical trials of tazemetostat;
- the number and development requirements of additional indications for tazemetostat and other product candidates that we may pursue, including the scope, progress, results and costs of discovery research, preclinical development, laboratory testing and clinical trials for such product candidates;
- the costs, timing and outcome of regulatory review of tazemetostat and other product candidates we may pursue;
- royalties payable by us on sales of tazemetostat under our amended and restated collaboration and license agreement with Eisai;
- our ongoing collaboration with Celgene;
- milestones, option exercise fees, license fees, and other revenues, if any, we may receive under our collaboration agreements;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights, defending any intellectual property-related claims, and challenging the intellectual property rights of others;
- the extent to which we acquire or in-license other products and technologies; and
- interest and principal payments under the Loan Agreement.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and even if regulatory approval is obtained, we may never achieve commercial success. Accordingly, we may need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. 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.

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

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings and license and development agreements with collaboration partners. We do not have any committed external source of funds other than amounts available pursuant to the Loan Agreement which amounts are subject to the satisfaction of specified conditions. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Additional debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Our existing indebtedness and the pledge of our assets as collateral limit our ability to obtain additional debt financing.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our indebtedness resulting from our Loan Agreement could adversely affect our financial condition or restrict our future operations.

On November 4, 2019, we entered into the Loan Agreement with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, or the Collateral Agent, and together with BioPharma Credit Investments V (Master) LP, the Lenders, that providing for up to $70.0 million in secured term loans to be advanced in up to three tranches, or the Loan Agreement, of which $25.0 million was drawn by us on November 18, 2019. Our ability to draw on the remaining $45.0 million under the Loan Agreement is subject to the satisfaction of certain conditions. The maturity date of the Loan Agreement is November 18, 2024, unless terminated earlier.

The Loan Agreement requires us to not have less than $45.0 million of unrestricted cash and cash equivalents, as measured on the last day of each fiscal quarter. Additionally, subject to customary exceptions and exclusions, all obligations under the Loan Agreement are secured pursuant to the terms of the Loan Agreement, a guaranty and security between us, certain of our subsidiaries, and the Collateral Agent, or the Pledge Agreement, and intellectual property and security agreements between us and Collateral Agent, or the IP Security Agreements, each dated November 18, 2019. Under the Loan Agreement, the Pledge Agreement, and the IP Security Agreements, we provided to the Lenders (i) a perfected, first-priority security interest in all of our personal property and (ii) a perfected, first-priority security interest in all of our intellectual property related to tazemetostat.

A failure to comply with the conditions of the Loan Agreement could result in an event of default. An event of default under the term loan facility includes, among other things, a failure to pay any amount due under the Loan Agreement as well as the occurrence of events that could reasonably be expected to result in a material adverse change. In the event of an acceleration of amounts due under the Loan Agreement as a result of an event of default, we may not have sufficient funds or may be unable to arrange for additional financing to repay the term loans or to make any accelerated payments.

Our limited operating history may make it difficult to evaluate the success of our business to date and to assess our future viability.

We commenced active operations in early 2008, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and, beginning in 2012, conducting clinical trials. All but four of the product candidates discovered by us are still in preclinical development. We are in the process of demonstrating our ability to obtain regulatory approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition at some point from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter-to-quarter and year-to-year due to a variety of factors, many of which are beyond our control. Accordingly, the results of any quarterly or annual periods should not be relied upon as indications of future operating performance.

Risks Related to Our Dependence on Third Parties

Our existing therapeutic collaborations are important to our business, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

Our resources for drug development are limited and we are actively building our sales, marketing, medical affairs and supply chain infrastructure. Accordingly, we have entered into therapeutic collaborations with other companies that we believe can provide such capabilities, including our collaboration and license agreements with Celgene, GSK, and Boehringer Ingelheim. We also rely on Genentech to manage our combination trial of tazemetostat and atezolizumab in relapsed or refractory DLBCL, and on the Lymphoma Study Association to manage our combination study of tazemetostat and R-CHOP in newly diagnosed, elderly, high risk patients with DLBCL. With our reacquisition of tazemetostat rights under our amended and restated collaboration and license agreement with Eisai, we do not have access to Eisai's capabilities for tazemetostat except with Eisai in Japan. Our collaborations have provided us with important funding for our development programs and product platform and we expect to receive additional funding under these collaborations in the future. Our existing therapeutic collaborations, and any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not have the ability or the development capabilities to perform their obligations as expected;
- collaborators may not pursue commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that may divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products and product candidates if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;

- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our therapeutic collaborations do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our product platform and product candidates could be delayed and we may need additional resources to develop product candidates and our product platform. All of the risks relating to product development, regulatory approval and commercialization described in our Annual Report on Form 10-K also apply to the activities of our therapeutic collaborators.

Our existing therapeutic collaborations contain restrictions on our engaging in activities that are the subject of the collaboration with third parties for specified periods of time. For example, under our collaboration agreement with Celgene, subject to specified exceptions, we may not, during the option period, research, develop or commercialize inhibitors directed to DOT1L and the three option targets covered by the agreement outside of the collaboration. These restrictions may have the effect of preventing us from undertaking development and other efforts that may appear to be attractive to us.

Additionally, subject to its contractual obligations to us, if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

For some of our product candidates or for some CMP targets, we may in the future collaborate with pharmaceutical and biotechnology companies for development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator’s resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator’s evaluation of a number of factors. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market or continue to develop our product platform and our business may be materially and adversely affected.

Failure of our third-party collaborators to successfully commercialize diagnostics, developed for use with our therapeutic product candidates, if and when needed, could harm our ability to commercialize these product candidates.

We do not plan to develop diagnostics internally and, as a result, we are dependent on the efforts of our third-party collaborators to successfully commercialize diagnostics when existing, available technology may not be sufficient to identify patients for treatment with our therapeutic product candidates. For example, we may rely on Roche Molecular to develop a companion or complementary diagnostic for detecting activating mutations in EZH2 in the tazemetostat NHL program. Our collaborators:

- may not perform their obligations as expected or have difficulty responding to accelerated approval timelines alongside the therapeutic product development;
- may encounter production difficulties that could constrain the supply of the diagnostics;
- may encounter delays or have difficulty obtaining regulatory approval for the diagnostic in target markets;
- may have difficulties gaining acceptance of the use of the diagnostics in the clinical community;
- may not pursue commercialization of any diagnostics that achieve regulatory approval;
- may elect not to continue or renew commercialization programs based on changes in the collaborators' strategic focus or available funding, or external factors such as an acquisition, that divert resources or create competing priorities;
- may not commit sufficient resources to the marketing and distribution of such product or products; and
- may terminate their relationship with us.

If diagnostics for use with our therapeutic product candidates fail to gain market acceptance, our ability to derive revenues from sales of our therapeutic product candidates could be harmed. If our collaborators fail to commercialize these diagnostics, 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 our therapeutic product candidates or do so on commercially reasonable terms, which could adversely affect and delay the development or commercialization of our therapeutic product candidates.

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

We currently rely on third-party clinical research organizations to conduct our ongoing clinical trials. We do not plan to independently conduct clinical trials of any future product candidates. We expect to continue to rely on third parties, such as clinical research organizations, research collaborative groups, clinical data management organizations, medical institutions and clinical investigators, to conduct our clinical trials. These agreements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, our product development activities might be delayed.

Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants or patients are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

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

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

We contract with third parties for the manufacture of tazemetostat for commercialization and clinical testing, and of any other product candidates that we develop for preclinical and clinical testing and for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

We do not have any manufacturing facilities and rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacture of tazemetostat and any other product candidate we develop that receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of tazemetostat or any other product candidate or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

We also expect to rely on third-party manufacturers or third-party collaborators for the manufacture of commercial supply of any other product candidates for which our collaborators or we obtain marketing approval. We may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

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

Third-party manufacturers may not be able to comply with current good manufacturing practices, or cGMP, regulations or similar regulatory requirements outside of the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products.

Tazemetostat and any other product candidate that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development, or marketing approval, and could adversely impact our ability to sell our approved products. We do not currently have arrangements in place for redundant supply or a second source for bulk drug substance and product. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers. Although we believe that there are several potential alternative manufacturers who could manufacture tazemetostat, we may incur added costs and delays in identifying and qualifying any such replacement.

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

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain patent protection for our technology and products or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and products. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and product candidates.

The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. 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. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. 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 at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

In the United States, the patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other non-United States jurisdictions to extend the term of a patent that covers an approved drug. With respect to the FDA-approval of TAZVERIK for the treatment of adult and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection, we expect to apply for patent term extension on a patent that covers TAZVERIK. In the future, if and when any additional product candidates receive FDA approval, we expect to apply for patent term extensions on patents covering those product candidates. We intend to seek patent term extensions for any of our issued patents in any jurisdiction where they are available, however there is no guarantee that the applicable authorities will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

Patent reform legislation such as the Leahy-Smith America Invents Act, or the Leahy-Smith Act, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. The Leahy-Smith Act includes a number of significant changes to United States patent law. These changes include provisions that affect the way patent applications are prosecuted, redefine prior art, provide more efficient and cost-effective avenues for competitors to challenge the validity of patents, and enable third-party submission of prior art to the U.S. Patent and Trademark Office during patent prosecution and additional procedures to attack the validity of a patent at U.S. Patent and Trademark Office administered post-grant proceedings, including

post-grant review, *inter partes* review, and derivation proceedings. In addition, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. As such, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

Moreover, we may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, 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. For example, we are involved in an opposition proceeding against one of our European patents, the claims of which cover a method for determining whether a cancer patient is a candidate for treatment with an EZH2 inhibitor based on their EZH2 mutation status. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if our owned and licensed 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 owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. 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 technology and products, or limit the duration of the patent protection of our technology and products. 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.

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 issued patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly.

We may need to license certain intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property, including patent rights, that are important or necessary to the development of our products. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we may be required to obtain a license from these third parties on commercially reasonable terms, or our business could be harmed, possibly materially.

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

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or threatened with, litigation regarding intellectual property rights with respect to our products and technology. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. For example, with respect to tazemetostat, we are aware of U.S. patents held by a third party, which could be construed to cover tazemetostat and its use in certain clinical indications. We have preemptively requested *inter partes* review at the U.S. Patent and Trademark Office challenging the validity of two of such patents.

In the event that an owner of one or more of these patents were to bring an infringement action against us, we believe we have defenses that we could assert in such event, and additionally in the U.S. Patent & Trademark Office, including the invalidity of the relevant claims of such patents. However, we may not be successful in asserting these defenses, including proving invalidity, and could be found to infringe one or more of these third party patents.

If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

If we fail to comply with our obligations in our intellectual property licenses and funding arrangements with third parties, we could lose rights that are important to our business.

We are party to license and research agreements that impose, and we may enter into additional licensing and funding arrangements with third parties that may impose, diligence, development and commercialization timelines, milestone payment, royalty, insurance and other obligations on us. Under our existing licensing and funding agreements, we are obligated to pay royalties on net product sales of product candidates or related technologies to the extent they are covered by the agreements. We also had diligence and development obligations under those agreements that we have satisfied. If we fail to comply with our obligations under current or future license and funding agreements, our counterparties may have the right to terminate these agreements, in which event we might not be able to develop, manufacture or market any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees 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 do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these employees or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

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

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

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

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside of the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Risks Related to Regulatory Approval of Our Product Candidates and Other Legal Compliance Matters

The marketing approval process is expensive, time-consuming and uncertain and may prevent us from obtaining approvals for the commercialization of some or all of our product candidates. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize tazemetostat for other indications or any other of our product candidates that we develop, and our ability to generate revenue will be materially impaired.

Our product candidates, including tazemetostat, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, export and import are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the EMA and similar regulatory authorities outside of the United States.

In December 2019 we submitted an NDA to the FDA for tazemetostat for the treatment of relapsed and refractory FL in patients who have received at least two prior systemic therapies. Failure to obtain marketing approval for tazemetostat for this indication or any other indication or of any other product candidate will prevent us from commercializing the product candidate. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and rely on third-party clinical research organizations to assist us in this process.

Securing marketing approval requires the submission of extensive preclinical, clinical and manufacturing data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety, efficacy and quality. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Our product candidates for which we seek approval may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. New cancer drugs frequently are indicated only for patient populations that have not responded to an existing therapy or have relapsed.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies, or additional manufacturing data. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

We received accelerated approval of tazemetostat in patients with epithelioid sarcoma and submitted an NDA for accelerated approval for tazemetostat in patients with relapsed or refractory FL who have received at least two prior systemic therapies in both EZH2 mutant and wild-type FL patient populations. In order to obtain accelerated approval, we must demonstrate that tazemetostat provides meaningful therapeutic benefit over existing treatments. In addition, as a condition of accelerated approval, we will need to perform post-marketing confirmatory trials to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoints, and if the studies are unsuccessful, tazemetostat may be subject to withdrawal procedures. In the case of our FL submission, if tazemetostat is approved in both EZH2 mutant and wild-type FL patient populations, the FDA could use these post-marketing studies to withdraw our approval if the confirmatory studies fail to demonstrate a clinical benefit.

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

We may not be able to obtain, or may be delayed in obtaining, orphan drug exclusivity for our product candidates and, even if we do, that exclusivity may not prevent the FDA or the EMA from approving other competing products.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug 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.

We have obtained orphan drug designations for tazemetostat for the treatment of patients with FL, chordoma, malignant rhabdoid tumors, or MRT, soft tissue sarcoma, or STS, and mesothelioma. The orphan drug designation for the treatment of MRT applies to INI1-negative MRT as well as SMARCA4-negative malignant rhabdoid tumor of ovary, or MRTO. We have also obtained orphan drug designations for tazemetostat for the treatment of patients with FL, DLBCL and malignant mesothelioma in Europe. We may not receive orphan drug designation for these product candidates for other indications, or for any other future clinical candidates we may develop.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug for the same indication for that time period. The applicable period is seven years in the United States and ten years in Europe. The exclusivity period in Europe can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition. In addition, even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

On August 18, 2017, Congress passed the FDA Reauthorization Act of 2017, or FDARA. FDARA, among other things, codified the FDA's pre-existing regulatory interpretation, to require that a drug sponsor demonstrate the clinical superiority of an orphan drug that is otherwise the same as a previously approved drug for the same rare disease in order to receive orphan drug exclusivity. The new legislation reverses prior precedent holding that the Orphan Drug Act unambiguously requires that the FDA recognize the orphan exclusivity period regardless of a showing of clinical superiority. The FDA may further reevaluate the Orphan Drug Act and its regulations and policies. We do not know if, when, or how the FDA may change the orphan drug regulations and policies in the future, and it is uncertain how any changes might affect our business. Depending on what changes the FDA may make to its orphan drug regulations and policies, our business could be adversely impacted. In addition, FDARA amended section 505B "Research into pediatric uses for drugs and biological products" of the Federal Food, Drug and Cosmetic Act (21USC 355c). Previously, drugs that had been granted orphan drug designation were exempt from the requirements of the Pediatric Research Equity Act. Under the amended section 505B, beginning on August 17, 2020, the submission of a pediatric assessment, waiver or deferral will be required for certain molecularly targeted cancer indications with the submission of an NDA application or supplement to an NDA application. Under FDARA, products with orphan drug designation that fall under this category will no longer be exempt from the pediatric research requirement. FL qualifies for an automatic full pediatric waiver by the FDA because it rarely or never occurs in pediatric patients. However, our other indications in development or future product candidates may require a pediatric assessment, which could result in delays in obtaining orphan drug exclusivity and increased costs and delays in obtaining regulatory approval.

A Fast Track designation by the FDA, such as the Fast Track designation we received for tazemetostat, may not lead to a faster development or regulatory review or approval process.

We have announced that we have received Fast Track designation from the FDA for tazemetostat for patients with relapsed or refractory FL, relapsed or refractory DLBCL with EZH2 activating mutations, and metastatic or locally advanced epithelioid sarcoma who have progressed on or following an anthracycline-based treatment regimen. We intend to seek Fast Track designation for tazemetostat for other indications and for our other product candidates as appropriate. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for FDA Fast Track designation. Drugs that have received Fast Track designation from the FDA are eligible for expedited development and priority review, and the opportunity for a rolling review, under certain circumstances. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure that the FDA would decide to grant it. Even if we do receive Fast Track designation, as we have for tazemetostat, we may not experience a faster development process, review or approval compared to conventional FDA procedures. We or the FDA may withdraw Fast Track designation if it believes that the designation is no longer supported by data from our clinical development program.

A breakthrough therapy designation by the FDA for our product candidates may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval.

A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs and biologics that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. Even if we receive breakthrough therapy designation, the receipt of such designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the products no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Failure to obtain marketing approval in foreign jurisdictions would prevent our product candidates from being marketed in those jurisdictions.

In order to market and sell tazemetostat or any other product candidate that we may develop in the European Union and many other foreign jurisdictions, we or our third-party collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside of the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside of the United States, a product must be approved for reimbursement before the product can be approved for sale in that country. We or our third-party collaborators may not obtain approvals from regulatory authorities outside of the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside of the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

Additionally, on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. Following protracted negotiations, the United Kingdom left the European Union on January 31, 2020. Under the withdrawal agreement, there is a transitional period until December 31, 2020 (extendable up to two years). Discussions between the United Kingdom and the European Union have so far mainly focused on finalizing withdrawal issues and transition agreements but have been extremely difficult to date. To date, only an outline of a trade agreement has been reached. Much remains open but the Prime Minister has indicated that the United Kingdom will not seek to extend the transitional period beyond the end of 2020. If no trade agreement has been reached before the end of the transitional period, there may be significant market and economic disruption. The Prime Minister has also indicated that the UK will not accept high regulatory alignment with the EU.

Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety, and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales, and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime that applies to products and the approval of product candidates in the United Kingdom. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, may force us to restrict or delay efforts to seek regulatory approval in the United Kingdom and/or European Union for our product candidates, which could significantly and materially harm our business.

If we are required by the FDA to obtain approval of a companion or complementary diagnostic in connection with approval of a candidate therapeutic product, and there are delays in obtaining FDA approval of a diagnostic device, we will not be able to commercialize the product candidate and our ability to generate revenue will be materially impaired.

According to FDA guidance, if the FDA determines that a companion or complementary diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, the FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion or complementary diagnostic is not also approved or cleared for that indication. Under the Federal Food, Drug, and Cosmetic Act, companion or complementary diagnostics are regulated as medical devices, and the FDA has generally required companion or complementary diagnostics intended to select the patients who will respond to cancer treatment to obtain Premarket Approval, or a PMA, for the diagnostic. The PMA process, including the gathering of clinical, preclinical, and manufacturing data, and the submission to and review by the FDA, involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device’s

safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. A PMA is not guaranteed and may take considerable time, and the FDA may ultimately respond to a PMA submission with a "not approvable" determination based on deficiencies in the application and require additional clinical trial or other data that may be expensive and time-consuming to generate and that can substantially delay approval. As a result, if we are required by the FDA to obtain approval of a companion or complementary diagnostic for a candidate therapeutic product, and we do not obtain or there are delays in obtaining FDA approval of a diagnostic device, we may not be able to commercialize the product candidate on a timely basis or at all and our ability to generate revenue will be materially impaired.

Tazemetostat and any other product candidate for which we obtain marketing approval could be subject to post-marketing restrictions or withdrawal from the market and we may be subject to substantial penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Tazemetostat and any other product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. As a condition of accelerated approval, the FDA may require a sponsor to perform post-marketing confirmatory study(ies) to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug may be subject to accelerated withdrawal procedures. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, including the requirement to implement a risk evaluation and mitigation strategy. New cancer drugs frequently are indicated only for patient populations that have not responded to an existing therapy or have relapsed. If tazemetostat or any other product candidate that we may develop receives marketing approval, the accompanying label may limit the approved use of our drug in this way, which could limit sales of the product.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product. The FDA and other agencies, including the Department of Justice, or the DOJ, closely regulate and monitor the post-approval marketing and promotion of drugs to ensure they are marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA and DOJ impose stringent restrictions on manufacturers' communications regarding off-label use, and if we do not market our products for their approved indications, we may be subject to enforcement action for off-label marketing. Violations of the Federal Food, Drug, and Cosmetic Act and other statutes, including the False Claims Act, relating to the promotion and advertising of prescription drugs may lead to investigations and enforcement actions alleging violations of federal and state health care fraud and abuse laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;

- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with any potential collaborators;
- unfavorable press coverage and damage to our reputation;
- refusal to permit the import or export of our products;
- product seizure;
- injunctions or the imposition of civil or criminal penalties; or
- litigation involving patients using our products.

Non-compliance with European Union and United Kingdom requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties.

Similarly, failure to comply with the European Union's and the United Kingdom's requirements regarding the protection of personal information can also lead to significant penalties and sanctions. The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the EU General Data Protection Regulation, or GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the U.S., and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities.

Our relationships with healthcare providers, physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which, in the event of a violation, could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates, including tazemetostat, for which we obtain marketing approval. Our future arrangements with healthcare providers, physicians and third-party payors 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 products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation or arranging of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of arrangement involving remuneration is to induce referrals of a federal healthcare covered business, the statue has been violated. In addition, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, the PPACA, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it to have committed a violation. The Anti-Kickback statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs;

- the federal False Claims Act imposes criminal and civil penalties, including through civil whistleblower or *qui tam* actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, false or fraudulent claims for payment by a federal healthcare program or making a false statement or record material to payment of a false claim or avoiding, decreasing or concealing an obligation to pay money to the federal government, with potential liability including mandatory treble damages and significant per-claim penalties, currently set at a minimum of $11,181 and a maximum of $22,363 per false claim;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act requires applicable manufacturers of covered drugs to report payments and other transfers of value to physicians and teaching hospitals; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws and transparency statutes, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. For example, European Union, or EU, member states and other foreign jurisdictions, including Switzerland, have adopted data protection laws and regulations which impose significant compliance obligations. Moreover, the collection and use of personal health data in the EU is governed by the provisions of the EU General Data Protection Regulation, or the GDPR. The GDPR, which is wide-ranging in scope, imposes several requirements relating to the control over personal data by individuals to whom the personal data relates, the information provided to the individuals, the documentation we must maintain, the security and confidentiality of the personal data, data breach notification and the use of third-party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the EU, provides an enforcement authority and authorizes the imposition of large penalties for noncompliance, including the potential for fines of up to €20 million or 4% of the annual global revenues of the non-compliant company, whichever is greater. The GDPR requirements apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, including employee information. The GDPR may increase our responsibility and potential liability in relation to personal data that we may process compared to prior EU law, including in clinical trials, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, which could divert management's attention and increase our cost of doing business.

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 physicians is governed by the national anti-bribery laws of European Union Member States, such as the U.K. Bribery Act 2010. Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain European Union 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 European Union Member States. These requirements are provided in the national laws, industry codes or professional codes of conduct applicable in the European Union Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

Efforts to ensure that our business with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. For instance, the U.S. Foreign Corrupt Practices Act, or FCPA, prohibits companies and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under the FCPA, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, governmental staff members, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls.

In order to comply with these laws, we have implemented a compliance program to actively identify, prevent and mitigate risk through the implementation of compliance policies and systems and by promoting a culture of compliance. Although we take our obligation to maintain our compliance with these various laws and regulations seriously and our compliance program is designed to prevent the violation of these laws and regulations, we cannot guarantee that our compliance program will be sufficient or effective, that we will be able to integrate the operations of acquired businesses into our compliance program on a timely basis, that our employees will comply with our policies and that our employees will notify us of any violation of our policies, that we will have the ability to take appropriate and timely corrective action in response to any such violation, or that we will make decisions and take actions that will necessarily limit or avoid liability for whistleblower claims that individuals, such as employees or former employees, may bring against us or that governmental authorities may prosecute against us based on information provided by individuals. If we are found to be in violation of any of the laws and regulations described above or other applicable state and federal healthcare laws, we may be subject to penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, contractual damages, reputational harm, imprisonment, diminished profits and future earnings, exclusion from government healthcare reimbursement programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and/or the curtailment or restructuring of our operations, any of which could have a material adverse effect on our business, results of operations and growth prospects. Any action against us for violation of these laws or regulations, 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. Moreover, achieving and sustaining compliance with applicable federal, state and foreign healthcare laws is costly and time-consuming for our management.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval. In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. 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 reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

In March 2010, the U.S. Congress PPACA, a sweeping law which included changes to the coverage and reimbursement of drug products under government healthcare programs.

Among the provisions of the PPACA of importance to our potential product candidates are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;

- a Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- requirements to report financial arrangements with physicians and teaching hospitals;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Further, other legislative changes have been proposed and adopted since the PPACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. In January 2013, the American Taxpayer Relief Act of 2012 became law, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

We expect that these healthcare reforms, 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, new payment methodologies and additional downward pressure on the price that we receive for any approved product and/or the level of reimbursement physicians receive for administering any approved product we might bring to market. Reductions in reimbursement levels may negatively impact the prices we receive or the frequency with which our products are prescribed or administered. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

Since enactment of the PPACA, there have been, and continue to be, numerous legal challenges and Congressional actions to repeal and replace provisions of the law. For example, with enactment of the Tax Cuts and Jobs Act of 2017, which was signed by President Trump on December 22, 2017, Congress repealed the "individual mandate." The repeal of this provision, which requires most Americans to carry a minimal level of health insurance, will become effective in 2019. Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the PPACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. Further, the Bipartisan Budget Act of 2018, among other things, amended the PPACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." The Congress may consider other legislation to replace elements of the PPACA during the next Congressional session.

The Trump administration has also taken executive actions to undermine or delay implementation of the PPACA. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of certain provisions of the PPACA or otherwise circumvent some of the requirements for health insurance mandated by the PPACA. One Executive Order directs federal agencies with authorities and responsibilities under the PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. The second Executive Order terminates the cost-sharing subsidies that reimburse insurers under the PPACA. Several state Attorneys General filed suit to stop the Trump administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. In addition, Centers for Medicare & Medicaid Services, or CMS,

has proposed regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the PPACA for plans sold through such marketplaces. On November 30, 2018, CMS announced a proposed rule that would amend the Medicare Advantage and Medicare Part D prescription drug benefit regulations to reduce out of pocket costs for plan enrollees and allow Medicare plans to negotiate lower rates for certain drugs. Among other things, the proposed rule changes would allow Medicare Advantage plans to use preauthorization, or PA, and step therapy, or ST, for six protected classes of drugs; with certain exceptions, permit plans to implement PA and ST in Medicare Part B drugs; and change the definition of "negotiated prices" while a definition of "price concession" in the regulations. It is unclear whether these proposed changes will be accepted, and if so, what effect such changes will have on our business. Further, on June 14, 2018, U.S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay more than $12 billion in PPACA risk corridor payments to third-party payors who argued were owed to them. This decision is under review by the U.S. Supreme Court during its current term. The effects of this gap in reimbursement on third-party payors, the viability of the PPACA marketplace, providers, and potentially our business, are not yet known.

In addition, on December 14, 2018, a U.S. District Court judge in the Northern District of Texas ruled that the individual mandate portion of the PPACA is an essential and inseverable feature of the PPACA, and therefore because the mandate was repealed as part of the Tax Cuts and Jobs Act, the remaining provisions of the ACA are invalid as well. The Trump administration and CMS have both stated that the ruling will have no immediate effect, and on December 30, 2018 the same judge issued an order staying the judgment pending appeal. The Trump Administration recently represented to the Court of Appeals considering this judgment that it does not oppose the lower court's ruling. On July 10, 2019, the Court of Appeals for the Fifth Circuit heard oral argument in this case. On December 18, 2019, that court affirmed the lower court's ruling that the individual mandate portion of the PPACA is unconstitutional and it remanded the case to the district court for reconsideration of the severability question and additional analysis of the provisions of the PPACA. On January 21, 2020, the U.S. Supreme Court declined to review this decision on an expedited basis. Litigation and legislation over the PPACA are likely to continue, with unpredictable and uncertain results.

Specifically, there have been several recent U.S. congressional inquiries and proposed federal and proposed and enacted state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare and reform government program reimbursement methodologies for drug products. At the federal level, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. For example, on May 11, 2018, the Trump administration issued a plan to lower drug prices. Under this blueprint for action, the Trump administration indicated that the Department of Health and Human Services, or HHS, will: take steps to end the gaming of regulatory and patent processes by drug makers to unfairly protect monopolies; advance biosimilars and generics to boost price competition; evaluate the inclusion of prices in drug makers' ads to enhance price competition; speed access to and lower the cost of new drugs by clarifying policies for sharing information between insurers and drug makers; avoid excessive pricing by relying more on value-based pricing by expanding outcome-based payments in Medicare and Medicaid; work to give Medicare Part D plan sponsors more negotiation power with drug makers; examine which Medicare Part B drugs could be negotiated for a lower price by Medicare Part D plans, and improving the design of the Medicare Part B Competitive Acquisition Program; update Medicare's drug-pricing dashboard to increase transparency; prohibit Medicare Part D contracts that include "gag rules" that prevent pharmacists from informing patients when they could pay less out-of-pocket by not using insurance; and require that Medicare Part D plan members be provided with an annual statement of plan payments, out-of-pocket spending, and drug price increases. In addition, on December 23, 2019, the Trump Administration published a proposed rulemaking that, if finalized, would allow states or certain other non-federal government entities to submit importation program proposals to the FDA for review and approval. Applicants would be required to demonstrate their importation plans pose no additional risk to public health and safety and will result in significant cost savings for consumers. At the same time, the FDA issued draft guidance that would allow manufacturers to import their own FDA-approved drugs that are authorized for sale in other countries (multi-market approved products).

The costs of prescription pharmaceuticals in the United States has also been the subject of considerable discussion in the United States, and members of Congress and the Trump administration have stated that they will address such costs through new legislative and administrative measures.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. Increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

Governments outside of the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our ability to generate revenues and become profitable could be impaired, or our business could be harmed, possibly materially.

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 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.

Our employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

Our internal information systems, or those of any collaborators, contractors, consultants, vendors, business partners or other third parties, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

We collect, store and transmit large amounts of confidential information, including personal information and information relating to intellectual property, on internal information systems and through the information systems of our collaborators, contractors, consultants, vendors, business partners or other third parties.

Despite the implementation of security measures, our internal information systems and those of third parties are vulnerable to damage from computer viruses, malware, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such systems are also vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, our collaborators, contractors, consultants, vendors, business partners and other third parties, or from cyberattacks by malicious third parties over the Internet or through other mechanisms. Cyberattacks are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. Cyberattacks could include the deployment of harmful malware, ransomware, denial of service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information. Cyberattacks also could include phishing attempts or e-mail fraud to cause payments or information to be transmitted to an unintended recipient.

While we have not experienced any such material system failure, accident, cyber-attack or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs, clinical trials and business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions, in addition to possibly requiring substantial expenditures of resources to remedy. For example, the loss of clinical trial data from clinical trials could result in delays or termination of our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, as risks with respect to our information systems continue to evolve, we will incur additional costs to maintain the security of our information systems and comply with evolving laws and regulations pertaining to cybersecurity and related areas. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, including regulatory fines and other losses with respect to privacy claims, enrollment in our clinical trials could be negatively affected, our competitive position and reputation could be harmed and the further development and commercialization of our product candidates could be delayed.

Risks Related to Employee Matters and Managing Growth

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

We are highly dependent on the research and development, clinical and business expertise of our executive officers as well as the other principal members of our management, scientific and clinical teams. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. For instance, since January 1, 2017, we have had multiple executive officers, including among others our former Executive Vice President and Chief Financial Officer, our former Chief Business Officer, our former President of Research and Chief Scientific Officer, and our former Executive Vice President and Chief Medical Officer terminate their employment with us. We do not maintain “key person” insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing, regulatory, and 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 our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, universities and research institutions for similar personnel. 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.

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

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, regulatory affairs and, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Risks Related to Our Common Stock

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

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

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 75% of the votes that all our stockholders would be entitled to cast to amend or repeal specified provisions of our certificate of incorporation or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

An active trading market for our common stock may not be sustained.

Although our common stock is listed on The Nasdaq Global Select Market, an active trading market for our shares may not be sustained. If an active market for our common stock does not continue, it may be difficult for our stockholders to sell their shares without depressing the market price for the shares or sell their shares at all. Any inactive trading market for our common stock may also impair our ability to raise capital to continue to fund our operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

The price of our common stock has been and may in the future be volatile and fluctuate substantially.

Our stock price has been and may in the future be volatile. The stock market in general and the market for smaller biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. From January 1, 2017 until February 25, 2020, the sale price of our common stock as reported on the Nasdaq Global Select Market ranged from a high of $27.82 to a low of $5.14. The market price for our common stock may be influenced by many factors, including:

- the commercial success of tazemetostat;
- regulatory developments with respect to tazemetostat, including with respect to our efforts to obtain approval with respect to our FL NDA;
- the success of competitive products or technologies;
- results of clinical trials of our product candidates or those of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or the financial results of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this Risk Factors section.

We have broad discretion over the use of our cash and cash equivalents and may not use them effectively.

Our management has broad discretion to use our cash and cash equivalents to fund our operations and could spend these funds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use to fund operations, we may invest our cash and cash equivalents in a manner that does not produce income or that loses value.

The Tax Cuts and Jobs Act of 2017 could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act of 2017, which significantly revised the Internal Revenue Code of 1986, as amended. The newly enacted federal income tax law, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain and our business and financial condition could be adversely affected. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. We urge our stockholders to consult with their legal and tax advisors with respect to this legislation and the potential tax consequences of investing in or holding our common stock.

We will continue to incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance initiatives and corporate governance practices.

As a public company, and particularly now that we are no longer an emerging growth company as of January 1, 2019, we will continue to incur significant legal, accounting and other expenses. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The Nasdaq Global Select Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to continue to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and make some activities more time-consuming and costly.

We cannot predict or estimate the amount of additional costs we may incur to continue to operate as a public company, nor can we predict the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we are required to furnish a report by our management on our internal control over financial reporting. Now that we are no longer an emerging growth company, we are also required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we are engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we have and will need to continue to dedicate internal resources, 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. If we or our auditors identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

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

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. The terms of our Loan Agreement restrict our ability to pay dividends. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for our stockholders for the foreseeable future.

If securities or industry analysts do not continue to publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common stock may be impacted, in part, by the research and reports that securities or industry analysts publish about us or our business. There can be no assurance that analysts will cover us, continue to cover us or provide favorable coverage. If one or more analysts downgrade our stock or change their opinion of our stock, our share price may decline. In addition, if one or more analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

There is no public market for our series A convertible preferred stock.

There is no established public trading market for our series A convertible preferred stock, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the series A convertible preferred stock on any national securities exchange or other nationally recognized trading system. Without an active market, the liquidity of the series A convertible preferred stock will be limited.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters are located in Cambridge, Massachusetts, where we occupy approximately 43,066 square feet of office and laboratory space. The term of the lease to our Cambridge headquarters expires November 30, 2022. In addition, we occupy an additional 33,525 square feet in Cambridge, Massachusetts. The term of this lease ends on March 31, 2027, but we have an option to extend the term for one additional five-year period.

Item 3. Legal Proceedings

We are not currently a party to any material legal proceedings.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Our common stock is traded on the Nasdaq Global Select Market under the symbol "EPZM." Trading of our common stock commenced on May 31, 2013, following the completion of our initial public offering. The following table sets forth the high and low sale prices per share of our common stock, as reported on the Nasdaq Global Select Market, for the periods indicated:

	Market Price	
	High	Low
Year ended December 31, 2019:		
Fourth quarter	$ 25.00	$ 9.74
Third quarter	$ 14.20	$ 9.89
Second quarter	$ 16.59	$ 11.23
First quarter	$ 14.95	$ 5.81
Year ended December 31, 2018:		
Fourth quarter	$ 11.00	$ 5.14
Third quarter	$ 14.25	$ 8.61
Second quarter	$ 18.70	$ 12.56
First quarter	$ 21.40	$ 12.35

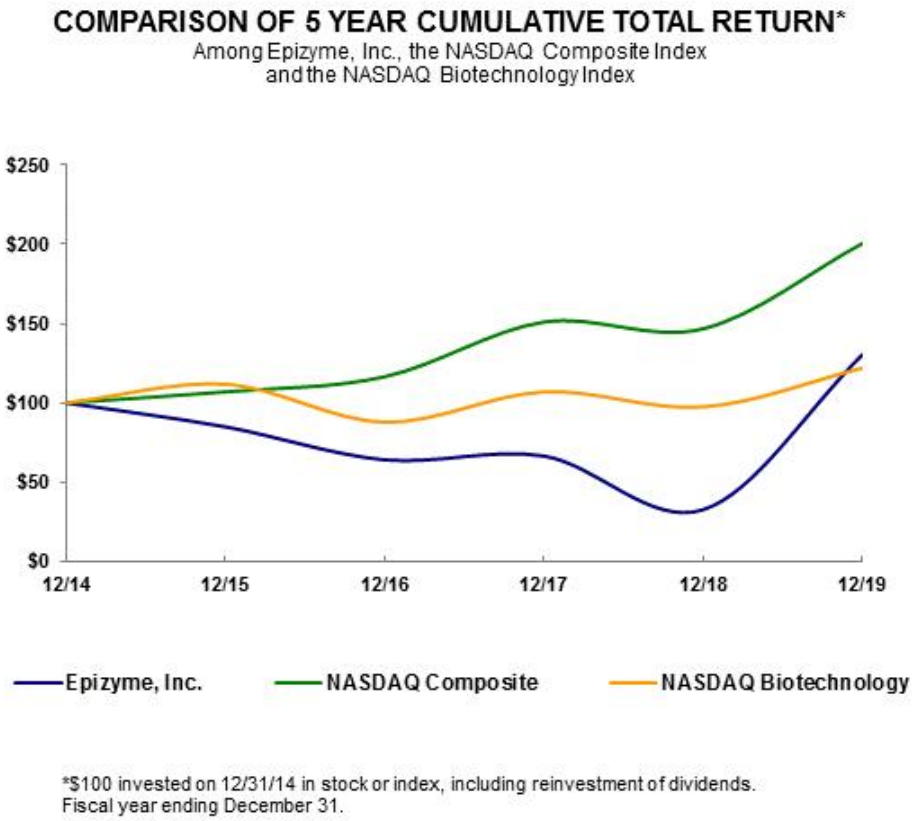
As of February 14, 2020, the number of holders of record of our common stock was 19. This number does not include beneficial owners whose shares are held in street name.

Dividends

We have never declared or paid cash dividends on our capital stock. We intend to retain all of our future earnings, if any, to finance the growth and development of our business. The terms of our loan agreement with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, or the Loan Agreement, restrict our ability to pay dividends. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

Stock Performance Graph

The following graph shows a comparison from December 31, 2014 through December 31, 2019 of the cumulative total return on an assumed investment of $100.00 in cash in our common stock, the Nasdaq Composite Index and the NASDAQ Biotechnology Index. Such returns are based on historical results and are not intended to suggest future performance. Data for the NASDAQ Composite Index and NASDAQ Biotechnology Index assume reinvestment of dividends.



The performance graph in this Item 5 is not deemed to be “soliciting material” or to be “filed” with the SEC for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section, and shall not be deemed incorporated by reference into any of our filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate it by reference into such a filing.

Item 6. Selected Financial Data

The following selected financial data has been derived from our consolidated financial statements. The information set forth below should be read in conjunction with Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* and with our consolidated financial statements and notes thereto included elsewhere in this document.

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Collaboration revenue	$ 23,800	$ 21,700	$ 10,000	$ 8,007	$ 2,560
Operating expenses:					
Research and development	132,639	105,833	109,661	91,461	111,209
General and administrative	68,303	43,972	37,181	28,372	23,900
Total operating expenses	200,942	149,805	146,842	119,833	135,109
Operating loss	(177,142)	(128,105)	(136,842)	(111,826)	(132,549)
Other income, net	6,905	4,532	2,197	1,614	173
Income tax benefit (expense)	(58)	(57)	336	—	—
Net loss	$ (170,295)	$ (123,630)	$ (134,309)	$ (110,212)	$ (132,376)
Accretion of convertible preferred stock	(2,940)	—	—	—	—
Net loss attributable to common stockholders	$ (173,235)	$ (123,630)	$ (134,309)	$ (110,212)	$ (132,376)
Basic and diluted loss per share attributable to common stockholders	$ (1.93)	$ (1.72)	$ (2.18)	$ (1.93)	$ (3.32)
Basic and diluted weighted average shares outstanding used in net loss per share attributable to common stockholders	89,891	71,864	61,471	57,126	39,839

	As of December 31,				
	2019	2018	2017	2016	2015
	(In thousands)				
Consolidated Balance Sheets Data:					
Cash and cash equivalents	$ 139,482	$ 86,671	$ 226,664	$ 77,895	$ 208,323
Marketable securities	241,605	153,633	49,775	164,297	—
Total assets	424,589	275,501	289,359	252,441	217,903
Total current liabilities	34,386	37,833	24,664	21,621	18,449
Deferred revenue	3,806	17,106	28,809	28,809	30,709
Long-term debt, net of debt discount	23,309	—	—	—	—
Liability related to sale of future royalties	12,793	—	—	—	—
Total stockholders' equity	331,137	233,009	235,371	201,700	169,532

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

Our management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements included in this Annual Report on Form 10-K, which have been prepared by us in accordance with accounting principles generally accepted in the United States, or GAAP, and with Regulation S-X promulgated under the Securities Exchange Act of 1934, as amended. This discussion and analysis should be read in conjunction with these consolidated financial statements and the notes thereto included elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in Part I, Item 1A. *Risk Factors* of this Annual Report on Form 10-K, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a biopharmaceutical company that is committed to rewriting treatment for people with cancer and other serious diseases through the discovery, development, and commercialization of novel epigenetic medicines. By focusing on the genetic drivers of disease, our science seeks to match targeted medicines with the patients who need them.

In January 2020, the U.S. Food and Drug Administration, or FDA, granted accelerated approval of TAZVERIK™ (tazemetostat) for the treatment of adult and pediatric patients aged 16 years and older with metastatic or locally advanced epithelioid sarcoma not eligible for complete resection. This approval was based on overall response rate and duration of response shown in the epithelioid sarcoma cohort of our Phase 2 trial in patients with INI1-negative tumors. The commercial launch is underway, and we have made TAZVERIK available to eligible patients and their physicians in the United States.

As part of the accelerated approval for epithelioid sarcoma, continued approval for this indication is contingent upon verification and description of clinical benefit in a confirmatory trial. To provide this confirmatory evidence to support a full approval of tazemetostat for this indication, we are conducting a global, randomized, controlled Phase 1b/3 confirmatory trial assessing TAZVERIK in combination with doxorubicin compared with doxorubicin plus placebo as a front-line treatment for epithelioid sarcoma. The safety run-in portion of the trial is underway, and we expect to advance the trial into the Phase 3 portion in 2020.

In December 2019, we submitted a New Drug Application, or NDA, to the FDA for accelerated approval of TAZVERIK for patients with relapsed or refractory follicular lymphoma, or FL, who have received at least two prior lines of systemic therapy. In February 2020, the NDA was accepted for filing by the FDA. The FDA granted priority review and has designated the application as a supplemental NDA, or sNDA, with a Prescription Drug User Fee Act, or PDUFA, target action date of June 18, 2020. Priority review is granted to investigational therapies that, if approved, may offer significant improvements in the treatment, prevention or diagnosis of a serious condition. The sNDA submission is based primarily on efficacy and safety data from the cohorts evaluating TAZVERIK as a monotherapy for patients with relapsed or refractory FL, both with and without EZH2 activating mutations, who have received two or more prior systemic therapies in our multi-cohort Phase 2 trial in patients with relapsed or refractory non-Hodgkin's lymphoma, or NHL.

As part of our accelerated approval strategy for FL, we have initiated a single trial to provide confirmatory evidence to support a full approval submission of TAZVERIK for this indication. The trial is a global, randomized, controlled Phase 1b/3 clinical trial comparing TAZVERIK in combination with the FDA-approved chemotherapeutic-free regimen known as R^2 (REVLIMID plus rituximab) compared with R^2 plus placebo in FL patients who have been treated with at least one prior systemic therapy. The safety run-in portion of the trial is underway, and we expect to advance it into the Phase 3 portion in 2020.

Through our planned development efforts, our intention is to make TAZVERIK available in all lines of treatment for patients with FL. We plan to leverage the confirmatory trial to expand TAZVERIK into the second-line treatment setting. In collaboration with The Lymphoma Study Association, or LYSA, and based on clinical activity observed with TAZVERIK in combination with R-CHOP as a front-line treatment for patients with high risk diffuse large B-cell lymphoma, or DLBCL, we plan to investigate this combination as a front-line treatment for high-risk patients with FL. In addition, we are finalizing plans for investigator-sponsored studies to evaluate tazemetostat in combination with rituximab, venetoclax or BTK inhibitors for the treatment of patients with FL in the third-line or later treatment settings.

Tazemetostat is an oral, first in class, selective small molecule inhibitor of the EZH2 histone methyltransferase, or HMT, that we are developing for the treatment of a broad range of cancer types in multiple treatment settings. Tazemetostat has shown meaningful clinical activity as an investigational monotherapy in multiple cancer indications and has been generally well-tolerated across clinical trials to date. We believe tazemetostat is a "pipeline in a product" opportunity and plan to explore its utility as a monotherapy and in combinations through both company and investigator-sponsored studies in additional indications, including:

- Lymphomas and B-cell malignancies, such as DLBCL, mantle cell lymphoma, or MCL, chronic lymphocytic leukemia, or CLL, chronic myeloid leukaemia, or CML, and others;
- Mutationally defined solid tumors, such as chordoma, melanoma, mesothelioma, and tumors harboring an EZH2 or SWI/SNF alteration;
- Chemotherapy or treatment-resistant tumors, such as triple-negative breast cancer, small cell lung cancer, ovarian cancer, and metastatic castration-resistant prostate cancer; and,
- Immuno-oncology-sensitive tumors, such as colorectal cancer, bladder cancer, soft tissue sarcomas and non-small cell lung cancer.

We own the global development and commercialization rights to tazemetostat outside of Japan. Eisai Co. Ltd, or Eisai, holds the rights to develop and commercialize tazemetostat in Japan.

TAZVERIK is available to eligible patients in the United States via a specialty distribution network. To commercialize TAZVERIK for the epithelioid sarcoma indication in the United States, we have built a focused field presence and marketing capabilities. This includes an efficiently sized field-based organization of 19 individuals. We have initiated our FL launch readiness activities and are expanding our infrastructure to support the launch and marketing of tazemetostat for FL in the United States, if approved. Our sales leadership team is in place, and we have completed our hiring of our sales representatives. For geographies outside the United States, we are evaluating the most efficient path to reach patients, including through potential collaborations.

Tazemetostat is covered by claims of U.S. and European composition of matter patents, which are expected to expire in 2032, exclusive of any patent term or other extensions. Tazemetostat has been granted Fast Track designation by the FDA in patients with relapsed or refractory FL, relapsed or refractory DLBCL with EZH2 activating mutations and metastatic or locally advanced epithelioid sarcoma who have progressed on or following an anthracycline-based treatment regimen. The FDA has also granted orphan drug designation to tazemetostat for the treatment of patients with FL, malignant rhabdoid tumors, or MRT, soft tissue sarcoma, or STS, and mesothelioma. The orphan drug designation for the treatment of MRT applies to INI1-negative MRT as well as SMARCA4-negative malignant rhabdoid tumor of ovary, or MRTO.

Beyond tazemetostat, we are progressing preclinical efforts to pursue additional development candidates for our pipeline and to further support our leadership position in epigenetics.

In November 2018, we entered a strategic collaboration with Boehringer Ingelheim International GmbH, or Boehringer Ingelheim, focused on the research, development and commercialization of novel small molecule inhibitors, discovered by us, directed toward two previously unaddressed epigenetic targets as potential therapies for people with cancer. Specifically, these targets are enzymes within the helicase and histone acetyltransferase, or HAT, families that when dysregulated have been linked to the development of cancers that currently lack therapeutic options. We also have collaborations with Glaxo Group Limited (an affiliate of GlaxoSmithKline), or GSK, focused on the development of PRMT inhibitors discovered by us, and with Celgene Corporation, which was recently acquired by Bristol-Myers Squibb, and Celgene RIVOT Ltd., an affiliate of Celgene Corporation, which we collectively refer to as Celgene, focused on the development of pinometostat and small molecule inhibitors directed to three HMT targets.

Through December 31, 2019, we have raised an aggregate of $1,280.7 million to fund our operations. This included $242.1 million of non-equity funding through our collaboration agreements, $123.1 million of funding received through agreements with Royalty Pharma and Pharmakon Advisors consisting of $100.0 million in consideration received and $25.0 million for the first tranche of borrowings less debt issuance costs of $1.7 million, $839.5 million from the sale of common stock and series A Convertible Preferred Stock in our public offerings and $76.0 million from the sale of redeemable convertible preferred stock in private financings prior to our initial public offering in May 2013.

As of December 31, 2019, we had $381.1 million in cash, cash equivalents and marketable securities.

We commenced active operations in early 2008, and since inception, have incurred significant operating losses. As of December 31, 2019, our accumulated deficit totaled $757.0 million. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We expect our expenses to increase in connection with our ongoing activities, particularly as we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. In addition, we expect our expenses to increase as we fund our tazemetostat development program; make any milestone payments provided for and achieved under the amended and restated collaboration and license agreement with Eisai; continue our collaboration with Celgene; and continue research and development and initiate clinical trials of, and seek regulatory approval for, any future product candidates.

Funding Agreements with BioPharma Credit Investments V (Master) LP, BioPharma Credit PLC and RPI Finance Trust

We executed a purchase agreement with RPI on November 4, 2019, or the RPI Purchase Agreement. Pursuant to the RPI Purchase Agreement, we sold to RPI 6,666,667 shares of our common stock and a warrant to purchase up to 2,500,000 shares of our common stock at an exercise price of $20.00 per share, or the Warrant. We also sold our rights to receive royalties from Eisai with respect to net sales by Eisai of tazemetostat products in Japan, or the Japan Royalty, pursuant to the amended and restated collaboration and license agreement between us and Eisai, dated as of March 12, 2015, or the Eisai License Agreement. In consideration for the sale of shares of our common stock, the Warrant and the Japan Royalty, RPI paid us $100.0 million upon the closing of the RPI Purchase Agreement in November 2019. In addition, RPI agreed, in connection with RPI's acquisition from Eisai of the right to receive royalties from us under the Eisai License Agreement, to reduce our royalty obligation by low single digits upon the achievement of specified annual net sales levels. We also had the option to sell to RPI $50.0 million of shares of common stock for an 18-month period beginning November 4, 2019, or the Put Option. On February 11, 2020, we sold 2,500,000 shares of common stock to RPI for an aggregate of $50.0 million in proceeds at a sale price of $20.00 per share of common stock pursuant to the Put Option.

On November 4, 2019, we also entered into a Loan Agreement with BioPharma Credit PLC, or the Collateral Agent, and BioPharma Credit Investments V (Master) LP, or the Lenders, providing for up to $70.0 million in secured term loans to be advanced in up to three tranches, or the Loan Agreement. We may borrow $25.0 million under each of the first two tranches and $20.0 million under the third tranche. We also have the right to request up to an additional $300.0 million in secured term loans, subject to the approval of BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, following FDA approval of tazemetostat for the treatment of FL in the United States, provided that we have not prepaid any outstanding term loans at the time of such request and such request is made before November 18, 2021.

On November 18, 2019, we borrowed the first tranche of $25.0 million, or the Tranche A Loan. Our right to borrow, and the Lenders' obligation to lend, under the second tranche is subject to FDA approval of tazemetostat for the treatment of epithelioid sarcoma in the United States, among other closing conditions. Our right to borrow, and the Lenders' obligation to lend, under the third tranche is subject to FDA approval of tazemetostat for the treatment of FL in the United States, among other closing conditions. Unless the conditions are satisfied and the amounts are borrowed prior to such dates, the Lenders' obligation to lend funds under the second tranche will expire on March 31, 2020, and the Lenders' obligation to lend funds under the third tranche will expire on December 31, 2020. We expect to borrow the second tranche of $25.0 million in March 2020 in conjunction with the Eisai milestone payment that was triggered upon receipt of FDA approval of our NDA of tazemetostat for the treatment of epithelioid sarcoma.

Under the terms of the Loan Agreement, we are required to make quarterly interest only payments following the closing of Tranche A Loan and eight equal quarterly payments of principal starting February 28, 2023 through November 18, 2024. Interest rates for the term loans will be determined by reference to a Eurodollar rate plus 7.75% above such Eurodollar rate. The Eurodollar rate will have a 2.00% floor. The term loans will be due in eight equal quarterly principal payments commencing on the first business day on or following the 39th month anniversary of November 18, 2019. All accrued and unpaid interest under any tranches actually borrowed will be due and payable on the 60th month anniversary of November 18, 2019. We may prepay the term loans before maturity in whole or in part. If we prepay any term loan, in whole or in part, during the first 36 months after November 18, 2019, then we must pay a prepayment premium equal to the greater of the amount of interest that would have accrued on the principal amount to be prepaid in the absence of any prepayment and a premium equal to 0.03 multiplied by the principal amount to be prepaid. If we prepay a term loan, in whole or in part, between the 36th month and 48th month after November 18, 2019, then we must pay a prepayment premium equal to 0.02 multiplied by the after amount to be prepaid. If we prepay a term loan, in whole or in part, between the 48th month and 60th month from November 18, 2019, then we must pay a prepayment premium equal to 0.01 multiplied by the principal amount to be prepaid.

The obligations under the Loan Agreement are secured by a first priority security interest in and a lien on substantially all of our assets, subject to certain exceptions.

The Loan Agreement contains certain customary representations and warranties, affirmative and negative covenants and events of default applicable to us and our subsidiaries. We will be required to comply at all times with a minimum liquidity financial covenant. If an event of default occurs and is continuing, the Collateral Agent may, among other things, accelerate the loans and foreclose on the collateral.

Collaborations

Refer to Item 1, *Business--Our Collaborations* and Note 10, *Collaborations*, of the notes to our consolidated financial statements in Item 15 of this Annual Report on Form 10-K for a description of the key terms of our arrangements with Boehringer Ingelheim, Eisai, Celgene and GSK, as well as the related accounting and revenue recognition considerations.

Results of Operations for the Years Ended December 31, 2019, 2018 and 2017

Collaboration Revenue

The following is a comparison of collaboration revenue for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
Collaboration revenue	$ 23.8	$ 21.7	$ 2.1	9.7%

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
Collaboration revenue	$ 21.7	$ 10.0	$ 11.7	117.0%

Our revenue during the periods consisted of collaboration revenue, including amounts recognized from deferred revenue related to upfront payments for licenses or options to obtain licenses in the future, research and development services revenue earned and milestone payments earned under collaboration and license agreements with our collaboration partners.

The following tables summarize our collaboration revenue, by collaboration partner, for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
Collaboration Partner				
GSK:	$ —	$ 20.0	$ (20.0)	-100.0%
BI:	23.8	1.7	22.1	1300.0%
	$ 23.8	$ 21.7	$ 2.1	9.7%

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
Collaboration Partner				
GSK:	$ 20.0	$ 10.0	$ 10.0	100.0%
BI:	1.7	—	1.7	100.0%
	$ 21.7	$ 10.0	$ 11.7	117.0%

Collaboration revenue for the year ended December 31, 2019 increased $2.1 million as compared to the year ended December 31, 2018, primarily as a result of $23.8 million related to milestones and services under our agreement with Boehringer Ingelheim, as compared to the achievement of a $12.0 million milestone and a $8.0 million milestone under our agreement with GSK and $1.7 million related to the commencement of services under our agreement with Boehringer Ingelheim during 2018. Collaboration revenue for the year ended December 31, 2018 increased $11.7 million as compared to the year ended December 31, 2017, primarily as a result of the achievement of a $12.0 million milestone and a $8.0 million milestone under our agreement with GSK and $1.7 million related to the commencement of services under our agreement with Boehringer Ingelheim during 2018 as compared to the achievement of a $10.0 million milestone under our agreement with GSK in 2017.

GSK. Under the agreement, we have received and recognized collaboration revenue totaling $89.0 million, consisting of upfront payments, fixed research funding, research and development services and preclinical and research milestone payments. As of December 31, 2019, for the two remaining targets, we are eligible to receive up to $50.0 million in clinical development milestone payments, up to $197.0 million in regulatory milestone payments and up to $128.0 million in sales-based milestone payments. As a result of the termination of the agreement as it relates to the third target, we will receive no additional payments related to that target. In addition, GSK is required to pay us royalties, at percentages from the mid-single digits to the low double-digits, on a licensed product-by-licensed product basis, on worldwide net product sales, subject to reduction in specified circumstances. Due to the uncertainty of pharmaceutical development and the high historical failure rates generally associated with drug development, we may not receive any additional milestone payments or royalty payments from GSK. GSK became solely responsible for development and commercialization for each licensed target in the collaboration when the research term ended on January 8, 2015.

Boehringer Ingelheim. In the years ended December 31, 2019 and 2018, we recognized $23.8 million and $1.7 million, respectively, in collaboration revenue as part of our Boehringer Ingelheim collaboration. Under the agreement we received $15.0 million in an upfront payment from Boehringer Ingelheim for our license to inhibitor technology of two undisclosed targets and $5.0 million in research funding in 2019. The revenue was recognized as we performed research services through the end of 2019. The research period expired on December 31, 2019, as Boehringer Ingelheim did not elect to extend the research period through December 31, 2020, and any future revenue will be related to milestone payments.

Celgene. In the years ended December 31, 2019, 2018, and 2017, no collaboration revenue was recognized as part of our Celgene collaboration.

As of December 31, 2019, we have total deferred revenue of $3.8 million in noncurrent liabilities on our consolidated balance sheet related to our Celgene collaboration, attributable to options for the non-pinometostat targets that are subject to the collaboration.

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including clinical trials and related clinical manufacturing expenses, fees paid to external providers of research and development services, third-party clinical research organizations, or CROs, compensation and benefits for full-time research and development employees, facilities expenses, overhead expenses, and other outside expenses. Most of our research and development costs are external costs, which we track on a program-by-program basis. Our internal research and development costs are primarily compensation expenses for our full-time research and development employees, including stock-based compensation expense.

In our early-stage research, we identify and prioritize novel CMPs that are implicated in cancer and other diseases, and seek to develop potent and selective small molecule inhibitors of these targets. During this phase of research, our external costs primarily relate to lead discovery, biology, drug metabolism and pharmacokinetics and chemistry services from a multinational network of third-party providers of research and development services. As our product candidates progress into preclinical and clinical development, external costs are driven by clinical trial costs, manufacturing expenses, and third-party research and development expenses.

In circumstances where our collaboration and license agreements provide for equally co-funded global development under joint risk sharing collaborations, and where we are the study sponsor, such as our Celgene collaboration, amounts received for co-funding are recorded as a reduction to research and development expense.

The following is a comparison of research and development expenses for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
Research and development	$ 132.6	$ 105.8	$ 26.8	25.4%

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
Research and development	$ 105.8	$ 109.7	$ (3.9)	-3.6%

During the year ended December 31, 2019, total research and development expenses increased by $26.8 million compared to the year ended December 31, 2018, primarily due to the payment of $20.0 million in clinical development milestones to Eisai, increases in tazemetostat manufacturing costs and the buildout of our regulatory and late stage development groups, offset by decreases in clinical trial expenses.

During the year ended December 31, 2018 total research and development expenses decreased by $3.9 million compared to the year ended December 31, 2017, primarily due to decreases in our discovery research activities due to a greater focus on our most advanced programs and decreases in clinical trial expenses, offset by greater tazemetostat manufacturing costs.

The following table illustrates the components of our research and development expenses:

Product Program	Year Ended December 31, 2019	2018	Change	%
	(In millions)			
External research and development expenses:				
Tazemetostat and related EZH2 programs	$ 67.8	$ 49.5	18.3	37.0%
Pinometostat and related DOT1L programs	0.3	0.0	0.3	100.0
Discovery and preclinical stage product programs, collectively	18.7	16.0	2.7	16.9
Unallocated personnel and other expenses	45.8	40.3	5.5	13.6
Total research and development expenses	$ 132.6	$ 105.8	$ 26.8	25.3%

Product Program	Year Ended December 31, 2018	2017	Change	%
	(In millions)			
External research and development expenses:				
Tazemetostat and related EZH2 programs	$ 49.5	$ 54.2	$ (4.7)	-8.7%
Pinometostat and related DOT1L programs	0.0	0.8	(0.8)	-100.0
Discovery and preclinical stage product programs, collectively	16.0	17.9	(1.9)	-10.6
Unallocated personnel and other expenses	40.3	36.8	3.5	9.5
Total research and development expenses	$ 105.8	$ 109.7	$ (3.9)	-3.6%

External research and development costs include external manufacturing costs related to the acquisition of active pharmaceutical ingredient and manufacturing of clinical drug supply, ongoing clinical trial costs, discovery and preclinical research in support of the tazemetostat program and expenses associated with our companion diagnostic program.

External research and development expenses for tazemetostat and related EZH2 programs increased $18.3 million for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase in tazemetostat related spending in the year ended December 31, 2019 related to greater tazemetostat manufacturing costs and the build out of our regulatory and late stage development groups, offset by decreases in clinical trial expenses.

External research and development expenses for tazemetostat and related EZH2 programs decreased $4.7 million for the year ended December 31, 2018 compared to the year ended December 31, 2017. The decrease in tazemetostat related spending in the year ended December 31, 2018 is primarily a result of decreased clinical spending as a result of the partial clinical holds on the enrollment of new patients in the United States, France and Germany, offset by an increase in tazemetostat manufacturing costs.

External research and development expenses for pinometostat and related DOT1L programs for the year ended December 31, 2019 increased $0.3 million compared to the year ended December 31, 2018. The costs incurred in the year ended December 31, 2019 were primarily associated with costs attributed to the CRADA with the NCI to evaluate pinometostat in clinical trials in a variety of hematologic malignancies and solid tumors. There were no costs incurred related to pinometostat in 2018.

External research and development expenses for pinometostat and related DOT1L programs for the year ended December 31, 2018 decreased $0.8 million when compared to the year ended December 31, 2017. There were no costs incurred related to pinometostat in 2018. The costs incurred related to pinometostat in the year ended December 31, 2017 were primarily associated with costs attributed to the CRADA with the NCI.

External research and development expenses for discovery and preclinical stage product programs increased $2.7 million for the year ended December 31, 2019 compared to the year ended December 31, 2018, primarily related to increased development activities related to our G9a preclinical program, offset by reduced spending for discovery research activities. External research and development expenses for discovery and preclinical stage product programs decreased $1.9 million for the year ended December 31, 2018 compared to the year ended December 31, 2017, primarily related to decreased spending for discovery research activities, offset by increased development activities related to our G9a preclinical program.

Unallocated personnel and other expenses are comprised of compensation expenses for our full-time research and development employees and other general research and development expenses. Unallocated personnel and other expenses for the year ended December 31, 2019 increased $5.5 million compared to the year ended December 31, 2018. The increase is a result of the allocation of expenses to projects and increases in facilities and equipment related expenses offset by an increase in unallocated personnel costs. Unallocated personnel and other expenses for the year ended December 31, 2018 increased $3.5 million compared to the year ended December 31, 2017. The increase in unallocated personnel and other expenses was primarily due to growth in our internal development functions and the associated third-party costs to support tazemetostat and the anticipated submission of our first NDA in the second quarter of 2019.

We expect research and development expenses will increase in 2020, as we increase our clinical trial activity for tazemetostat and utilize our drug discovery platform to progress preclinical efforts and pursue additional development candidates to expand our pipeline.

General and Administrative

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation, related to our executive, finance, intellectual property, business development and support functions. Other general and administrative expenses include allocated facility-related costs not otherwise included in research and development expenses, travel expenses and professional fees for auditing, tax and legal services, including intellectual property and general legal services.

The following is a comparison of general and administrative expenses for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
General and administrative	$ 68.3	$ 44.0	$ 24.3	55.2%

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
General and administrative	$ 44.0	$ 37.2	$ 6.8	18.3%

For the year ended December 31, 2019, our general and administrative expenses increased $24.3 million compared to the year ended December 31, 2018, primarily due to increased pre-commercialization activities, including the build out of our medical affairs and commercial organizations, and increased personnel related expenses. For the year ended December 31, 2018, our general and administrative expenses increased $6.8 million compared to the year ended December 31, 2017, primarily due to an increase in medical affairs and commercial costs as a result of organizational development in preparation for commercialization of tazemetostat.

We expect that general and administrative expenses will increase in 2020, as we continue to increase our commercial activities for tazemetostat.

Other Income, Net

The following is a comparison of other income, net for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
Other income, net				
Interest income	$ 7.4	$ 4.6	$ 2.8	60.9%
Interest expense	(0.3)	—	(0.3)	100
Other (expense) income, net	—	—	—	0.0
Non-cash interest expense related to sale of future royalties	(0.2)	—	(0.2)	100
Other income, net	$ 6.9	$ 4.6	$ 2.3	50.2%

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
Other income, net				
Interest income	$ 4.6	$ 2.2	$ 2.4	109.1%
Interest expense	—	—	—	0.0
Other income, net	—	—	—	0.0
Other income, net	$ 4.6	$ 2.2	$ 2.4	109.1%

Other income, net consists of interest income earned on our cash equivalents and marketable securities, net of imputed interest expense paid under our capital lease obligation. Other income is mainly comprised of interest income, which increased $2.8 million for the year ended December 31, 2019 compared to the year ended December 31, 2018, primarily due to active management of our investment portfolio, an increase in investment yields, and an increased cash balance as a result of the public offering that we conducted in March 2019, the RPI Purchase Agreement and the Loan Agreement. The increase in interest income was offset by non-cash interest expense of $0.2 million related to the sale of future royalties and interest expense of $0.3 million incurred under our long-term debt agreement. Interest income increased $2.4 million for the year ended December 31, 2018 compared to the year ended December 31, 2017, primarily due to active management of our investment portfolio, an increase in investment yields, and an increased cash balance as a result of the public offering that we conducted in October 2018.

Income Tax Benefit

We evaluated the expected recoverability of our net deferred tax assets as of December 31, 2019 and 2018, and determined that, with the exception of the deferred tax asset related to alternative minimum tax, or AMT, credits, there was insufficient positive evidence to support the recoverability of these net deferred tax assets. The AMT credit becomes refundable no later than 2022 under the Tax Cuts and Jobs Act, and as such, the related deferred tax asset will be able to be realized. The corresponding valuation allowance of $368,000 was reversed as of December 31, 2017 and recognized as a tax benefit. As of December 31, 2018, $184,000 of the deferred tax asset was reclassified to an income tax receivable. Fifty percent of the remaining AMT credit is refundable with the filing of the 2019 tax return. As such, as of December 31, 2019, $92,000 of the deferred tax asset was reclassified to an income tax receivable. There was no tax benefit or provision as a result of the asset reclassification on the balance sheet.

Liquidity and Capital Resources

Through December 31, 2019, we have raised an aggregate of $1,280.7 million to fund our operations, of which $242.1 million was non-equity funding through our collaboration agreements, $123.1 million was from funding received through agreements with Royalty Pharma and Pharmakon Advisors consisting of $100.0 million in consideration received and $25.0 million for the first tranche of borrowings less debt issuance costs of $1.7 million, $839.5 million was from the sale of common stock and series A Convertible Preferred Stock in our public offerings and $76.0 million was from the sale of redeemable convertible preferred stock in private financings prior to our initial public offering in May 2013. As of December 31, 2019, we had $381.1 million in cash, cash equivalents and marketable securities.

In November 2019, we raised approximately $123.1 million from the sale to RPI of 6,666,667 shares of our common stock, the Warrant and the Japan Royalty for, as well as from proceeds of the Tranche A Loan borrowings under the Loan Agreement. On February 11, 2020, we sold 2,500,000 shares of common stock to RPI for an aggregate of $50.0 million in proceeds at a sale price of $20.00 per share of common stock pursuant to the Put Option.

In March 2019, we raised approximately $122.7 million in net proceeds (after deducting underwriting discounts and commissions and estimated offering expenses, but excluding any expenses and other costs reimbursed by the underwriters) from the sale of 11,500,000 shares of our common stock in a public offering at a price of $11.50 per share. We also raised approximately $37.4 million in net proceeds (after deducting underwriting discounts and commissions and estimated offering expenses, but excluding any expenses and other costs reimbursed by the underwriters) from the sale of 350,000 shares of series A convertible preferred stock in a public offering at a price of $115 per share. The series A convertible preferred stock is convertible into 3,500,000 shares of our common stock.

In October 2018, we raised approximately $81.6 million in net proceeds (after deducting underwriting discounts and commissions and estimated offering expenses, but excluding any expenses and other costs reimbursed by the underwriters) from the sale of 9,583,334 shares of our common stock in a public offering at a price of $9.00 per share.

In September 2017, we raised $151.3 million, net of underwriting discounts and commissions, but before direct and incremental costs from the sale of 10,557,000 shares of our common stock in a public offering at a price to the public of $15.25 per share.

In addition to our existing cash, cash equivalents and marketable securities, we may receive research and development co-funding and are eligible to earn a significant amount of option exercise and milestone payments under our collaboration agreements. Our ability to earn these payments and the timing of earning these payments is dependent upon the outcome of our research and development activities and is uncertain at this time.

Funding Requirements

Our primary uses of capital are, clinical trial costs, third-party research and development services, expenses related to preparation for commercialization, compensation and related expenses, laboratory and related supplies, our potential future milestone payment obligations to Eisai and Roche Molecular under the amended Eisai collaboration agreement and Roche Molecular companion diagnostic agreement, legal and other regulatory expenses and general overhead costs.

Because our product candidates are in various stages of clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability. Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements. Except for any obligations of our collaborators to make license, milestone or royalty payments under our agreements with them, and amounts available to us under the Loan Agreement with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, which are subject to certain conditions, we do not have any committed external sources of liquidity. To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our stockholders may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise any additional funds that may be needed through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Outlook

Based on our current operating plan, we expect that our existing cash, cash equivalents and marketable securities will be sufficient to fund our planned operating expenses and capital expenditure requirements into 2022, without giving effect to any potential option exercise fees or milestone payments we may receive under our collaboration agreements. We have based this estimate on assumptions that may prove to be wrong, particularly as the process of testing product candidates in clinical trials is costly and the timing of progress in these trials is uncertain. As a result, we could use our capital resources sooner than we expect.

Cash Flows

The following is a summary of cash flows for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,			
	2019	2018	Change	%
	(In millions)			
Net cash used in operating activities	$ (147.2)	$ (121.6)	$ (25.6)	21.0%
Net cash (used in) provided by investing activities	(85.3)	(102.6)	17.3	-16.8
Net cash provided by financing activities	286.3	84.2	202.1	240.0

	Year Ended December 31,			
	2018	2017	Change	%
	(In millions)			
Net cash used in operating activities	$ (121.6)	$ (120.4)	$ (1.2)	1.0%
Net cash provided by (used in) investing activities	(102.6)	113.3	(215.9)	190.6
Net cash provided by financing activities	84.2	155.9	(71.7)	46.0

Net Cash Used in Operating Activities

Net cash used in operating activities was $147.2 million during the year ended December 31, 2019 compared to $121.6 million during the year ended December 31, 2018. The increase in net cash used in operating activities primarily relates to the increase in net loss in the period compared to 2018, and a net increase in non-cash stock-based compensation, which was partially offset by changes in working capital and a decrease in net depreciation and amortization.

Net cash used in operating activities was $121.6 million during the year ended December 31, 2018 compared to $120.4 million during the year ended December 31, 2017. The increase in net cash used in operating activities primarily relates to the decrease in net loss in the period compared to 2017, and a net increase in non-cash stock-based compensation, which was partially offset by a decrease in net depreciation and amortization and changes in working capital. The most significant items affecting working capital in the year ended December 31, 2018 includes accounts receivable related to the milestone revenue recognized under the GSK agreement and current deferred revenue associated with the BI Agreement.

Net Cash Used in Investing Activities

Net cash used in investing activities during the year ended December 31, 2019 reflects $505.0 million of purchases of available for sale securities and $0.6 million of purchases of property and equipment, offset by maturities/sales of available for sale securities of $420.3 million.

Net cash used in investing activities during the year ended December 31, 2018 reflects $298.7 million of purchases of available-for-sale securities and $0.3 million of purchases of property and equipment, offset by maturities of available-for-sale securities of $196.4 million.

Net cash provided by investing activities during the year ended December 31, 2017 reflects $126.4 million of purchases of available-for-sale securities and $1.0 million of purchases of property and equipment, offset by maturities of available-for-sale securities of $240.7 million.

Net Cash Provided by Financing Activities

Net cash provided by financing activities of $286.3 million during the year ended December 31, 2019 primarily reflects net cash received during the period of $123.1 million in the aggregate received through the RPI Purchase Agreement with RPI and the Loan Agreement with BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC, net cash received from the sale of common stock of $123.0 million and net cash received from the sale of convertible preferred stock of $37.4 million, as well as cash received from stock option exercises.

Net cash provided by financing activities of $84.2 million during the year ended December 31, 2018 primarily reflects net cash received from the sale of common stock in our public offerings in the fourth quarter of 2018 of $81.7 million, cash received from stock option exercises of $1.9 million, and the purchases of shares under our employee stock purchase plan of $0.7 million, partially offset by the payments under our capital lease obligation of $0.1 million.

Net cash provided by financing activities of $155.9 million during the year ended December 31, 2017 primarily reflects net cash received from the sale of common stock in public offerings in the first quarter and third quarter of 2017 of $152.5 million, cash received from stock option exercises of $3.3 million, and the purchases of shares under our employee stock purchase plan of $0.7 million, partially offset by the payments under our capital lease obligation of $0.6 million.

Contractual Obligations and Contingent Liabilities

The following summarizes our significant contractual obligations as of December 31, 2019:

Contractual Obligations	Total	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
			(In thousands)		
Lease obligations	$ 29,718	$ 4,512	$ 15,510	$ 9,172	$ 524
Long-term debt obligations	25,000	—	12,500	12,500	—
Total obligations	$ 54,718	$ 4,512	$ 28,010	$ 21,672	$ 524

In addition to commitments under leasing arrangements described in the table above and in Note 8, *Leases* to the financial statements in Item 15 of this Annual Report on Form 10-K, we have committed to fund the remaining $4.4 million of development costs payable to Roche Molecular upon certain development and regulatory milestones, under our amended companion diagnostic agreement with Roche Molecular. We expect these remaining development costs to be incurred and paid through 2020.

In addition, the contractual obligations table does not include potential future milestones or royalties that we may be required to make under license and collaboration agreements, including potential future milestones or royalties payable to Eisai under the amended collaboration and license agreement, due to the uncertainty of events requiring payment under these agreements. Under the amended collaboration and license agreement with Eisai, we agreed to pay up to $50.0 million in regulatory milestone payments, including a $25.0 million milestone payment upon regulatory approval of the first NDA or MAA, and a $25.0 million milestone payment upon regulatory approval of the NDA or MAA for the second indication, and royalties at a percentage in the mid-teens on worldwide net sales of any EZH2 product, excluding net sales in Japan. In February 2020, we paid the first $25.0 million milestone payment upon regulatory approval of tazemetostat for epithelioid sarcoma.

We enter into contracts in the normal course of business with CROs for clinical and preclinical research studies, external manufacturers for product for use in our clinical trials, and other research supplies and other services as part of our operations. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the balance sheets and the reported amounts of collaboration revenue and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time such estimates are made. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the consolidated financial statements prospectively from the date of the change in estimate.

We define our critical accounting policies as those accounting principles generally accepted in the United States of America that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our financial statements which require significant estimates and judgments are as follows:

Revenue Recognition

Effective January 1, 2018, we adopted Accounting Standards Codification, or ASC, Topic 606, *Revenue from Contracts with Customers*, or ASC 606, using the modified retrospective transition method. Under this method, results for reporting periods beginning after January 1, 2018 are presented pursuant to ASC 606, while prior period amounts are not adjusted and continue to be reported in accordance with ASC 605. This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, we assess the goods or services promised within each contract and determines those that are performance obligations, and assesses 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 when (or as) the performance obligation is satisfied.

We have entered into collaboration and license agreements, which are within the scope of ASC 606, to discover, develop, manufacture and commercialize product candidates. The terms of these agreements typically contain multiple promises or obligations, which may include: (i) licenses, or options to obtain licenses, to compounds directed to specific HMT targets (referred to as "exclusive licenses") and (ii) research and development activities to be performed on behalf of the collaboration partner related to the licensed HMT targets. Payments to us under these agreements may include non-refundable license fees, customer option exercise fees, payments for research activities, reimbursement of certain costs, payments based upon the achievement of certain milestones and royalties on any resulting net product sales.

We first evaluate license and/or collaboration arrangements to determine whether the arrangement (or part of the arrangement) represents a collaborative arrangement pursuant to ASC Topic 808, *Collaborative Arrangements*, based on the risks and rewards and activities of the parties pursuant to the contractual arrangement. We account for collaborative arrangements (or elements within the contract that are deemed part of a collaborative arrangement), which represent a collaborative relationship and not a customer relationship, outside the scope of ASC 606. Our collaborations primarily represent revenue arrangements. For the arrangements or arrangement components that are subject to revenue accounting guidance, in determining the appropriate amount of

revenue to be recognized as it fulfills its obligations under each of its agreements, we perform the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) we satisfy each performance obligation. As part of the accounting for these arrangements, we must use significant judgment to determine: a) the number of performance obligations based on the determination under step (ii) above and whether those performance obligations are distinct from other performance obligations in the contract; b) the transaction price under step (iii) above; and c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. We use judgment to determine whether milestones or other variable consideration, except for royalties, should be included in the transaction price as described further below. The transaction price is allocated to each performance obligation on a relative stand-alone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. In determining the stand-alone selling price of a license to our proprietary technology or a material right provided by a customer option, we consider market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements as well as internally developed estimates that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the license. In validating its estimated stand-alone selling price, we evaluate whether changes in the key assumptions used to determine its estimated stand-alone selling price will have a significant effect on the allocation of arrangement consideration between performance obligations.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

Exclusive Licenses – If the license to our intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, which generally include research and development services, we recognize revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a license is distinct from the other promises, we consider relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, we consider whether the collaboration partner can benefit from the license for its intended purpose without the receipt of the remaining promise, whether the value of the license is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, we utilize judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. We evaluate the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. The measure of progress, and thereby periods over which revenue should be recognized, are subject to estimates by management and may change over the course of the research and development and licensing agreement.

Research and Development Services – The promises under our collaboration and license agreements generally include research and development services to be performed by the Company on behalf of the collaboration partner. For performance obligations that include research and development services, we generally recognize revenue allocated to such performance obligations based on an appropriate measure of progress. The Company utilizes judgment to determine the appropriate method of measuring progress for purposes of recognizing revenue, which is generally an input measure such as costs incurred. We evaluate the measure of progress each reporting period as described under *Exclusive Licenses* above. Reimbursements from the partner that are the result of a collaborative relationship with the partner, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense.

Customer Options – Our arrangements may provide a collaborator with the right to select a target for licensing either at the inception of the arrangement or within an initial pre-defined selection period, which may, in certain cases, include the right of the collaborator to extend the selection period. Under these agreements, fees may be due to us (i) at the inception of the arrangement as an upfront fee or payment, (ii) upon the exercise of an option to acquire a license or (iii) upon extending the selection period as an extension fee or payment. If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services, the goods and services underlying the customer options are not considered to be performance obligations at the outset of the arrangement, as they are contingent upon option exercise. We evaluate the customer options for material rights, or options to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the inception of the arrangement. We allocate the transaction price to material rights based on the relative stand-alone selling price, which is determined based on the identified discount and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised or expires.

Milestone Payments – At the inception of each arrangement that includes development milestone payments, we evaluate whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control or control of the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. We evaluate factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, we reevaluate the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment. If a milestone or other variable consideration relates specifically to our efforts to satisfy a single performance obligation or to a specific outcome from satisfying the performance obligation, we generally allocate the milestone amount entirely to that performance obligation once it is probable that a significant revenue reversal would not occur.

Royalties – For arrangements that include sales-based royalties, including milestone payments based on a level of sales, and the license is deemed to be the predominant item to which the royalties relate, we 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). To date, we have not recognized any royalty revenue resulting from any of its licensing arrangements.

For a complete discussion of accounting for collaboration revenues, see Note 10, *Collaborations*, in the accompanying Notes to Consolidated Financial Statements included in Item 15. of Part IV of this Annual Report on Form 10-K.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses as of each balance sheet date. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- contract research organizations in connection with clinical trials;
- investigative sites in connection with clinical trials;
- vendors in connection with non-clinical development activities; and
- vendors related to product manufacturing, development and distribution of clinical supplies.

We generally accrue expenses related to research and development activities based on the services received and efforts expended pursuant to contracts with multiple contract research organizations that conduct and manage clinical trials on our behalf as well as other vendors that provide research and development services. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of subjects and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we would adjust the accrual or prepaid accordingly.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed we may report amounts that are too high or too low in any particular period. To date, there have been no material differences from our estimates to the amount actually incurred.

Liability Related to Sale of Future Royalties

We treat the liability related to sale of future royalties as a debt financing, as we have significant continuing involvement in the generation of the cash flows, to be amortized to interest expense using the effective interest rate method over the life of the related royalty stream.

The liability related to sale of future royalties and the related interest expense are based on our current estimates of future royalties expected to be paid over the life of the arrangement. We will periodically assess the expected royalty payments using a combination of internal projections and forecasts from external sources. To the extent our future estimates of royalty payments are greater or less than previous estimates or the estimated timing of such payments is materially different than its previous estimates, we will prospectively recognize related non-cash interest expense.

Going Concern

We continually evaluate our ability to continue as a going concern within one year of the date of issuance of financial statements in both our Quarterly Reports on Form 10-Q and Annual Report on Form 10-K. Our evaluation entails analyzing forward looking budgets and forecasts for expectations of our cash needs, and comparing those needs to our current cash, cash equivalent and marketable security balances.

Based on our current operating plan, we expect that our existing cash, cash equivalents and marketable securities will be sufficient to fund our planned operating expenses and capital expenditure requirements into 2022, without giving effect to any potential option exercise fees or milestone payments we may receive under our collaboration agreements.

Recent Accounting Pronouncements

For detailed information regarding recently issued accounting pronouncements and the expected impact on our consolidated financial statements, see Note 2, *Summary of Significant Accounting Policies—Recent Accounting Pronouncements*, in the accompanying Notes to Consolidated Financial Statements included in Item 15. of Part IV of this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates. As of December 31, 2019, we had cash equivalents and available for sale securities of $381.1 million consisting of money market funds, corporate bonds, commercial paper and government-related obligations. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. We estimate that a hypothetical 100-basis point change in market interest rates would impact the fair value of our investment portfolio as of December 31, 2019 by $1.2 million.

We contract with CROs and manufacturers globally. Transactions with these providers are predominantly settled in U.S. dollars and, therefore, we believe that we have only minimal exposure to foreign currency exchange risks. We do not hedge against foreign currency risks.

Item 8. Financial Statements and Supplementary Data

The information required by this item may be found on pages F-2 through F-32 as listed below, including the quarterly information required by this item.

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Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of December 31, 2019. In designing and evaluating our disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and our management necessarily applied its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our principal executive officer and principal financial officer concluded that as of December 31, 2019, our disclosure controls and procedures were (1) designed to ensure that material information relating to us is made known to our management including our principal executive officer and principal financial officer by others, particularly during the period in which this report was prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, 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 and includes those policies and procedures that:

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO, in *Internal Control—Integrated Framework (2013)*. Based on its assessment, management believes that, as of December 31, 2019, our internal control over financial reporting is effective based on those criteria.

Ernst & Young LLP, our independent registered public accounting firm has audited the consolidated financial statements included in this Annual Report on Form 10-K and, as part of the audit, has issued a report on the effectiveness of our internal control over financial reporting as of December 31, 2019, which report is included herein.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Epizyme, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Epizyme, Inc.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Epizyme, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated February 27, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

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

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 27, 2020

Changes in Internal Control Over Financial Reporting

We entered into the RPI Purchase Agreement as of November 4, 2019. As a result, we made the following significant modifications to our internal control over financial reporting, including changes to accounting policies and procedures, operational processes, and documentation practices:

- updated our policies and procedures related to liabilities related to the sale of future royalties and added documentation processes related to accounting for the RPI Purchase Agreement;
- modified our review controls to take into account the new accounting policy; and
- added controls to address related disclosures.

Other than the items described above, there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding our directors, including the audit committee and audit committee financial experts, and executive officers and compliance with Section 16(a) of the Exchange Act will be included in our 2020 Proxy Statement and is incorporated herein by reference.

We have adopted a Code of Business Conduct and Ethics for all of our directors, officers and employees as required by NASDAQ governance rules and as defined by applicable SEC rules. Stockholders may locate a copy of our Code of Business Conduct and Ethics on our website at www.epizyme.com or request a copy without charge from:

Epizyme, Inc.
Attention: Investor Relations
400 Technology Square, 4th Floor
Cambridge, MA 02139

We will post to our website any amendments to the Code of Business Conduct and Ethics, and any waivers that are required to be disclosed by the rules of either the SEC or NASDAQ.

Item 11. Executive Compensation

The information required by this item regarding executive compensation will be included in our 2020 Proxy Statement and is incorporated herein by reference.

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

The information required by this item regarding security ownership of certain beneficial owners and management and securities authorized for issuance under equity compensation plans will be included in our 2020 Proxy Statement and is incorporated herein by reference.

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

The information required by this item regarding certain relationships and related transactions and director independence will be included in our 2020 Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this item regarding principal accounting fees and services will be included in our 2020 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are included in this Annual Report on Form 10-K:

1. The following Report and Consolidated Financial Statements of the Company are included in this Annual Report:

   Report of Independent Registered Public Accounting Firm

   Consolidated Balance Sheets

   Consolidated Statements of Operations and Comprehensive Loss

   Consolidated Statements of Cash Flows

   Consolidated Statements of Stockholders' Equity

   Notes to Consolidated Financial Statements

2. All financial schedules have been omitted because the required information is either presented in the consolidated financial statements or the notes thereto or is not applicable or required.

3. Exhibits:

Exhibit Number	Description of Exhibit
3.1	Restated Certificate of Incorporation of the Registrant (1)
3.2	Amended and Restated Bylaws of the Registrant (2)
4.1	Form of Series A Preferred Stock Certificate (22)
4.2	Amended and Restated Investor Rights Agreement dated as of April 2, 2012 (4)
4.3	Certificate of Designation of Series A Convertible Preferred Stock of the Company (22)
4.4	Description of Securities of the Registrant (25)
10.1+	2008 Stock Incentive Plan (4)
10.2+	Form of Incentive Stock Option Agreement under 2008 Stock Incentive Plan (4)
10.3+	Form of Nonstatutory Stock Option Agreement under 2008 Stock Incentive Plan (4)
10.4+	Form of Restricted Stock Agreement under 2008 Stock Incentive Plan (4)
10.5+	2013 Stock Incentive Plan (2)
10.6+	Form of Incentive Stock Option Agreement under 2013 Stock Incentive Plan (2)
10.7+	Form of Nonstatutory Stock Option Agreement under 2013 Stock Incentive Plan (2)
10.8+	Form of Restricted Stock Agreement under 2013 Stock Incentive Plan (2)
10.9+	Form of Restricted Stock Unit Agreement under 2013 Stock Incentive Plan (21)
10.10+	2013 Employee Stock Purchase Plan (2)
10.11+	Executive Severance and Change in Control Plan (21)
10.12+	Employment Offer Letter dated between the Registrant and Robert Bazemore, dated August 5, 2015 (12)
10.13+	Employment Offer Letter between the Company and Matthew E. Ros, dated April 15, 2016 (15)
10.14+	Employment Offer Letter between the Registrant and Paolo Tombesi, dated July 1, 2019 (23)
10.15+	Employment Offer Letter between the Company and Shefali Agarwal, dated June 18, 2018 (20)
10.16	Form of Director and Officer Indemnification Agreement (2)
10.17†	Collaboration and License Agreement dated as of April 1, 2011 by and between the Registrant and Eisai Co., Ltd. (3)
10.18†	License and Collaboration Agreement dated as of April 2, 2012 by and between the Registrant and Celgene International Sàrl and Celgene Corporation (3)
10.19†	Companion Diagnostics Agreement dated as of December 18, 2012 between the Registrant and Eisai Co., Ltd. on the one side and Roche Molecular Systems, Inc. on the other side (3)
10.20†	First Amendment to the Companion Diagnostics Agreement dated October 23, 2013 between the Registrant and Eisai Co. Ltd. on the one side and Roche Molecular Systems, Inc. on the other side (6)
10.21†	Second Amendment to the Companion Diagnostics Agreement dated November 16, 2015 between the Registrant and Eisai Co. Ltd. on the one side and Roche Molecular Systems, Inc. on the other side (14)
10.22†	Third Amendment to the Companion Diagnostics Agreement dated March 7, 2018 between the Registrant and Eisai Co. Ltd. on the one side and Roche Molecular Systems, Inc. on the other side (19)

Exhibit Number	Description of Exhibit
10.23	Letter Agreement by and between the Registrant and Eisai Co., Ltd. dated as of December 21, 2012 relating to Companion Diagnostics Agreement (4)
10.24	Amended and Restated Letter Agreement dated as of March 12, 2015 by and between the Registrant and Eisai Co., Ltd. relating to the Companion Diagnostics Agreement (11)
10.25†	Amended and Restated Collaboration and License Agreement dated as of March 12, 2015, by and between the Registrant and Eisai Co. Ltd. (11)
10.26	Lease Agreement dated as of June 15, 2012 between the Registrant and ARE-TECH Square, LLC (4)
10.27	Non-Employee Director Compensation Program (23)
10.28	First Amendment to Lease Agreement dated as of September 30, 2013 between the Registrant and ARE-TECH Square, LLC (5)
10.29	Second Amendment to Lease Agreement dated as of May 18, 2016 between the Registrant and ARE-TECH Square, LLC (16)
10.30†	Amended and Restated Collaboration and License Agreement dated as of July 8, 2015 by and between the Registrant and Celgene Corporation and Celgene RIVOT Ltd. (13)
10.31†	Collaboration and License Agreement dated as of January 8, 2011 by and between the Registrant and Glaxo Group Limited (3)
10.32†	Amendment to Collaboration and License Agreement dated as of July 23, 2013 by and between the Registrant and Glaxo Group Limited (7)
10.33†	Amendment to Collaboration and License Agreement dated as of February 24, 2014 by and between the Registrant and Glaxo Group Limited (8)
10.34†	Amendment to Collaboration and License Agreement dated as of March 18, 2014 by and between the Registrant and Glaxo Group Limited (8)
10.35†	Amendment to Collaboration and License Agreement dated as of April 17, 2014 by and between the Registrant and Glaxo Group Limited (9)
10.36†	Amendment to Collaboration and License Agreement dated as of October 1, 2014 by and between the Registrant and Glaxo Group Limited (10)
10.37	Third Amendment to Lease Agreement, entered into May 25, 2017 and effective May 18, 2017, by and between the Company and ARE-TECH Square, LLC (18)
10.38	Fourth Amendment to Lease Agreement, entered into May 25, 2017 and effective May 18, 2017, by and between the Company and ARE-TECH Square, LLC (18)
10.39□	Collaboration Agreement dated as of November 14, 2018 by and between the Registrant and Boehringer Ingelheim International GmbH (21)
10.41†	Fourth Amendment to the Companion Diagnostics Agreement dated July 26, 2019 between the Registrant and Eisai Co. Ltd. on the one side and Roche Molecular Systems, Inc. and Roche Sequencing Solutions, Inc. on the other side. (24)
10.42	Lease Agreement dated as of August 16, 2019 by and between the Registrant and BMR-Hampshire LLC. (24)
10.43	Loan Agreement dated as of November 4, 2019 by and between the Registrant and BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC (25)
10.44	Guaranty and Security Agreement dated as of November 18, 2019 by and between the Registrant and BioPharma Credit PLC (25)

Exhibit Number	Description of Exhibit
10.45☐	Purchase Agreement dated as of November 4, 2019 by and between the Registrant and RPI Finance Trust (25)
10.46	Warrant Agreement dated as of November 4, 2019 by and between the Registrant and RPI Finance Trust (25)
21.1	Subsidiaries of the Registrant (4)
23.1	Consent of Ernst & Young LLP (25)
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (25)
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (25)
32.1	Certifications pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002, by Robert B. Bazemore, President and Chief Executive Officer of the Company, and Paolo Tombesi, Chief Financial Officer of the Company. (25)
101	The following financial statements formatted in XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Net Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Changes in Stockholders' Equity, (v) Consolidated Statements of Cash Flows, and (vi) the Notes to the Consolidated Financial Statements.
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

+ Management compensatory agreement.

† Confidential treatment has been granted as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

☐ Confidential treatment requested as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

(1) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on June 7, 2013.

(2) Incorporated by reference to the Registration Statement on Form S-1/A (File No. 333-187892) filed with the Securities and Exchange Commission on April 26, 2013.

(3) Incorporated by reference to the Registration Statement on Form S-1/A (File No. 333-187982) filed with the Securities and Exchange Commission on May 13, 2013.

(4) Incorporated by reference to the Registration Statement on Form S-1 (File No. 333-187982) filed with the Securities and Exchange Commission on April 18, 2013.

(5) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on October 23, 2013.

(6) Incorporated by reference to the Registration Statement on Form S-1 (File No. 333-193569) filed with the Securities and Exchange Commission on January 27, 2014.

(7) Incorporated by reference to the Registration Statement on Form S-1/A (File No. 333-193569) filed with the Securities and Exchange Commission on January 28, 2014.

(8) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on April 22, 2014.

(9) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on May 14, 2014.

(10) Incorporated by reference to the Registrant's Annual Report on Form 10-K (File No. 001-35945) filed with the Securities and Exchange Commission on March 12, 2015.

(11) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on March 16, 2015.

(12) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on August 6, 2015.

(13) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on August 6, 2015.

(14) Incorporated by reference to the Registrant's Annual Report on Form 10-K (File No. 001-35945) filed with the Securities and Exchange Commission on March 9, 2016.

(15) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on May 6, 2016.

(16) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on August 8, 2016.

(17) Incorporated by reference to the Annual Report on Form 10-K (File No. 001-35945) filed with the Securities and Exchange Commission on March 3, 2017.

(18) Incorporated by reference to the Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on May 30, 2017.

(19) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on May 8, 2018.

(20) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on November 2, 2018

(21) Incorporated by reference to the Annual Report on Form 10-K (File No. 001-35945) filed with the Securities and Exchange Commission on February 26, 2019.

(22) Incorporated by reference to the Current Report on Form 8-K (File No. 001-35945) filed with the Securities and Exchange Commission on March 7, 2019.

(23) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on August 9, 2019.

(24) Incorporated by reference to the Quarterly Report on Form 10-Q (File No. 001-35945) filed with the Securities and Exchange Commission on October 31, 2019.

(25) Filed with this Annual Report on Form 10-K.

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.

Epizyme, Inc.

By: /s/ Robert B. Bazemore
Robert B. Bazemore
President and Chief Executive Officer

Dated: February 27, 2020

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:

Name	Title	Date
/s/ Robert B. Bazemore Robert B. Bazemore	President, Chief Executive Officer, Director *(Principal Executive Officer)*	February 27, 2020
/s/ Paolo Tombesi Paolo Tombesi	Chief Financial Officer *(Principal Financial Officer)*	February 27, 2020
/s/ Joseph Beaulieu Joseph Beaulieu	Corporate Controller and Treasurer *(Principal Accounting Officer)*	February 27, 2020
/s/ Andrew R. Allen Andrew R. Allen, M.D., Ph.D.	Director	February 27, 2020
/s/ Kenneth Bate Kenneth Bate	Director	February 27, 2020
/s/ Grant Bogle Grant Bogle	Director	February 27, 2020
/s/ Kevin T. Conroy Kevin T. Conroy	Director	February 27, 2020
/s/ Michael Giordano Michael Giordano, M.D.	Director	February 27, 2020
/s/ Carl Goldfischer Carl Goldfischer, M.D.	Director	February 27, 2020
/s/ Pablo Legorreta Pablo Legorreta	Director	February 27, 2020
/s/ David M. Mott David M. Mott	Director	February 27, 2020
/s/ Richard F. Pops Richard F. Pops	Director	February 27, 2020
/s/ Victoria Richon Victoria Richon	Director	February 27, 2020

EPIZYME, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Epizyme, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Epizyme, Inc. (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2020, expressed an unqualified opinion thereon.

Adoption of New Accounting Standards

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Update (ASU) No. 2016-02, *Leases* (Topic 842), and the related amendments and changed its method of accounting for revenue in 2018 due to the adoption of Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), and the related amendments.

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 consolidated 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.

Accrued and Prepaid Clinical Trial Expenses

Description of the Matter

The Company's total accrued expenses were $22.5 million at December 31, 2019, which included the estimated obligation for clinical trial expenses incurred as of December 31, 2019 but not paid as of that date. In addition, the Company's total prepaid expenses and other current assets were $15.5 million, which included amounts that were paid in advance of services incurred pursuant to clinical trials. As discussed in Note 2 to the consolidated financial statements, when vendor billing terms do not coincide with the Company's period-end, the Company is required to make estimates of its obligations to those vendors, including clinical trial and pharmaceutical development costs, contractual services costs and costs for supply of its product candidates incurred in a given accounting period and record accruals at the end of the period. The Company bases its estimates on its knowledge of the research and development programs, services performed for the period, past history for related activities and the expected duration of the third-party service contract, where applicable. Payments for these activities are based on the terms of the individual arrangements and may result in payment terms that differ from the pattern of costs incurred. There may be instances in which payments made to vendors will exceed the level of services provided and result in a prepayment of the clinical expense.

Auditing the Company's accrued and prepaid clinical trial expenses is especially challenging due to the large volume of information received from multiple vendors that perform service on the Company's behalf. While the Company's estimates of accrued and prepaid clinical trial expenses are primarily based on information received related to each study from its vendors, the Company may need to make an estimate for additional costs incurred. Additionally, due to the long duration of clinical trials and the timing of invoicing received from vendors, the actual amounts incurred are not typically known at the time the financial statements are issued.

How We Addressed the Matter in Our Audit

We evaluated and tested the design and operating effectiveness of internal controls over the Company's process used in determining the valuation and completeness of accrued and prepaid clinical trial expenses.

To evaluate the accrued and prepaid clinical trial expenses, our audit procedures included, among others, testing the accuracy and completeness of the underlying data used in determining the accrued and prepaid clinical trial expenses and evaluating the assumptions/estimates used by management to adjust the actual information received. To assess the nature and extent of the services incurred, we corroborated the progress of clinical trials with the Company's research and development personnel that oversee the clinical trials and obtained information directly from vendors of their costs incurred to date. To evaluate the completeness and valuation of the accrual, we also tested subsequent invoices received and inspected the Company's contracts with vendors and any pending change orders to assess the impact to the accrual.

Accounting for Loan and Purchase Agreements

Description of the Matter

On November 4, 2019, the Company entered into a Purchase Agreement with RPI Finance Trust ("RPI" and "RPI Purchase Agreement") and a loan agreement (the "Loan Agreement") with BioPharma Credit Investments V (Master) LP and Biopharma Credit PLC (collectively, "Biopharma"), as discussed in Note 11 and 12 to the consolidated financial statements. The agreements were accounted pursuant to applicable accounting guidance as a combined transaction as RPI and Biopharma are related parties. Pursuant to the RPI Purchase Agreement, the Company agreed to sell to RPI 6,666,667 shares of common stock of the Company, a warrant to purchase up to 2,500,000 shares of the Company's common stock at an exercise price of $20.00 per share, and all of the Company's rights to receive royalties from Eisai Co., Ltd. ("Eisai") with respect to net sales by Eisai of tazemetostat products in Japan (the "Japan Royalty"). In consideration for the sale of the shares of common stock, the warrant and the Japan Royalty, RPI paid the Company $100.0 million upon the closing of the Purchase Agreement. In addition, under the Purchase Agreement, the Company has the right to sell, and RPI has the obligation to purchase, subject to certain conditions $50.0 million of shares of common stock at the Company's option for an 18-month period from the date of execution of the Purchase Agreement. Pursuant to the Loan Agreement, BioPharma will provide for up to $70.0 million in secured term loans to be advanced in three tranches. The Company drew the first $25 million tranche in November 2019 and the Company's right to borrow the second and third tranches is subject to regulatory and other conditions. The aggregate consideration of $125.0 million was allocated to the components of the transaction on a relative fair value basis.

Auditing the Company's loan and purchase agreement is especially challenging due to (1) the complexity of the application of the debt and equity technical accounting guidance to the transaction and (2) the significant estimation required by management to determine the fair value of the liability related to Japan Royalty of $12.6 million. The Company determined the fair value of the Japan Royalty using a discounted cash flow model and based on their estimate of future royalty payments to be paid to RPI over the life of the agreement. The significant estimation was primarily due to the uncertainty of tazemetostat revenues in Japan for which the royalties are due and the associated discount rate used. These significant assumptions are forward looking and could be affected by future economic, regulatory, and market conditions.

How We Addressed the Matter in Our Audit

We evaluated and tested the design and operating effectiveness of internal controls over the Company's accounting for the transactions. For example, we tested management's review controls over the accounting for the transaction and the relative fair value allocation, including the estimate of the Japan Royalty and underlying assumptions used to develop such estimates.

To assess the accounting for the transactions, we reviewed the terms of the arrangements, held discussions with management and evaluated the appropriate accounting guidance to apply. To test the fair value of the liability related to the Japan royalty, we performed audit procedures that included, among others, evaluating the Company's selection of the valuation methodology, evaluating the methods and significant assumptions used by the Company, and evaluating the completeness and accuracy of the underlying data supporting the significant assumptions and estimates. We involved our valuation professionals to assist with our evaluation of the methodology used by the Company and significant assumptions included in the fair value estimates. For example, we compared the significant assumptions to external market information and to the Company's budgets and forecasts. Specifically, when assessing the key assumptions, we focused on market size and share, price and probability of success assumptions that would drive the forecasted revenue as well as the associated discount rate.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2009.
Boston, Massachusetts
February 27, 2020

EPIZYME, INC.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands except per share data)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 139,482	$ 86,671
Marketable securities	241,605	153,633
Accounts receivable	2,567	20,067
Prepaid expenses and other current assets	15,523	12,164
Total current assets	399,177	272,535
Property and equipment, net	2,219	2,057
Operating lease assets	21,206	—
Restricted cash and other assets	1,987	909
Total assets	$ 424,589	$ 275,501
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 8,782	$ 4,780
Accrued expenses	22,549	19,700
Current portion of operating lease obligation	3,039	—
Current portion of deferred revenue	—	13,300
Other current liabilities	16	53
Total current liabilities	34,386	37,833
Operating lease obligation, net of current portion	19,120	—
Deferred revenue, net of current portion	3,806	3,806
Long-term debt, net of debt discount	23,309	—
Other long-term liabilities	38	853
Liability related to sale of future royalties	12,793	—
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 5,000 shares authorized; 350 shares and no shares issued and outstanding, respectively (equivalent to 3,500 shares of common stock upon conversion at a 10:1 ratio)	37,432	—
Common stock, $0.0001 par value; 125,000 shares authorized; 97,783 shares and 79,175 shares issued and outstanding, respectively	10	8
Additional paid-in capital	1,050,695	819,779
Accumulated other comprehensive loss	19	(54)
Accumulated deficit	(757,019)	(586,724)
Total stockholders' equity	331,137	233,009
Total liabilities and stockholders' equity	$ 424,589	$ 275,501

See notes to consolidated financial statements.

EPIZYME, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Amounts in thousands except per share data)

	Year Ended December 31,		
	2019	2018	2017
Collaboration revenue	$ 23,800	$ 21,700	$ 10,000
Operating expenses:			
Research and development	132,639	105,833	109,661
General and administrative	68,303	43,972	37,181
Total operating expenses	200,942	149,805	146,842
Operating loss	(177,142)	(128,105)	(136,842)
Other income, net:			
Interest income, net	7,110	4,557	2,165
Other (expense) income, net	(13)	(25)	32
Non-cash interest expense related to sale of future royalties	(192)	—	—
Other income, net	6,905	4,532	2,197
Loss before income taxes	(170,237)	(123,573)	(134,645)
Income tax (provision) benefit	(58)	(57)	336
Net loss	$ (170,295)	$ (123,630)	$ (134,309)
Other comprehensive loss:			
Unrealized gain (loss) on available for sale securities	73	(5)	57
Comprehensive loss	$ (170,222)	$ (123,635)	$ (134,252)
Reconciliation of net loss to net loss attributable to common stockholders:			
Net loss	$ (170,295)	$ (123,630)	$ (134,309)
Accretion of convertible preferred stock	(2,940)	—	—
Net loss attributable to common stockholders	$ (173,235)	$ (123,630)	$ (134,309)
Net loss per share attributable to common stockholders:			
Basic	$ (1.93)	$ (1.72)	$ (2.18)
Diluted	$ (1.93)	$ (1.72)	$ (2.18)
Weighted-average common shares outstanding used in net loss per share attributable to common stockholders:			
Basic	89,891	71,864	61,471
Diluted	89,891	71,864	61,471

See notes to consolidated financial statements.

EPIZYME, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Year Ended December 31,		
	2019	**2018**	**2017**
			(as revised)*
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (170,295)	$ (123,630)	$ (134,309)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	840	1,052	1,639
Stock-based compensation	18,016	12,004	11,431
Amortization of discount on investments	(3,175)	(1,556)	265
Amortization of debt discount	37	—	—
Non-cash interest expense associated with the sale of future royalties	192	—	—
Deferred income taxes	92	184	(368)
Changes in operating assets and liabilities:			
Accounts receivable	17,500	(19,686)	(359)
Prepaid expenses and other current assets	(3,359)	(3,181)	(2,525)
Accounts payable	3,389	(2,404)	1,967
Accrued expenses	2,897	2,066	1,523
Deferred revenue	(13,300)	13,300	—
Operating lease assets	(9,921)	—	—
Operating lease liabilities	10,043	—	—
Other assets and liabilities	(124)	251	303
Net cash used in operating activities	**(147,168)**	**(121,600)**	**(120,433)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of marketable securities	(504,981)	(298,670)	(126,356)
Proceeds from sales/maturities of marketable securities	420,255	196,363	240,670
Purchases of property and equipment	(594)	(299)	(984)
Net cash (used in) provided by investing activities	**(85,320)**	**(102,606)**	**113,330**
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock, net of commissions	122,991	81,938	152,922
Proceeds from issuance of preferred stock, net of commissions	37,432	—	—
Payment of public offering costs	(284)	(260)	(388)
Proceeds from issuance of debt	25,000	—	—
Payment of debt issuance costs	(1,650)	—	—
Proceeds from the issuance of common stock, warrants, and sale of future royalties to RPI, net of offering costs	99,774	—	—
Payment under capital lease obligation	(16)	(129)	(620)
Proceeds from stock options exercised	2,358	1,885	3,281
Issuance of shares under employee stock purchase plan	741	779	677
Net cash provided by financing activities	**286,346**	**84,213**	**155,872**
Net (decrease) increase in cash and cash equivalents	53,858	(139,993)	148,769
Cash, cash equivalents, and restricted cash, beginning of period	87,133	227,126	78,357
Cash, cash equivalents, and restricted cash, end of period	$ 140,991	$ 87,133	$ 227,126
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Unpaid offering costs	$ 78	$ 75	$ —
Unpaid debt issuance costs	$ 78	$ —	$ —
Cumulative catch up related to the adoption of ASU 2016-09	$ —	$ —	$ 115
Property and equipment included in accounts payable or accruals	$ 454	$ 194	$ 58
Cash paid for income taxes	$ 45	$ 48	$ 33

See notes to consolidated financial statements.

** Revised as a result of the adoption of ASU 2016-18*

EPIZYME, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands except share data)

	Common Stock		Preferred Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Loss	Equity
Balance at December 31, 2016	58,050,280	$ 6	—	$ —	$ 555,473	$ (353,673)	$ (106)	$ 201,700
Cumulative catch up related to the adoption of ASU 2016-09 (Note 2)	—	—	—	—	115	(115)	—	—
Issuance of common stock (net of commissions and offering costs of $388)	10,689,253	1	—	—	152,533	—	—	152,534
Exercise of stock options and vesting of restricted stock units	478,471	—	—	—	3,281	—	—	3,281
Stock-based compensation	—	—	—	—	11,431	—	—	11,431
Issuance of shares under employee stock purchase plan	83,687	—	—	—	677	—	—	677
Unrealized gain on available for sale securities	—	—	—	—	—	—	57	57
Net loss	—	—	—	—	—	(134,309)	—	(134,309)
Balance at December 31, 2017	69,301,691	$ 7	—	$ —	$ 723,510	$ (488,097)	$ (49)	$ 235,371
Cumulative catch up related to the adoption of ASU 2014-09 (Note 2)	—	—	—	—	—	25,003	—	25,003
Issuance of common stock (net of commissions and offering costs of $260)	9,583,334	1	—	—	81,601	—	—	81,602
Exercise of stock options and vesting of restricted stock units	215,156	—	—	—	1,885	—	—	1,885
Stock-based compensation	—	—	—	—	11,839	—	—	11,839
Stock in lieu of board fees	12,213	—	—	—	165	—	—	165
Issuance of shares under employee stock purchase plan	62,986	—	—	—	779	—	—	779
Unrealized loss on available for sale securities	—	—	—	—	—	—	(5)	(5)
Net loss	—	—	—	—	—	(123,630)	—	(123,630)
Balance at December 31, 2018	79,175,380	$ 8	—	$ —	$ 819,779	$ (586,724)	$ (54)	$ 233,009
Issuance of series A convertible preferred stock, net of commissions and beneficial conversion charge	—	—	350,000	34,492	2,940		—	37,432
Accretion of series A convertible preferred stock	—	—	—	2,940	(2,940)	—	—	—
Issuance of common stock (net of commissions and offering costs of $284)	11,500,000	1	—	—	122,707	—	—	122,708
Issuance of common stock to Royalty Pharma (net of commissions and offering costs of $304)	6,666,667	1	—	—	78,704	—	—	78,705
Issuance of warrant to Royalty Pharma	—	—	—	—	8,390	—	—	8,390
Exercise of stock options and vesting of restricted stock units	356,538	—	—	—	2,358	—	—	2,358
Stock-based compensation	—	—	—	—	17,875	—	—	17,875
Issuance of shares of common stock in lieu of board fees	12,156	—	—	—	141	—	—	141
Issuance of shares under employee stock purchase plan	72,735	—	—	—	741	—	—	741
Unrealized gain on available for sale securities	—	—	—	—	—	—	73	73
Net loss	—	—	—	—	—	(170,295)	—	(170,295)
Balance at December 31, 2019	97,783,476	$ 10	350,000	$ 37,432	$ 1,050,695	$ (757,019)	$ 19	$ 331,137

See notes to consolidated financial statements.

1. The Company

Epizyme, Inc. (collectively referred to with its wholly owned, controlled subsidiary, Epizyme Securities Corporation, as "Epizyme" or the "Company") is a biopharmaceutical company that is committed to rewriting treatment for cancer and other serious diseases through the discovery, development, and commercialization of novel epigenetic medicines. By focusing on the genetic drivers of disease, the Company's science seeks to match targeted medicines with the patients who need them.

Through December 31, 2019, the Company has raised, including amounts received under collaboration agreements, an aggregate of $1,280.7 million to fund its operations, of which $242.1 million was non-equity funding through its collaboration agreements, $123.1 was from funding received through agreements with RPI Finance Trust ("RPI") and BioPharma Credit Investments V (Master) LP and BioPharma Credit PLC (the "Lenders"), $839.5 million was from the sale of common stock and series A convertible preferred stock in the Company's public offerings and $76.0 million was from the sale of redeemable convertible preferred stock in private financings prior to the Company's initial public offering in May 2013. As of December 31, 2019, the Company had $381.1 million in cash, cash equivalents and marketable securities.

The Company commenced active operations in early 2008. Since its inception, the Company has generated an accumulated deficit of $757.0 million through December 31, 2019 and will require substantial additional capital to fund its research, development, and commercialization efforts. The Company is subject to risks common to companies in the biotechnology industry, including, but not limited to, risks of failure of commercialization, clinical trials and preclinical studies, the need to obtain additional financing to fund the future development and commercialization of tazemetostat and the rest of its pipeline, the need to obtain marketing approval for its product candidates, the need to successfully commercialize and gain market acceptance of its product candidates, dependence on key personnel, protection of proprietary technology, compliance with government regulations, development by competitors of technological innovations and ability to transition from clinical-stage manufacturing to commercial-stage production of products.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles, or GAAP. Any reference in these notes to applicable guidance is meant to refer to the authoritative accounting principles generally accepted in the United States as found in the ASC and Accounting Standards Update, or ASU, of the FASB. The consolidated financial statements include the accounts of the Company and its wholly owned, controlled subsidiary, Epizyme Securities Corporation. All intercompany transactions and balances of subsidiaries have been eliminated in consolidation.

Use of Estimates

The preparation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities, as of the date of the consolidated financial statements, and the reported amounts of collaboration revenue and expenses during the reporting period. Actual results and outcomes may differ materially from management's estimates, judgments and assumptions.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but before the consolidated financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The Company evaluated all events and transactions through the date these financial statements were filed with the Securities and Exchange Commission.

Cash and cash equivalents

The Company considers all highly liquid securities with original final maturities of three months or less from the date of purchase to be cash equivalents. Cash and cash equivalents are comprised of demand deposit accounts, funds in money market accounts, commercial paper and corporate notes.

Marketable securities

The Company classifies marketable securities with a remaining maturity when purchased of greater than three months as available-for-sale. The Company considers all available-for-sale securities, including those with maturity dates beyond 12 months, as available to support current operational liquidity needs and therefore classifies all securities with maturity dates beyond 90 days at the date of purchase as current assets. Available-for-sale securities are maintained by the Company's investment managers and may consist of commercial paper, high-grade corporate notes, U.S. Treasury securities, and U.S. government agency securities. Available-for-sale securities are carried at fair value with the unrealized gains and losses included in other comprehensive loss as a component of stockholders' equity until realized. Any premium or discount arising at purchase is amortized and/or accreted to interest income and/or expense over the life of the instrument. Realized gains and losses are determined using the specific identification method and are included in other income (expense).

The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of December 31, 2019 was $116.7 million, which consisted of 3 commercial paper securities and 19 corporate notes securities. The aggregate fair value of securities held by the Company in an unrealized loss position for greater than twelve months as of December 31, 2019 was $4.0 million, which consisted of 1 U.S. government agency security. The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of December 31, 2018 was $139.2 million, which consisted of 19 commercial paper securities and 29 corporate notes securities. There were no marketable securities held by the Company for greater than twelve months as of December 31, 2018. If any adjustment to fair value reflects a decline in value of the investment, the Company considers all available evidence to evaluate the extent to which the decline is "other-than-temporary" and, if so, mark the investment to market through a charge to the Company's consolidated statement of operations and comprehensive loss.

The Company does not intend to sell and it is unlikely that the Company will be required to sell the above investments before recovery of their amortized cost bases, which may be maturity. The Company determined there was no material change in the credit risk of the above investments, and as a result, the Company determined it did not hold any investments with an other-than-temporary impairment as of December 31, 2019 and 2018.

The following table summarizes the available for sale securities held at December 31, 2019 (in thousands):

Description	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Commercial paper	$ 96,952	$ 27	$ (16)	$ 96,963
Corporate notes	140,634	49	(41)	140,642
U.S. government agency securities and U.S. Treasuries	4,000	—	—	4,000
Total	$ 241,586	$ 76	$ (57)	$ 241,605

The following table summarizes the available for sale securities held at December 31, 2018 (in thousands):

Description	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Commercial paper	$ 73,110	$ —	$ (22)	$ 73,088
Corporate notes	80,575	—	(30)	80,545
U.S. government agency securities and U.S. Treasuries	—	—	—	—
Total	$ 153,685	$ —	$ (52)	$ 153,633

Certain short-term debt securities with original maturities of less than 90 days are included in cash and cash equivalents within the consolidated balance sheets and are not included in the tables above.

The majority of marketable securities held at December 31, 2019 have maturities of less than one year, with the exception of one U.S. government agency security. All marketable securities held at December 31, 2018 have maturities of less than one year.

The amortized cost of available-for-sale securities is adjusted for amortization of premiums and accretion of discounts to maturity. At December 31, 2019, the balance in the Company's accumulated other comprehensive loss was composed mainly of activity related to the Company's available-for-sale marketable securities. There were no realized gains or losses recognized on the sale or maturity of available-for-sale securities during the year ended December 31, 2019 and December 31, 2018, respectively, and as a result, the Company did not reclassify any amounts out of accumulated other comprehensive loss for the same period.

Restricted Cash

As of January 1, 2018, the Company adopted ASU 2016-18, *Restricted Cash*, or ASU 2016-18, which requires an entity to reconcile and explain the period-over-period change in total cash, cash equivalents and restricted cash within its statements of cash flows. The Company adopted the standard using the retrospective approach. The adoption of the standard did not have a material impact on the Company's consolidated financial statements or disclosures; however, prior period restricted cash was added to beginning and ending cash and cash equivalents in the consolidated statements of cash flows to conform to the current period presentation.

A reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statements of cash flows, is as follows:

	December 31,		
	2019	2018	2017
	(In thousands)		
Cash and cash equivalents	$ 139,482	$ 86,671	$ 226,664
Restricted cash, as part of other assets	1,509	462	462
Total cash, cash equivalents, and restricted cash shown in the consolidated statements of cash flows	$ 140,991	$ 87,133	$ 227,126

The $1.5 million in restricted cash is comprised of $0.5 million in a letter of credit as a security deposit for the office and laboratory lease at Technology Square in Cambridge, Massachusetts and $1.0 million in a letter of credit as a security deposit for the Company's office lease at Hampshire Street in Cambridge, Massachusetts. The Company has recorded cash held to secure these letters of credit as restricted cash in restricted cash and other assets on the consolidated balance sheet. The restricted cash is classified as non-current based on the related lease terms.

Fair Value Measurements

The Financial Accounting Standards Board, or FASB, Codification Topic 820, *Fair Value Measurements and Disclosures*, requires the use of valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets and liabilities. The income approach uses valuation techniques to convert future amounts, such as cash flows or earnings, to a single present amount on a discounted basis. The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (replacement cost). Valuation techniques should be consistently applied. GAAP also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities.
Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company's financial instruments as of December 31, 2019 and 2018 consisted primarily of cash and cash equivalents, marketable securities and accounts receivable and accounts payable. As of December 31, 2019 and December 31, 2018, the Company's financial assets recognized at fair value consisted of the following:

	Fair Value as of December 31, 2019			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Cash equivalents	$ 132,193	$ 124,419	$ 7,774	$ —
Marketable securities:				
Commercial paper	96,963	—	96,963	—
Corporate notes	140,642	—	140,642	—
U.S. government agency securities and treasuries	4,000	—	4,000	—
Total	$ 373,798	$ 124,419	$ 249,379	$ —

	Fair Value as of December 31, 2018			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Cash equivalents	$ 79,225	$ 50,785	$ 28,440	$ —
Marketable securities:				
Commercial paper	73,088	—	73,088	—
Corporate notes	80,545	—	80,545	—
U.S. government agency securities and treasuries	—	—	—	—
Total	$ 232,858	$ 50,785	$ 182,073	$ —

Cash equivalents and marketable securities have been initially valued at the transaction price and subsequently valued, at the end of each reporting period, utilizing third-party pricing services or other market observable data.

The Company measures its cash equivalents at fair value on a recurring basis, which approximates cost. The Company classifies some of its cash equivalents within Level 1 of the fair value hierarchy because they are valued using observable inputs that reflect quoted prices for identical assets in active markets. The Company measures its marketable securities at fair value on a recurring basis and classifies those instruments and some cash equivalents within Level 2 of the fair value hierarchy. The pricing services used by management utilize industry standard valuation models, including both income and market based approaches and observable market inputs to determine the fair value of marketable securities and those cash equivalents classified within Level 2 of the fair value hierarchy.

As of December 31, 2019, the fair value of the long-term debt, payable in installments through November 18, 2024, approximated its carrying value due to the proximity of the issuance date to December 31, 2019.

Amortization of Debt Discount and Issuance Costs

Long-term debt is initially recorded at its allocated proceeds, net of discounts and deferred costs. Debt discount and issuance costs, consisting of legal and other fees directly related to the debt, are offset against initial carrying value of the debt and are amortized to interest expense over the estimated life of the debt based on the effective interest method.

Liability Related to Sale of Future Royalties

The Company treats the liability related to sale of future royalties as a debt financing, as the Company has significant continuing involvement in the generation of the cash flows, to be amortized to interest expense using the effective interest rate method over the life of the related royalty stream.

The liability related to sale of future royalties and the related interest expense are based on the Company's current estimates of future royalties expected to be paid over the life of the arrangement. The Company will periodically assess the expected royalty payments using a combination of internal projections and forecasts from external sources. To the extent the Company's future estimates of royalty payments are greater or less than previous estimates or the estimated timing of such payments is materially different than its previous estimates, the Company will prospectively recognize related non-cash interest expense.

For further discussion of the sale of future royalties, refer to Note 11, *Sale of Future Royalties*.

Going Concern

At each reporting period, the Company evaluates whether there are conditions or events that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. The Company is required to make certain additional disclosures if it concludes substantial doubt exists and it is not alleviated by the Company's plans or when its plans alleviate substantial doubt about the Company's ability to continue as a going concern.

The Company's evaluation entails analyzing prospective operating budgets and forecasts for expectations of the Company's cash needs, and comparing those needs to the current cash, cash equivalent and marketable security balances. After considering the Company's current research and development plans, the building of commercial infrastructure and the timing expectations related to the progress of its programs, and after considering its existing cash, cash equivalents and marketable securities as of December 31, 2019, the Company did not identify conditions or events that raise substantial doubt about the Company's ability to continue as a going concern within one year from the date these financial statements were issued.

Accounts Receivable

Accounts receivable are amounts due from collaboration partners as a result of research and development services provided, reimbursements under equally co-funded global development arrangements or milestones achieved but not yet paid. The Company considered the need for an allowance for doubtful accounts and has concluded that no allowance was needed as of December 31, 2019 or 2018, as the estimated risk of loss on its accounts receivable was determined to be minimal.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk include cash, cash equivalents, marketable securities and accounts receivable. The Company attempts to minimize the risks related to cash, cash equivalents and marketable securities by working with highly rated financial institutions that invest in a broad and diverse range of financial instruments as defined by the Company. The Company has established guidelines relative to credit ratings and maturities intended to safeguard principal balances and maintain liquidity. The Company maintains its funds in accordance with its investment policy, which defines allowable investments, specifies credit quality standards and is designed to limit the Company's credit exposure to any single issuer.

Accounts receivable represent amounts due from collaboration partners. The Company monitors economic conditions to identify facts or circumstances that may indicate that any of its accounts receivable are at risk of collection.

Property and Equipment

The Company records property and equipment at cost. Property and equipment acquired under a capital lease is recorded at the lesser of the present value of the minimum lease payments under the capital lease or the fair value of the leased property at lease inception. The Company calculates depreciation and amortization using the straight-line method over the following estimated useful lives:

Asset Category	Useful Lives
Laboratory equipment	3 - 6 years
Computer and office equipment, and furniture	3 - 10 years
Leasehold improvements	3 - 6 years or term of respective lease, if shorter

Amortization of capital lease assets is included in depreciation expense. The Company capitalizes expenditures for new property and equipment and improvements to existing facilities and charges the cost of maintenance to expense. The Company eliminates the cost of property retired or otherwise disposed of, along with the corresponding

accumulated depreciation, from the related accounts, and the resulting gain or loss is reflected in the results of operations.

Impairment of Long-Lived Assets

The Company reviews long-lived assets to be held and used, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets or asset group may not be recoverable.

Evaluation of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset or asset group and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the asset or asset group, the assets are written down to their estimated fair values. No such impairments were recorded during 2019, 2018 or 2017.

Income Taxes

The Company records deferred income taxes to recognize the effect of temporary differences between tax and financial statement reporting. The Company calculates the deferred taxes using enacted tax rates expected to be in place when the temporary differences are realized and records a valuation allowance to reduce deferred tax assets if it is determined that it is more likely than not that all or a portion of the deferred tax asset will not be realized. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings results, expectations of future taxable income, carryforward periods available and other relevant factors. The Company records changes in the required valuation allowance in the period that the determination is made.

The Company assesses its income tax positions and records tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances and information available as of the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, the Company records the largest amount of tax benefit with a greater than 50.0% likelihood of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, the Company does not recognize a tax benefit in the financial statements. The Company records interest and penalties related to uncertain tax positions, if applicable, as a component of income tax expense. Refer to Note 6, *Income Taxes*, for additional information regarding the Company's income taxes.

Revenue Recognition

Effective January 1, 2018, the Company adopted ASC, Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), using the modified retrospective transition method. Under this method, results for reporting periods beginning after January 1, 2018 are presented pursuant to ASC 606, while prior period amounts are not adjusted and continue to be reported in accordance with ASC 605. This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company has entered into collaboration and license agreements, which are within the scope of ASC 606, to discover, develop, manufacture and commercialize product candidates. The terms of these agreements typically contain multiple promises or obligations, which may include: (i) licenses, or options to obtain licenses, to compounds directed to specific targets (referred to as "exclusive licenses") and (ii) research and development

activities to be performed on behalf of the collaboration partner related to the licensed targets. Payments to the Company under these agreements may include non-refundable license fees, customer option exercise fees, payments for research activities, reimbursement of certain costs, payments based upon the achievement of certain milestones and royalties on any resulting net product sales.

The Company first evaluates license and/or collaboration arrangements to determine whether the arrangement (or part of the arrangement) represents a collaborative arrangement pursuant to ASC Topic 808, *Collaborative Arrangements*, based on the risks and rewards and activities of the parties pursuant to the contractual arrangement. The Company accounts for collaborative arrangements (or elements within the contract that are deemed part of a collaborative arrangement), which represent a collaborative relationship and not a customer relationship, outside the scope of ASC 606. The Company's collaborations primarily represent revenue arrangements. For the arrangements or arrangement components that are subject to revenue accounting guidance, in determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. As part of the accounting for these arrangements, the Company must use significant judgment to determine: a) the number of performance obligations based on the determination under step (ii) above and whether those performance obligations are distinct from other performance obligations in the contract; b) the transaction price under step (iii) above; and c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. The Company uses judgment to determine whether milestones or other variable consideration, except for sales-based royalties, should be included in the transaction price as described further below. The transaction price is allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. In determining the stand-alone selling price of a license to the Company's proprietary technology or a material right provided by a customer option, the Company considers market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements as well as internally developed estimates that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the license. In validating its estimated stand-alone selling price, the Company evaluates whether changes in the key assumptions used to determine its estimated stand-alone selling price will have a significant effect on the allocation of arrangement consideration between performance obligations.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

Exclusive Licenses – If the license to the Company's intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, which generally include research and development services, the Company recognizes revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a license is distinct from the other promises, the Company considers relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can benefit from the license for its intended purpose without the receipt of the remaining promises, whether the value of the license is dependent on the unsatisfied promises, whether there are other vendors that could provide the remaining promises, and whether it is separately identifiable from the remaining promises. For licenses that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. The measure of progress, and thereby periods

over which revenue should be recognized, are subject to estimates by management and may change over the course of the research and development and licensing agreement.

Research and Development Services – The promises under the Company's collaboration and license agreements generally include research and development services to be performed by the Company on behalf of the collaboration partner. For performance obligations that include research and development services, the Company generally recognizes revenue allocated to such performance obligations based on an appropriate measure of progress. The Company utilizes judgment to determine the appropriate method of measuring progress for purposes of recognizing revenue, which is generally an input measure such as costs incurred. The Company evaluates the measure of progress each reporting period as described under *Exclusive Licenses* above. Reimbursements from the partner that are the result of a collaborative relationship with the partner, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense.

Customer Options – The Company's arrangements may provide a collaborator with the right to select a target for licensing either at the inception of the arrangement or within an initial pre-defined selection period, which may, in certain cases, include the right of the collaborator to extend the selection period. Under these agreements, fees may be due to the Company (i) at the inception of the arrangement as an upfront fee or payment, (ii) upon the exercise of an option to acquire a license or (iii) upon extending the selection period as an extension fee or payment. If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services, the goods and services underlying the customer options are not considered to be performance obligations at the outset of the arrangement, as they are contingent upon option exercise. The Company evaluates the customer options for material rights, or options to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the inception of the arrangement. The Company allocates the transaction price to material rights based on the relative stand-alone selling price, which is determined based on the identified discount and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised or expires.

Milestone Payments – At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment. If a milestone or other variable consideration relates specifically to the Company's efforts to satisfy a single performance obligation or to a specific outcome from satisfying the performance obligation, the Company generally allocates the milestone amount entirely to that performance obligation once it is probable that a significant revenue reversal would not occur.

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

For a complete discussion of accounting for collaboration revenues, see Note 10, *Collaborations*.

Revenue Recognition Prior to Adoption of ASC 606 – Prior to the adoption of ASC 606, the Company recognized revenue when all of the following criteria were met: persuasive evidence of an arrangement exists; delivery has

occurred or services have been rendered; the Company's price to the customer is fixed or determinable and collectability is reasonably assured.

Multiple-Element Revenue Arrangements. The Company's collaborations primarily represented multiple-element revenue arrangements. To account for these transactions, the Company determined the elements, or deliverables, included in the arrangement and allocated arrangement consideration to the various elements based on each element's relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involved significant judgment, including consideration as to whether each delivered element had standalone value to the collaborator. The Company determined the estimated selling price for deliverables within each agreement using vendor-specific objective evidence ("VSOE") of selling price, if available, or third-party evidence of selling price if VSOE was not available, or the Company's best estimate of selling price, if neither VSOE nor third-party evidence was available. Determining the best estimate of selling price for a deliverable required significant judgment. The Company typically used its best estimate of a selling price to estimate the selling price for licenses to its proprietary technology, since it often did not have VSOE or third-party evidence of selling price for these deliverables. In those circumstances where the Company applied its best estimate of selling price to determine the estimated selling price of a license to its proprietary technology, it considered market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements as well as internally developed estimates that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the license. In validating its best estimate of selling price, the Company evaluated whether changes in the key assumptions used to determine its best estimate of selling price would have a significant effect on the allocation of arrangement consideration between deliverables. The Company recognized consideration allocated to an individual element when all other revenue recognition criteria were met for that element.

The Company's multiple-element revenue arrangements generally included the following:

- ***Exclusive Licenses***. The deliverables under our collaboration agreements generally included exclusive licenses to discover, develop, manufacture and commercialize compounds with respect to one or more specified HMT targets. To account for this element of the arrangement, the Company evaluated whether the exclusive license had standalone value from the undelivered elements to the collaboration partner based on the consideration of the relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and other market participants. Arrangement consideration allocated to licenses may be recognized upon delivery of the license if facts and circumstances indicate that the license has standalone value apart from the undelivered elements, which generally include research and development services. Arrangement consideration allocated to licenses is deferred if facts and circumstances indicate that the delivered license does not have standalone value from the undelivered elements.

  The Company has determined that some of its exclusive licenses lack standalone value apart from the related research and development services, and in those circumstances recognized collaboration revenue from non-refundable exclusive license fees on a straight-line basis over the contracted or estimated period of performance, which is generally the period over which the research and development services are to be provided.

- ***Research and Development Services.*** The deliverables under the Company's collaboration and license agreements generally include deliverables related to research and development services to be performed on behalf of the collaboration partner. As the provision of research and development services is a part of the Company's central operations, when the Company is principally responsible for the performance of these services under the agreements, it recognized revenue on a gross basis for research and development services as those services were performed.

- ***Option Arrangements.*** The Company's arrangements may provide a collaborator with the right to select a target for licensing either at the inception of the arrangement or within an initial pre-defined selection period, which may, in certain cases, include the right of the collaborator to extend the selection period. Under these agreements, fees may be due to the Company at the inception of the arrangement as an upfront fee or payment, upon the exercise of an option to acquire a license or upon extending the selection period as an extension fee or payment.

  The accounting for option arrangements is dependent on the nature of the options granted to the collaboration partner. Options are considered substantive if, at the inception of the arrangement, the Company is at risk as to whether the collaboration partner will choose to exercise the options to secure

exclusive licenses. Factors that are considered in evaluating whether options are substantive include the overall objective of the arrangement, the benefit the collaborator might obtain from the arrangement without exercising the options, the cost to exercise the options relative to the total upfront consideration and the additional financial commitments or economic penalties imposed on the collaborator as a result of exercising the options. For arrangements under which the option to secure licenses is considered substantive, the Company did not consider the licenses to be deliverables at the inception of the arrangement. For arrangements where the option to secure licenses is not considered substantive, the Company considered the license to be a deliverable at the inception of the arrangement and, upon delivery of the license, applied the multiple-element revenue arrangement criteria to the license and any other deliverables to determine the appropriate revenue recognition. None of the options to secure exclusive licenses included in our collaborative arrangements have been determined to be substantive.

Milestone Revenue. The Company's collaboration and license agreements generally include contingent milestone payments related to specified preclinical research and development milestones, clinical development milestones, regulatory milestones and sales-based milestones. Preclinical research and development milestones are typically payable upon the selection of a compound candidate for the next stage of research and development. Clinical development milestones are typically payable when a product candidate initiates or advances in clinical trial phases or achieves defined clinical events, such as proof-of-concept. Regulatory milestones are typically payable upon submission for marketing approval with regulatory authorities, upon receipt of actual marketing approvals for a compound or for additional indications or upon the first commercial sale. Sales-based milestones are typically payable when annual sales reach specified levels.

At the inception of each arrangement that included milestone payments, we evaluated whether each milestone was substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation included an assessment of whether:

- the consideration is commensurate with either the entity's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone;
- the consideration relates solely to past performance; and
- the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement.

The Company evaluated factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment.

Non-refundable preclinical research and development, clinical development and regulatory milestones that were expected to be achieved as a result of the Company's efforts during the period of its performance obligations under the collaboration and license agreements were generally considered to be substantive and were recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. If not considered to be substantive, revenue from achievement of milestones was initially deferred and recognized over the remaining term of our performance obligations. Milestones that were not considered substantive because the Company did not contribute effort to its achievement are recognized as revenue upon achievement, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations on the Company's part.

Research and Development Expenses

Research and development expenses are expensed as incurred. Research and development expenses are comprised of costs incurred in providing research and development activities, including salaries and benefits, facilities costs, overhead costs, contract research and development services, and other outside costs. Nonrefundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

External research and development expenses associated with the Company's programs include clinical trial site costs, clinical manufacturing costs, costs incurred for consultants and other outside services, such as data management and statistical analysis support, and materials and supplies used in support of the clinical and preclinical programs. Internal costs of the Company's clinical programs include salaries, stock-based compensation, and the portion of the Company's facility costs allocated to research and development expense. When vendors billing terms do not coincide with the Company's period-end, the Company is required to make estimates of its obligations to those vendors, including clinical trial and pharmaceutical development costs, contractual services costs and costs for supply of its product candidates incurred in a given accounting period and record accruals at the end of the period. The Company bases its estimates on its knowledge of the research and development programs, services performed for the period, past history for related activities and the expected duration of the vendor service contract, where applicable.

The Company generally accrues expenses related to research and development activities based on the services received and efforts expended pursuant to contracts with multiple contract research organizations that conduct and manage clinical trials, as well as other vendors that provide research and development services. Payments for these activities are based on the terms of the individual arrangements and may result in payment terms that differ from the pattern of costs incurred. There may be instances in which payments made to vendors will exceed the level of services provided and result in a prepayment of the clinical expense. Payments under some of these contracts depend on factors such as the successful enrollment of subjects and the completion of clinical trial milestones. In accruing service fees, the Company estimates the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from estimates, the Company would adjust the accrual or prepaid accordingly in future periods.

Stock-Based Compensation

The Company measures employee and non-employee stock-based compensation based on the grant date fair value of the stock-based compensation award. The Company grants stock options at exercise prices equal to the fair value of the Company's common stock on the date of grant, based on observable market prices.

The Company recognizes employee stock-based compensation expense on a straight-line basis over the requisite service period of the awards. The Company recognizes forfeitures at the time they occur. The actual expense recognized over the vesting period will only represent those options that vest.

For awards with performance conditions in which the award does not vest unless the performance condition is met, the Company recognizes expense if, and to the extent that, the Company estimates that achievement of the performance condition is probable. If the Company concludes that vesting is probable, it recognizes expense from the date it reaches this conclusion through the estimated vesting date. For awards with performance conditions that accelerate vesting of the award, the Company estimates the likelihood of satisfaction of the performance conditions, which affects the period over which the expense is recognized, and recognizes the expense using the accelerated attribution model.

Refer to Note 13, *Employee Benefit Plans*, for additional information regarding the measurement and recognition of expense related to the Company's stock-based compensation awards.

Earnings (Loss) per Share

The Company computes basic earnings (loss) per share by dividing income (loss) attributable to common stockholders by the weighted average number of shares of common stock outstanding. During periods of income, the Company allocates participating securities a proportional share of income determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the "two-class method"). The Company's restricted stock and Series A Convertible Preferred Stock par value of $0.001 per share (the "Series A Preferred Stock") participate in dividends declared by the Company and are therefore considered to be participating securities. Participating securities have the effect of diluting both basic and diluted earnings per share during periods of income. During periods of loss, the Company allocates no loss to participating securities because they have no contractual obligation to share in the losses of the Company. The Company computes diluted earnings (loss) per share after giving consideration to the dilutive effect of stock options and warrants that are outstanding during the period, except where such non-participating securities would be anti-dilutive. Refer to Note 14, *Loss per Share*, for the Company's calculation of loss per share for the periods presented.

Segment Information

The Company operates as one reportable business segment: the discovery and development of novel epigenetic therapies for patients with cancer and other diseases.

Pending Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurements of Credit Losses on Financial Instruments*. The FASB has subsequently issued amendments to ASU 2016-13, which will be effective for the Company January 1, 2020. These standards require that credit losses be reported using an expected losses model rather than the incurred losses model that is currently used, and establishes additional disclosures related to credit risks. For available-for-sale securities with unrealized losses, these standards now require allowances to be recorded instead of reducing the amortized cost of the investment. The Company is currently evaluating the impact of the adoption of ASU 2016-13 and does not expect adoption to have a material effect on the Company's consolidated financial statements or disclosures.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements ("ASC 808")*, which clarifies certain that transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. The ASU will be effective for the Company in the first quarter of fiscal 2021, with early adoption permitted. A retrospective adoption to the date the Company adopted ASC 606 is required by recognizing a cumulative-effect adjustment to the opening balance of retained earnings of the earliest annual period presented. The Company is currently evaluating the impact of the adoption of this standard on its financial statements.

Recently Adopted Accounting Pronouncements

Leases

In February 2016, the FASB issued ASU, 2016-02, Leases ("ASC 842"), which requires lessees to recognize a right-of-use asset and lease liability for most lease arrangements. The new standard is effective for annual reporting periods beginning after December 15, 2018. A modified retrospective transition approach is required to be applied to leases existing as of, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available.

Effective January 1, 2019, the Company adopted ASC 842 using the required modified retrospective approach and utilizing the effective date as its date of initial application, for which prior periods are presented in accordance with the previous guidance in ASC 840, Leases ("ASC 840").

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and short-term and long-term lease liabilities, as applicable. The Company has elected not to recognize on the balance sheet leases with terms of 12 months or less. The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. Certain adjustments to the right-of-use asset may be required for items such as incentives received. The interest rate implicit in lease contracts is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. In transition to ASC 842, the Company utilized the remaining lease term of its leases in determining the appropriate incremental borrowing rates.

In accordance with ASC 842, components of a lease should be split into three categories: lease components (e.g., land, building, etc.), non-lease components (e.g., common area maintenance, consumables, etc.), and non-components (e.g., property taxes, insurance, etc.). The fixed and in-substance fixed contract consideration (including any consideration related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

Although separation of lease and non-lease components is required, certain expedients are available. Entities may elect the practical expedient to not separate lease and non-lease components by class of underlying asset. Rather, entities would account for each lease component and the related non-lease component together as a single component. The Company elected to treat lease and non-lease components as a single component for leases of all underlying asset types, including real estate and non-real estate leases.

In adopting ASC 842, the Company elected to utilize the available package of practical expedients permitted under the transition guidance within the new standard, which does not require the reassessment of the following: i) whether existing or expired arrangements are or contain a lease, ii) the lease classification of existing or expired leases, and iii) whether previous initial direct costs would qualify for capitalization under the new lease standard.

The adoption of this standard resulted in the recognition of operating lease liabilities and right-of-use assets of $11.5 million and $10.7 million, respectively, on the Company's consolidated balance sheet relating to its leases for its corporate headquarters and other office space in Cambridge, Massachusetts and other operating leases. The adoption of the standard did not have a material effect on the Company's consolidated statements of operation and comprehensive loss or consolidated statements of cash flows. As of December 31, 2019, the Company had operating lease liabilities and right-of-use asset balances under the transition guidance within the new standard of $9.4 million and $8.7 million, respectively.

3. Property and Equipment, net

Property and equipment, net consists of the following:

	December 31,	
	2019	2018
	(In thousands)	
Laboratory equipment	$ 4,273	$ 4,132
Computer and office equipment, furniture	5,113	5,040
Leasehold improvements	424	414
Construction in progress	560	271
Property and equipment	10,370	9,857
Less: accumulated depreciation and amortization	(8,151)	(7,800)
Property and equipment, net	$ 2,219	$ 2,057

Depreciation and amortization expense was $0.8 million, $1.1 million and $1.6 million for the years ended December 31, 2019, 2018, and 2017, respectively.

4. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	December 31,	
	2019	2018
	(In thousands)	
Prepaid clinical and manufacturing costs	$ 7,657	$ 6,295
Interest receivable on available for sale securities	943	679
Other prepaid expenses and other receivables	6,923	5,190
Total prepaid expenses and other current assets	$ 15,523	$ 12,164

5. Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2019	2018
	(In thousands)	
Employee compensation and benefits	$ 7,844	$ 5,509
Research and development expenses	9,706	11,272
Professional services and other	4,999	2,919
Accrued expenses	$ 22,549	$ 19,700

6. Income Taxes

The Company’s losses before income taxes consist solely of domestic losses.

The provision for (benefit from) income taxes for the years ended December 31, 2019, 2018, and 2017 is as follows:

	2019	2018	2017
	(In thousands)		
Current	$ (34)	$ (127)	$ 32
Deferred	92	184	(368)
Total	58	57	(336)
Income tax provision (benefit)	$ 58	$ 57	$ (336)

A reconciliation of the federal statutory income tax rate and the Company's effective income tax rate is as follows:

	Year Ended December 31,		
	2019	2018	2017
Federal statutory income tax rate	21.0%	21.0%	34.0%
State income taxes	6.0	5.7	4.8
Research and development and other tax credits	1.9	2.4	4.2
Permanent items	(0.7)	(0.7)	(2.0)
Change in valuation allowance	(27.5)	(28.3)	5.7
Return-to-provision adjustments	—	(0.1)	(0.7)
Rate Change	—	—	(45.7)
Other	(0.7)	—	—
Effective income tax rate	0.0%	0.0%	0.3%

Deferred Tax Assets (Liabilities)

The Company's deferred tax assets (liabilities) included in other assets in the consolidated balance sheets consist of the following:

	December 31,	
	2019	2018
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 180,877	$ 147,586
Research and development and other credit carryforwards	29,774	26,731
Capitalized start-up costs	901	1,031
Deferred revenue	1,029	1,021
Accruals and allowances	1,922	1,522
Eisai license payment	12,840	8,225
Stock compensation	6,489	4,692
Other	442	480
Sale of royalty	3,458	—
Lease liability	5,990	—
Gross deferred tax assets	243,722	191,288
Deferred tax asset valuation allowance	(237,858)	(191,070)
Total deferred tax assets	5,864	218
Deferred tax liabilities:		
Depreciation and other	(40)	(34)
Right of use asset	(5,732)	—
Total deferred tax liabilities	(5,772)	(34)
Net deferred tax asset (liability)	$ 92	$ 184

The Company evaluated the expected recoverability of its net deferred tax assets as of December 31, 2019 and 2018, and determined that, with the exception of the deferred tax asset related to alternative minimum tax ("AMT") credits, there was insufficient positive evidence to support the recoverability of these net deferred tax assets, concluding it is more likely than not that its net deferred tax assets would not be realized in the future; therefore, the Company provided a full valuation allowance against its net deferred tax asset balance as of December 31, 2019 and 2018, with the exception of the deferred tax asset related to the AMT credit. The AMT credit became refundable beginning in 2018 through no later than 2022 under the Tax Cuts and Jobs Act ("TCJA"), tax reform legislation, and as such, the related deferred tax asset will be able to be realized and the corresponding valuation allowance of $368,000 was reversed as of December 31, 2017 and recognized as a tax benefit. As of December 31, 2018, $184,000 of the deferred tax asset was reclassified to an income tax receivable. Fifty percent of the remaining AMT credit is refundable with the filing of the 2019 tax return. As such, as of December 31, 2019, $92,000 of the deferred tax asset was reclassified to an income tax receivable. There was no tax benefit or provision as a result of the asset reclassification on the consolidated balance sheet.

As of December 31, 2019, the Company had operating loss carryforwards of approximately $665.0 million and $656.0 million available to offset future taxable income for United States federal and state income tax purposes, respectively. The U.S. federal tax operating loss carryforwards of $428.5 million will expire at various dates from 2029 through 2037. Approximately $236.5 million of the U.S. federal tax operating losses can be carried forward indefinitely. The state tax operating loss carryforwards expire commencing in 2030 and will expire at various dates through 2039.

Additionally, as of December 31, 2019, the Company had research and development tax credit carryforwards of approximately $10.9 million and $3.6 million available to be used as a reduction of federal income taxes and state income taxes, respectively, which expire at various dates from 2028 through 2039, as well as federal orphan drug tax credit carryforwards of $15.9 million, which would expire at various dates from 2033 through 2038, and a $0.1 million federal alternative minimum tax credit carryforward, which represents the remaining AMT credit to be refunded with the filing of the 2020-2022 tax returns. The Company's ability to use its operating loss carryforwards and tax credits to offset future taxable income is subject to restrictions under Section 382 of the U.S. Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"). These restrictions may limit the future use of the operating loss carryforwards and tax credits if certain ownership changes described in the Internal Revenue Code occur. Future changes in stock ownership may occur that would create further limitations on the Company's use of the operating loss carryforwards and tax credits. In such a situation, the Company may be required to pay income taxes, even though significant operating loss carryforwards and tax credits exist.

Uncertain Tax Positions

The following is a rollforward of the Company's unrecognized tax benefits:

	December 31,	
	2019	2018
	(In thousands)	
Unrecognized tax benefits - as of beginning of year	$ 5,743	$ 5,223
Gross increases - current period tax positions	585	520
Unrecognized tax benefits - as of end of year	$ 6,328	$ 5,743

None of the Company's unrecognized tax benefits would result in income tax expense or impact the Company's effective tax rate if recognized. The Company had no accrued tax-related interest or penalties as of December 31, 2019 or 2018.

The Company has generated research and development and orphan drug credits, but has not conducted a study to document the qualified activities. This study may result in an adjustment to the Company's reserve for uncertain tax positions, research and development credit, and orphan drug credit carryforwards.

The Company files income tax returns in the U.S. federal tax jurisdiction and various state tax jurisdictions. Since the Company is in a loss carryforward position, the Company is generally subject to examination by the U.S. federal, state and local income tax authorities for all tax years in which a loss carryforward is available.

7. Commitments and Contingencies

Commitments

In addition to commitments under leasing arrangements (Refer to Note 8, *Leases*), the Company has committed to $10.4 million of development costs payable to Roche Molecular Systems Inc, ("Roche Molecular") upon certain development and regulatory milestones, under the amended companion diagnostic agreement, and Eisai has agreed to reimburse the Company $0.9 million of this amount related to a regulatory milestone for Japan. In July 2019, the Company entered into a fourth amendment to the companion diagnostics agreement. Under the amended agreement, the Company and Roche Molecular agreed to divide a $1.0 million regulatory milestone for the United States into two separate milestone payments, of which $0.5 million was paid by the Company as part of the signed amendment, with the remaining $0.5 million to be paid by the Company upon the satisfaction of certain conditions set forth in the fourth amendment to the companion diagnostics agreement. Through December 31, 2019, the Company has paid

Roche Molecular $6.0 million under this amended agreement, including developmental costs of $4.0 million and $2.0 million paid in 2019 and 2018, respectively, upon the achievement of milestones under the companion diagnostics agreement with Roche Molecular. As of December 31, 2019, the Company is responsible for the remaining development costs of $4.4 million due under the agreement. The Company expects the remaining development costs under the amended agreement to be incurred and paid through 2020.

Additionally, the Company enters into contracts in the normal course of business with clinical research organizations for clinical and preclinical research studies, external manufacturers for product for use in clinical trials, and other research supplies and other services as part of the Company's operations. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in contractual commitments.

8. Leases

The Company enters into lease arrangements for its facilities as well as certain equipment. A summary of the arrangements are as follows:

Operating Leases

The Company leases office and laboratory space at Technology Square in Cambridge, Massachusetts under a Lease Agreement, dated as of June 15, 2012, as amended, (the "Technology Square Lease"), with ARE-TECH Square, LLC, a Delaware limited liability company, (the "Technology Square Landlord"), with a term that originally continued through May 31, 2018, and a Company option to extend the term of the lease at the then-current market rent, as defined in the Technology Square Lease, through November 30, 2022.

In May 2017, the Company entered into a Third Amendment to the Technology Square Lease, (the "Third Amendment"), with the Technology Square Landlord, and a Fourth Amendment to the Technology Square Lease with the Technology Square Landlord, and, together with the Third Amendment, the Amendments.

Under the Amendments, the Company extended the term of the Technology Square Lease to November 30, 2022 but retained the right to terminate the Technology Square Lease prior to December 31, 2017. The Company did not exercise this right. Under the Technology Square Lease as amended, the Company has agreed to pay a monthly base rent of approximately $0.2 million for the period commencing December 1, 2017 through May 31, 2018, with an increase on June 1, 2018 of approximately $33,000 and annual increases of approximately $9,000 on December 1 of each subsequent year until December 1, 2021.

The Company has a $0.5 million letter of credit as a security deposit for the Technology Square Lease and has recorded cash held to secure this letter of credit as restricted cash and other assets on the consolidated balance sheet. In applying the ASC 842 transition guidance, the Company determined the classification of this lease to be operating and recorded a lease liability and a right-of-use asset on the ASC 842 effective date.

On August 16, 2019, the Company entered into a lease ("the Hampshire Street Lease") with BMR-Hampshire LLC (the "Landlord"). The Hampshire Street Lease is for 33,525 rentable square feet of office space in Cambridge, Massachusetts. The Hampshire Street Lease commenced as of December 1, 2019. The Hampshire Street Lease has an initial term of seven years and four months from the commencement date and provides the Company with an option to extend the lease term for one additional five-year period. After a four-month period during which base rent is not payable, the Hampshire Street Lease provides for monthly rent payments starting at $0.2 million and increasing 2.5% per year. In the event that the Company exercises its option to extend the lease term, the Hampshire Street Lease provides for monthly rent payments during the additional five-year period at the greater of the base rent rate at the end of the initial term or the then-current market rent. In addition to base rent, the Hampshire Street Lease requires the Company to pay certain variable costs, including taxes, insurance, maintenance and other operating expenses.

The Company has a $1.0 million letter of credit in favor of the Landlord as a security deposit for the Hampshire Street Lease and has recorded cash held to secure this letter of credit as restricted cash and other assets on the consolidated balance sheet. In applying ASC 842, the Company determined the classification of the Hampshire Street Lease to be operating and recorded a lease liability and a right-of-use asset as of December 31, 2019.

The Company is required to pay certain variable costs to its landlords in addition to fixed rent. These costs include common area maintenance, real estate taxes, and parking and are included in lease expense.

The following table contains a summary of the lease costs recognized under Topic 842 and other information pertaining to the Company's operating leases for the three and nine months ended December 31, 2019:

	Twelve months ended December 31, 2019
Lease cost	
Operating lease cost	$ 3,771
Variable lease cost	1,318
Total lease cost	$ 5,089
Other information	
Operating cash flows used for operating leases	$ 3,648
Weighted average remaining lease term	5.3 years
Weighted average discount rate	9.60%

Future minimum lease payments under the Company's non-cancelable operating leases as of December 31, 2019, are as follows:

	2019 (In thousands)
2020	$ 4,512
2021	6,405
2022	6,189
2023	2,916
Thereafter	9,696
Total lease payments	$ 29,718
Less: imputed interest	(7,559)
Total operating lease liabilities at December 31, 2019	$ 22,159

Under the prior lease accounting guidance, the Company's contractual commitments under leases, excluding common area maintenance charges and real estate taxes, as of December 31, 2018 were as follows:

	Total	2019	2020	2021	2022	2023
	(In thousands)					
Operating leases	$ 14,099	$ 3,552	$ 3,641	$ 3,574	$ 3,332	$ —
Capital lease, including amounts representing interest	69	16	17	18	18	—
Total commitments	$ 14,168	$ 3,568	$ 3,658	$ 3,592	$ 3,350	$ —

9. Stockholders' (Deficit) Equity

Common Stock

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to dividends when and if declared by the board of directors.

In November 2019, the Company issued to RPI 6,666,667 shares of Common Stock pursuant to a purchase agreement (for additional information refer to Note 11, *Sale of Future Royalties*). In March 2019, October 2018, and September 2017, the Company issued 11,500,000, 9,583,334 and 10,557,000 shares of Common Stock, respectively, in connection with public offerings. The issuance of these shares contributed to significant increases in the Company's shares of common stock outstanding as of December 31, 2019 and 2018 and in the weighted average shares outstanding for the years ended December 31, 2019 and 2018 when compared to the comparable prior year periods.

As of December 31, 2019, a total of 25,428,732 shares of common stock were reserved for issuance upon (i) the exercise of outstanding stock options and vesting of restricted stock units (ii) the issuance of stock awards under the Company's 2013 Stock Incentive Plan and 2013 Employee Stock Purchase Plan (iii) the issuance of common stock under the Series A Preferred Stock (iv) the issuance of common stock under the warrants and (v) the issuance of common stock under the Company's Put Option.

Convertible Preferred Stock

On March 6, 2019, the Company entered into an Underwriting Agreement, (the "Preferred Stock Agreement"), that related to the public offering of 350,000 shares of Series A Preferred Stock, for a purchase price to the public of $115.00 per share. All of the Series A Preferred Stock was sold by the Company for net proceeds of $37.4 million.

Upon issuance, each share of Series A Preferred Stock included an embedded beneficial conversion feature because the market price of the Company's common stock on the date of issuance of the Series A Preferred Stock of $12.34 per share as compared to an effective conversion price of the Series A Preferred Stock of $11.50 per share. As a result, the Company recorded the intrinsic value of the beneficial conversion feature of $2.9 million as a discount on the Series A Preferred Stock at issuance. Because the Series A Preferred Stock is immediately convertible upon issuance and does not include mandatory redemption provisions, the discount on the Series A Preferred Stock was immediately accreted.

The Company evaluated the Series A Preferred Stock for liability or equity classification in accordance with the provisions of ASC 480, Distinguishing Liabilities from Equity, and determined that equity treatment was appropriate because the Series A Preferred Stock did not meet the definition of the liability instruments defined thereunder for convertible instruments. Specifically, the Series A Preferred Stock is not mandatorily redeemable and does not embody an obligation to buy back the shares outside of the Company's control in a manner that could require the transfer of assets. Additionally, the Company determined that the Series A Preferred Stock would be recorded as permanent equity, not temporary equity, based on the guidance of ASC 480 given that the holders of equally and more subordinated equity would be entitled to also receive the same form of consideration upon the occurrence of the event that gives rise to the redemption or events of redemption that are within the control of the Company.

Voting Rights

Shares of Series A Preferred Stock will generally have no voting rights except as required by law and except that the consent of the holders of a majority of our outstanding shares of Series A Preferred Stock will be required to amend the terms of the Series A Preferred Stock or take certain other actions with respect to the Series A Preferred Stock.

Dividends

Shares of Series A Preferred Stock will be entitled to receive dividends equal to (on an as-if-converted-to-common stock basis), and in the same form and manner as, dividends actually paid on shares of the Company's common stock.

Liquidation Rights

Subject to the prior and superior rights of the holders of any senior securities of the Company, upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, each holder of shares of Series A Preferred Stock shall be entitled to receive, in preference to any distributions of any of the assets or surplus funds of the Company to the holders of common stock, an amount equal to $0.001 per share of Series A Preferred Stock, plus an additional amount equal to any dividends declared but unpaid on such shares, before any payments shall be made or any assets distributed to holders of any class of common stock.

If, upon any such liquidation, dissolution or winding up of the Company, the assets of the Company shall be insufficient to pay the holders of shares of the Series A Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Company shall be distributed ratably to holders of the shares of the Series A Preferred Stock in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

Conversion

Each share of Series A Preferred Stock shall be convertible, at any time and from time to time from and after the issuance date, at the option of the holder thereof, into a number of shares of common stock equal to 10 shares of common stock, provided that the holder will be prohibited from converting Series A Preferred Stock into shares of the Company's common stock if, as a result of such conversion, the holder, together with its affiliates and attribution parties, would own more than 9.99% of the total number of shares of common stock then issued and outstanding. The holder can change this requirement to a higher or lower percentage, not to exceed 9.99% of the number of shares of common stock outstanding, upon 61 days' notice to the Company.

Redemption

The Company is not obligated to redeem or repurchase any shares of Series A Preferred Stock. Shares of Series A Preferred Stock are not entitled to any redemption rights or mandatory sinking fund or analogous fund provisions.

Warrants

In November 2019, warrants to purchase up to 2,500,000 shares of Common Stock at an exercise price of $20.00 per share (the "Common Stock Warrant"), were issued to RPI pursuant to the RPI Purchase Agreement (for additional information refer to Note 11, *Sale of Future Royalties*), which were classified as equity and recorded at their relative fair value of $8.4 million to additional paid-in-capital on the consolidated balance sheets.

10. Collaborations

GSK

In January 2011, the Company entered into a collaboration and license agreement with GSK, to discover, develop and commercialize novel small molecule HMT inhibitors directed to available targets from the Company's platform. Under the terms of the agreement, the Company granted GSK exclusive worldwide license rights to HMT inhibitors directed to three targets. Additionally, as part of the research collaboration, the Company agreed to provide research and development services related to the licensed targets pursuant to agreed upon research plans during a research term that ended January 8, 2015. In March 2014, the Company and GSK amended certain terms of this agreement for the third licensed target, revising the license terms with respect to candidate compounds and amending the corresponding financial terms, including reallocating milestone payments and increasing royalty rates as to the third target. Subsequent to a GSK strategic portfolio prioritization, the Company received notice in October 2017 that GSK terminated the agreement with respect to the third target, effective December 31, 2017, which returned all rights to that target to the Company. The two other targets continue to be subject to the agreement and were not impacted by the termination with respect to the third target. The Company substantially completed all research obligations under this agreement by the end of the first quarter of 2015 and completed the transfer of the remaining data and materials for these programs to GSK in the second quarter of 2015.

Agreement Structure

Under the agreement, the Company has received and recognized collaboration revenue totaling $89.0 million, consisting of upfront payments, fixed research funding, research and development services and preclinical and research and development milestone payments. As of December 31, 2019, for the two remaining targets, the Company is eligible to receive up to $50.0 million in clinical development milestone payments, up to $197.0 million in regulatory milestone payments and up to $128.0 million in sales-based milestone payments. As a result of the termination of the agreement as it relates to the third target, the Company will receive no additional payments related to that target. In addition, GSK is required to pay the Company royalties, at percentages from the mid-single digits to the low double-digits, on a licensed product-by-licensed product basis, on worldwide net product sales, subject to reduction in specified circumstances. Due to the uncertainty of pharmaceutical development and the high historical failure rates generally associated with drug development, the Company may not receive any additional milestone payments or royalty payments from GSK. GSK became solely responsible for development and commercialization for each licensed target in the collaboration when the research term ended on January 8, 2015.

Collaboration Revenue

Through December 31, 2019, the Company has earned a total of $89.0 million under the GSK agreement, which the Company recognized as collaboration revenue in the consolidated statements of operations and comprehensive loss, including $20.0 million in milestone revenue in the year ended December 31, 2018. The Company did not recognize any collaboration revenue under the agreement in the year ended December 31, 2019. The Company did not have any deferred revenue related to this agreement as of December 31, 2019 or December 31, 2018 and any future revenues will relate to any milestone payments and royalties received under the agreement with respect to the two remaining targets. As of December 31, 2018, the Company had $20.0 million in receivables under this agreement which were collected in 2019. There were no receivables outstanding under this agreement as of December 31, 2019.

Eisai

In April 2011, the Company entered into a collaboration and license agreement with Eisai under which the Company granted Eisai an exclusive worldwide license to its small molecule HMT inhibitors directed to the EZH2 HMT, including the Company's product candidate tazemetostat, while retaining an opt-in right to co-develop, co-commercialize and share profits with Eisai as to licensed products in the United States.

As of December 31, 2014, the Company had completed its performance obligations under the original agreement.

In March 2015, the Company entered into an amended and restated collaboration and license agreement with Eisai (the "Eisai License Agreement"), under which the Company reacquired worldwide rights, excluding Japan, to its EZH2 program, including tazemetostat. Under the Eisai License Agreement, the Company is responsible for global development, manufacturing and commercialization outside of Japan of tazemetostat and any other EZH2 product candidates, with Eisai retaining development and commercialization rights in Japan, as well as a right to elect to manufacture tazemetostat and any other EZH2 product candidates in Japan, and a right of first negotiation for the rest of Asia. Eisai waived its right of first negotiation for the rest of Asia in 2018.

Under the original agreement, Eisai was solely responsible for funding all research, development and commercialization costs for EZH2 compounds. Under the Eisai License Agreement, the Company is solely responsible for funding global development, manufacturing and commercialization costs for EZH2 compounds outside of Japan, including the remaining development costs due under a companion diagnostic agreement with Roche Molecular, and Eisai is solely responsible for funding Japan-specific development and commercialization costs for EZH2 compounds.

The Company recorded the reacquisition of worldwide rights, excluding Japan, to the EZH2 program, including tazemetostat, under the Eisai License Agreement, as an acquisition of an in-process research and development asset. As this asset was acquired without corresponding processes or activities that would constitute a business, had not achieved regulatory approval for marketing and, absent obtaining such approval, had no alternative future use, the Company recorded the $40.0 million upfront payment made to Eisai in March 2015 as research and development expense in the consolidated statements of operations and comprehensive loss. The Company also agreed to pay Eisai up to $20.0 million in clinical development milestone payments, including a $10.0 million milestone upon the earlier

of initiation of a first phase 3 clinical trial of any EZH2 product or the first submission of an NDA or Market Authorization Application, ("MAA"), and a $10.0 million milestone upon the earlier of initiation of a first phase 3 clinical trial of an EZH2 product or the first submission of an NDA or MAA for an indication different from the previous indication, up to $50.0 million in regulatory milestone payments, including a $25.0 million milestone payment upon regulatory approval of the first NDA or MAA, and a $25.0 million milestone payment upon regulatory approval of the next NDA or MAA of the different indication, and royalties at a percentage in the mid-teens on worldwide net sales of any EZH2 product, excluding net sales in Japan. The Company is eligible to receive from Eisai royalties at a percentage in the mid-teens on net sales of any EZH2 product in Japan. In the second quarter of 2019, the Company submitted its first NDA to the U.S. Food and Drug Administration, ("FDA"), for the treatment of patients with epithelioid sarcoma, triggering the payment of the first $10.0 million clinical development milestone to Eisai and the recording of this amount to research and development expense. The Company paid the $10.0 million clinical development milestone to Eisai in June 2019. In the fourth quarter of 2019, the Company submitted its second NDA to the FDA, for the treatment of patients with follicular lymphoma, triggering the payment of the second $10.0 million clinical development milestone to Eisai and the recording of this amount to research and development expense. The Company paid the $10.0 million clinical development milestone to Eisai in December 2019. In January 2020, we triggered the payment of the $25.0 million milestone payment upon regulatory approval of tazemetostat for epithelioid sarcoma.

Roche Molecular

In December 2012, Eisai and the Company entered into an agreement with Roche Molecular under which Eisai and the Company engaged Roche Molecular to develop a companion diagnostic to identify patients who possess certain activating mutations of EZH2. In October 2013, this agreement was amended to include additional mutations in EZH2. The development costs due under the amended agreement with Roche Molecular were the responsibility of Eisai until the execution of the amended and restated collaboration and license agreement with Eisai in March 2015, at which time the Company assumed responsibility for the remaining development costs due under the agreement. In December 2015, the Company entered into a second amendment to the companion diagnostic agreement with Roche Molecular. The agreement was further amended in March 2018. Under the amended agreement, the Company was responsible for remaining development costs of $10.4 million due under the agreement as of March 2018 and Eisai has agreed to reimburse the Company $0.9 million of this amount related to a regulatory milestone for Japan. In July 2019, the Company entered into a fourth amendment to the companion diagnostics agreement. Under the amended agreement, the Company and Roche Molecular agreed to divide a $1.0 million regulatory milestone for the United States into two separate milestone payments, of which $0.5 million was paid by the Company as part of the signed amendment, with the remaining $0.5 million to be paid by the Company upon the satisfaction of certain conditions set forth in the fourth amendment to the companion diagnostics agreement. As of December 31, 2019, the Company is responsible for the remaining development costs of $4.4 million due under the agreement. The Company expects the remaining development costs under the amended agreement to be incurred and paid through 2020.

Under the agreement with Roche Molecular, Roche Molecular is obligated to use commercially reasonable efforts to develop and to make commercially available the companion diagnostic. Roche Molecular has exclusive rights to commercialize the companion diagnostic.

The agreement with Roche Molecular will expire when the Company is no longer developing or commercializing tazemetostat. The Company may terminate the agreement by giving Roche Molecular 90 days' written notice if the Company discontinues development and commercialization of tazemetostat or determines, in conjunction with Roche Molecular, that the companion diagnostic is not needed for use with tazemetostat. Either the Company or Roche Molecular may also terminate the agreement in the event of a material breach by the other party, in the event of material changes in circumstances that are contrary to key assumptions specified in the agreement or in the event of specified bankruptcy or similar circumstances. Under specified termination circumstances, Roche Molecular may become entitled to specified termination fees.

Boehringer Ingelheim

In November 2018, the Company entered into a collaboration and license agreement with Boehringer Ingelheim International GmbH ("Boehringer Ingelheim") to discover, research, develop and commercialize small molecule compounds that are inhibitors of an undisclosed histone acetyl transferase, or HAT, target and an undisclosed helicase target, along with associated predictive biomarkers (the "Target Projects"). Under the terms of the agreement, the Company granted to Boehringer Ingelheim an exclusive, world-wide license to the undisclosed target inhibitors technology. The agreement also includes reciprocal licenses to utilize each other's know-how, patents and technologies for activities under the agreement. Further, each party is granted the license to develop, manufacture, commercialize and otherwise exploit any compound or product that successfully achieves start of lead optimization ("SoLO"). The Company is also obligated to provide R&D services through SoLO approval for both Target Projects, and to serve on the Joint Steering Committee ("JSC") throughout the contractual term of the contract. The parties will jointly research and develop the first target program and will share commercialization activities within the United States. Boehringer Ingelheim will assume responsibility for commercialization outside of the United States. Boehringer Ingelheim is responsible for worldwide development and commercialization of the second target program.

Agreement Structure

Under the terms of the agreement, the Company received a $15.0 million upfront payment and $5.0 million in research funding for the costs to be incurred by the Company in connection with its research activities, payable quarterly in four equal installments during 2019. At its discretion, Boehringer Ingelheim had the option to extend the research period by up to one year, subject the Company's agreement to the specified research activities and additional research funding. During the third quarter of 2019, Boehringer Ingelheim's option to extend the research period expired unexercised, and therefore the research period ended on December 31, 2019. The Company is eligible to receive up to $80.5 million in clinical development milestone payments, up to $106.5 million in regulatory milestone payments and up to $93.5 million in sales-based milestone payments. In addition, Boehringer Ingelheim is required to pay the Company tiered royalties, on a product by product, and country by country basis, at percentages ranging from the mid-single digits to low-double digits. Royalties will be payable on net product sales for therapies directed at the second target both in the United States and the rest of the world and net product sales outside of the United States for therapies directed at the first target.

In the second quarter of 2019, we achieved and received a $5.5 million development milestone, which was included in the transaction price and recognized over the remaining performance period.

The next potential milestone payment that the Company might be entitled to receive under this agreement is a $5.5 million milestone, for selection of a lead optimization candidate for the shared program targeting enzymes within the HAT families under the agreement. Due to the uncertainty of pharmaceutical development and the high historical failure rates generally associated with drug development, the Company may not receive any additional milestone or royalty payments from Boehringer Ingelheim.

Accounting Considerations of the Agreement

The Company assessed the arrangement in accordance with ASC 606 and concluded that the contract counterparty, Boehringer Ingelheim, is a customer based on the arrangement structure, through the satisfaction of each target's performance obligations. The Company identified the following performance obligations under the arrangement:

- the combination of the Epizyme License to the first undisclosed target inhibitor technology, associated research and development services through the research period and,
- the combination of the Epizyme License to the second undisclosed target inhibitor technology, associated research and development services through the research period.

The Company determined that each Epizyme license was not distinct from the associated research and development services due to the limited economic benefit that Boehringer Ingelheim would derive from the Epizyme license if the research services were not provided by the Company. Accordingly, the Epizyme license and associated research and development services, for each Target Project, are each accounted for as a combined performance obligation.

Under the agreement, the Company determined that the total transaction price at execution was $20.0 million, comprised of the following:

- $15.0 million total upfront payment received under the agreement;
- $5.0 million research funding payment to be received in 2019;

In addition, during 2019, the Company achieved a $5.5 million development milestone for selection of a lead optimization candidate for the shared program targeting enzymes within helicase families, which was added to the transaction price.

The future potential milestone payments are excluded from the transaction price at inception, as the achievement of the milestone events are highly uncertain. As such, all milestone payments are fully constrained. The Company will reevaluate the transaction price at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, and, if necessary, adjust its estimate of the transaction price.

The Company determined that a 50/50 allocation of transaction price between the two performance obligations is appropriate considering the following factors: (i) R&D components' standalone selling price estimated using the cost plus margin approach; based on cost-plus 10%; (ii) the license rights granted for each program (world-wide or ex-US only) and their potential market opportunities; (iii) the total potential milestone payments for each program; and (iv) the expected revenue recognition pattern for each program, which is expected to be relatively consistent. Therefore, $10.0 million was allocated to the first undisclosed target license and associated research services and $10.0 million was allocated to the second undisclosed target license and associated research services and was recognized through December 31, 2019. The $5.5 million development milestone for selection of a lead optimization candidate for the shared program targeting enzymes within helicase families was allocated to the first undisclosed target license and associated research services and was recognized in the year ended December 31, 2019.

The allocation of the variable consideration, the development milestones, will be allocated to each performance obligation as described in the contract. The milestone payments are defined by program and are directly attributable to distinct achievements in each program. The recognition of revenue for each milestone will be based on progress to date in satisfying the applicable performance obligation.

Collaboration Revenue

Through December 31, 2019, the Company has recognized $25.5 million in total collaboration revenue since the inception of this collaboration, including $23.8 million during the year ended December 31, 2019, which included the recognition of $13.3 million of revenue that was deferred as of December 31, 2018.

The Company did not have any deferred revenue related to this agreement as of December 31, 2019. As of December 31, 2019, the Company had $1.3 million in receivables under this agreement, which were collected in January 2020. There were no receivables outstanding under this agreement as of December 31, 2018.

The Company will reevaluate the likelihood of achieving future milestones at the end of each reporting period. If the performance obligations have not been satisfied at the point at which the risk of significant revenue reversal is resolved, the transaction price will be adjusted and a cumulative catch up based on performance to date will be recorded. If performance obligations that have been satisfied, the milestone revenue from the arrangement will be recognized as revenue in the period the risk of significant reversal is relieved.

Celgene (a subsidiary of Bristol-Myers Squibb)

In April 2012, the Company entered into a collaboration and license agreement with Celgene. On July 8, 2015, the Company entered into an amendment and restatement of the collaboration and license agreement with Celgene.

All performance obligations, except for the three material rights were substantially satisfied as of the adoption of ASC 606 and therefore all of the transaction price allocated to those performance obligations has been recognized as revenue under ASC 606. Through December 31, 2019, the Company has recognized revenue of $99.2 million under the agreement as collaboration revenue in the Company's consolidated statements of operations and comprehensive loss and in accumulated deficit as a result of the cumulative-effect recognition upon adoption of ASC 606. The amounts received that have not yet been recognized as revenue, relate to the material rights, and are recorded in deferred revenue on the Company's consolidated balance sheet. Deferred revenue related to the agreement amounted to $3.8 million as of December 31, 2019, all of which is included in noncurrent liabilities.

11. Sale of Future Royalties

On November 4, 2019, the Company entered into a loan agreement with the Lenders providing for up to $70.0 million in secured term loans to be advanced in up to three tranches (the "Loan Agreement"). The Company may borrow $25.0 million under each of the first two tranches and $20.0 million under the third tranche. As of December 31, 2019, the Company had borrowed an aggregate principal amount under the first tranche of $25.0 million (the "Tranche A Note Payable"), with the ability to draw down the remaining two tranches under the Loan Agreement subject to certain conditions. The Company also has the right to request up to an additional $300.0 million in secured term loans, subject to the approval of the Lenders, following FDA approval of tazemetostat for the treatment of FL in the United States, provided that the Company has not prepaid any outstanding term loans at the time of such request and such request is made before November 18, 2021. (See Note 12, *Long-Term Debt*)

On the same day, the Company executed a purchase agreement (the "RPI Purchase Agreement") with RPI. Pursuant to the RPI Purchase Agreement, the Company agreed to sell to RPI 6,666,667 shares of its common stock, a warrant to purchase up to 2,500,000 shares of common stock at an exercise price of $20.00 per share (the "Common Stock Warrant"), and all of the Company's rights to receive royalties from Eisai with respect to net sales by Eisai of tazemetostat products in Japan pursuant to the Eisai License Agreement and any successor arrangement for Japan sales (the "Japan Royalty", and collectively, the "Transaction"). In consideration for the sale of shares of common stock, the Warrant and the Japan Royalty, RPI paid the Company $100.0 million upon the closing of the RPI Purchase Agreement. In addition, RPI agreed, in connection with RPI's acquisition from Eisai of the right to receive royalties from the Company under the Eisai License Agreement, to reduce the Company's royalty obligation by low single digits upon the achievement of specified annual net sales levels over $1.5 billion. In addition, under the RPI Purchase Agreement, the Company has the right to sell, and RPI has the obligation to purchase, subject to certain conditions, including a maximum purchase price of $20.00 per share, $50.0 million of shares of common stock at the Company's option for an 18-month period from the date of execution of the RPI Purchase Agreement (the "Put Option"). As further discussed in Note 16, *Subsequent Events*, the Company sold 2.5 million shares of its common stock, for an aggregate of $50.0 million in proceeds in February 2020 pursuant to the Put Option. Additionally, under the terms of the RPI Purchase Agreement, the founder and chief executive officer of RP Management, an affiliate of RPI, and a co-founder of Pharmakon Advisors LP, an affiliate of the Lenders was elected as a director of the Company.

The Company accounted for the Loan Agreement and RPI Purchase Agreement as a single arrangement as RPI and the Lenders are related parties and the agreements were negotiated together. The aggregate proceeds of $125.0 million were allocated on a relative fair value basis, which approximated their respective actual fair values, to the four units of accounting pursuant to the transaction as follows: (1) $79.0 million to the common stock issued to RPI based on the closing price of the Company's common stock on the date of the transaction, (2) $8.4 million to the warrant to purchase shares of common stock, based on the Black-Scholes option pricing model, (3) $12.6 million to the liability related to the sale of future royalties based on a discounted cash flow model and (4) $25.0 million to the Tranche A Note Payable based on the terms of the Loan Agreement. Transaction costs of $2.0 million were allocated directly to the units of accounting it relates to.

The fair value for the liability related to the sale of future royalties at the time of the transaction was based on our current estimates of future royalties expected to be paid to RPI over the life of the arrangement, which are considered level 3 inputs.

The allocated fair value of the common stock and warrants have been recorded in additional paid-in-capital and the Tranche A Note Payable has been recorded as long-term debt (See Note 12, *Long-Term Debt*).

Under the terms of RPI Purchase Agreement, although the Company sold all of its rights to receive the Japan Royalty, the Company continues to own all tazemetostat intellectual property rights and is responsible for the ongoing manufacturing and supply obligations related to the generation of these royalties. Due to the Company's continuing involvement, the Company will continue to account for any royalties due as revenue and recorded the proceeds from this transaction as a liability ("Royalty Obligation") that will be amortized using the effective interest method over the estimated life of the RPI Purchase Agreement.

As royalties are remitted to RPI from Eisai, the balance of the Royalty Obligation will be effectively repaid over the life of the Eisai License Agreement. In order to determine the amortization of the Royalty Obligation, the Company is required to estimate the total amount of future royalty payments to RPI over the life of the Eisai License Agreement. The $12.6 million recorded at execution will be accreted to the total of these royalty payments as interest expense over the life of the Royalty Obligation. At execution, the Company's estimate of this total interest expense resulted in an effective annual interest rate of approximately 9.01%. This estimate contains significant assumptions that impact both the amount recorded at execution and the interest expense that will be recognized over the royalty period. The Company will periodically assess the estimated royalty payments to RPI from Eisai and to the extent the amount or timing of such payments is materially different than the original estimates, an adjustment will be recorded prospectively to increase or decrease interest expense. There are a number of factors that could materially affect the amount and timing of royalty payments to RPI from Eisai, and correspondingly, the amount of interest expense recorded by the Company, most of which are not within the Company's control. Such factors include, but are not limited to, delays or discontinuation of development of tazemetostat in Japan, regulatory approval, changing standards of care, the introduction of competing products, manufacturing or other delays, generic competition, intellectual property matters, adverse events that result in governmental health authority imposed restrictions on the use of the drug products, significant changes in foreign exchange rates as the royalties remitted to RPI are made in U.S. dollars (USD) while the underlying Japan sales of tazemetostat will be made in currencies other than USD, and other events or circumstances that are not currently foreseen as tazemetostat is still under development in Japan and subject to regulatory approval. Changes to any of these factors could result in increases or decreases to both royalty revenues and interest expense.

The following table shows the activity of the Royalty Obligation since the transaction inception through December 31, 2019:

	Year Ended December 31, 2019
	(In thousands)
Proceeds from sale of future royalties	$ 12,601
Non-cash interest expense recognized	192
Liability related to the sale of future royalties - ending balance	$ 12,793

During the year ended December 31, 2019 no non-cash royalties from net sales of tazemetostat in Japan were recorded and the Company recorded $0.2 million of related non-cash interest expense.

12. Long-Term Debt

As of December 31, 2019, the Company had borrowed the first tranche of $25.0 million in term loans under the Loan Agreement. Under the terms of the Loan Agreement, the Company is required to make quarterly interest only payments following the closing of Tranche A Loan on November 18, 2019 and 8 equal quarterly payments of principal starting February 28, 2023 through November 18, 2024. The per annum interest rate of the Loan Agreement is equal to the LIBOR rate plus 7.75%. The Company has the ability to prepay the outstanding loan at its option by paying the greater of a prepayment penalty amount equal to the sum of all interest accruing from the prepayment date through the 36th-month anniversary of the Tranche A closing date on the amount of principal prepaid or a prepayment fee of 3% of the outstanding principal amount of the loan if prepayment was made before November 18, 2022, 2% of outstanding principal amount of the loan if prepayment was made between November 18, 2022 and November 2023 or 1% of the outstanding principal amount of the loan if the prepayment is made between November 18, 2023 and November 18, 2024. Lastly, the Company paid a commitment fee of 2.00% of the total $70.0 million committed facility amount, as well as expenses incurred by the Lender in executing the Loan Agreement. The Company also has the right to request up to an additional $300.0 million in secured term loans, subject to the approval of the Lenders, following FDA approval of tazemetostat for the treatment of FL in the United

States, provided that the Company has not prepaid any outstanding term loans at the time of such request and such request is made before November 18, 2021.

The obligations under the Loan Agreement are secured by a first priority security interest in and lien upon substantially all of the Company's assets excluding its subsidiary, Epizyme Securities Corporation. The Loan Agreement contains negative covenants restricting the Company's activities, including prohibition on consolidation, liquidation or dissolution, mergers or acquisitions, or change in control transactions. It also prohibits any disposition of all or any part of its properties or assets. There are no financial covenants associated with the agreement. The obligations under the agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in the Company's business, operations or financial or other condition. The Company has determined that the risk of subjective acceleration under the material adverse events clause is not probable and therefore has classified the outstanding principal in current and non-current liabilities based on scheduled principal payments.

The Company has the following minimum aggregate future loan payments at December 31, 2019 (in thousands):

	Year Ended December 31, 2019
2020	$ —
2021	—
2022	—
2023	12,500
2024	12,500
Total minimum payments	25,000
Less amounts representing interest and discount	(1,691)
Less current portion	—
Long-term debt, net of current portion	$ 23,309

For the year ended December 31, 2019, interest expense related to the Company's Loan Agreement was approximately $0.3 million. The total carrying value of debt is classified as long-term on the consolidated balance sheet as of December 31, 2019.

13. Employee Benefit Plans

Stock Incentive Plans

In 2008, the Company's board of directors adopted and the Company's stockholders approved the 2008 Stock Incentive Plan (the "2008 Plan"), which provided for the granting of certain defined stock incentive awards to employees, members of the Company's board of directors and non-employee consultants, advisors or other service providers. In April 2013, the Company's board of directors adopted and the Company's stockholders approved the 2013 Stock Incentive Plan (the "2013 Plan"), which provides for the granting of certain defined stock incentive awards to employees, members of the Company's board of directors and non-employee consultants, advisors or other service providers. Additionally, in May 2013, the Company's board of directors adopted and the Company's stockholders approved the 2013 Employee Stock Purchase Plan (the "2013 ESPP"), which provides participating employees the option to purchase shares of the Company's common stock at defined purchase prices over six month offering periods.

Stock incentive awards granted under the 2013 Plan may be incentive stock options, non-qualified stock options, restricted stock awards, restricted stock units, stock appreciation rights and other stock-based awards under the applicable provisions of the Internal Revenue Code. Incentive stock options are granted only to employees of the Company. Non-qualified stock options and restricted stock may be granted to officers, employees, consultants, advisors and other service providers. Incentive and non-qualified stock options and restricted stock granted to employees generally vest over four years, with 25.0% vesting upon the one-year anniversary of the grant and the remaining 75.0% vesting monthly over the following three years. Non-qualified stock options granted to consultants and other non-employees generally vest over the period of service to the Company. Initial non-qualified stock

options granted to members of the Company's board of directors generally vest over the recipient's term of board service. Annual non-qualified stock options granted to members of the Company's board of directors vest on the one-year anniversary of the grant. Incentive and non-qualified stock options expire ten years from the date of grant.

Stock-Based Compensation

Total stock-based compensation expense related to stock options, restricted stock units, shares issued under the employee stock purchase plan, and shares granted to non-employee directors in lieu of board fees was $18.0 million, $12.0 million, and $11.4 million for the years ended December 31, 2019, 2018, and 2017, respectively. Stock-based compensation expense is classified in the consolidated statements of operations and comprehensive loss as follows:

	Year Ended December 31,		
	2019	2018	2017
	(In thousands)		
Research and development	$ 6,295	$ 4,083	$ 5,613
General and administrative	11,721	7,921	5,818
Total	$ 18,016	$ 12,004	$ 11,431

Stock Options

The Company uses the Black-Scholes option-pricing model to measure the fair value of stock option awards. Weighted average assumptions used in this pricing model on the date of grant for options granted to employees are as follows:

	Year Ended December 31,		
	2019	2018	2017
Risk-free interest rate	2.2%	2.6%	1.8%
Expected life of options	6.0 years	6.0 years	6.0 years
Expected volatility of underlying stock	72.0%	71.5%	74.2%
Expected dividend yield	0.0%	0.0%	0.0%

There were no stock option awards granted to non-director, non-employees in the years ended December 31, 2019, December 31, 2018 or 2017.

The risk-free interest rate is based upon the U.S. Treasury yield curve in effect at the time of grant, with a term that approximates the expected life of the option. The Company calculates the expected life of options granted to employees using the simplified method as the Company has insufficient historical information to provide a basis for estimate. The Company determines the expected volatility using a blended approach encompassing its historical experience and the historical volatility of a peer group of comparable publicly traded companies with product candidates in similar stages of development to the Company's product candidates. The Company has applied an expected dividend yield of 0.0% as the Company has not historically declared a dividend and does not anticipate declaring a dividend during the expected life of the options.

The following is a summary of stock option activity for the year ended December 31, 2019:

	Number of Options	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
	(In thousands)		(In years)	(In thousands)
Outstanding at December 31, 2018	5,153	$ 14.48		
Granted	4,223	10.83		
Exercised	(261)	9.03		
Forfeited or expired	(1,028)	13.64		
Outstanding at December 31, 2019	8,087	$ 12.86	7.9	$ 95,883
Exercisable at December 31, 2019	2,910	$ 15.09	6.0	$ 28,601

During the years ended December 31, 2019, 2018 and 2017, the Company granted stock options to purchase an aggregate of 4,222,693 shares, 2,537,277 shares, and 2,331,500 shares, respectively, at weighted-average grant date fair values per option share of $6.99, $9.49, and $8.85, respectively. The total grant date fair value of options that vested during the years ended December 31, 2019, 2018 and 2017 was $13.2 million, $12.1 million, and $12.0 million, respectively. The aggregate intrinsic value of stock options exercised was $1.2 million in 2019, $1.5 million in 2018 and $4.1 million in 2017.

As of December 31, 2019, there was $33.6 million in unrecognized stock-based compensation related to stock options that are expected to vest. These costs are expected to be recognized over a weighted average remaining vesting period of 2.8 years.

Restricted Stock Units

During the year-ended December 31, 2019, 304,960 restricted stock units (“RSUs”) were granted to executives. These awards were service-based. Assuming all service conditions are achieved, 25% of the RSUs would vest annually for four years.

	Number of Units	Weighted Average Grant Date Fair Value per Unit
	(In thousands except per share data)	
Outstanding at December 31, 2018	—	$ —
Granted	305	9.32
Vested	—	—
Forfeited	(21)	9.12
Outstanding at December 31, 2019	284	$ 9.34

Compensation expense totaling $0.5 million was recognized for the service-based RSUs to executives for the year-ended December 31, 2019.

As of December 31, 2019, there was $2.1 million of unrecognized compensation cost related to service-based RSUs that are expected to vest. These costs are expected to be recognized over a weighted average remaining vesting period of 3.25 years.

During 2019, the Company granted approximately 604,000 RSUs to executives and employees, which contain performance conditions. 20% of the RSUs vested on June 30, 2019 and 25% of the RSUs became probable of achievement in the quarter ended December 31, 2019. The remaining performance conditions are based on regulatory approval and are not probable as of December 31, 2019. Assuming all remaining performance conditions are achieved, the Company expects that the remaining 20% would vest on March 31, 2020, and the final 30% of the RSUs would vest on September 30, 2020.

	Number of Performance Based RSU Shares	Weighted Average Grant Date Fair Value per Unit
	(In thousands except per share data)	
Outstanding at December 31, 2018	—	$ —
Granted	604	12.18
Vested	(95)	12.14
Forfeited	(66)	12.09
Outstanding at December 31, 2019	443	$ 12.16

Compensation expense totaling $3.6 million was recognized for the performance-based RSUs for the year-ended December 31, 2019.

There was $3.4 million of unrecognized compensation cost as of December 31, 2019, related to performance-based RSUs that will be recognized when and if the performance conditions become probable.

As of December 31, 2019, there were approximately 727,000 RSUs outstanding.

401(k) Savings Plan

The Company has a defined contribution 401(k) savings plan (the "401(k) Plan"). The 401(k) Plan covers substantially all employees, and allows participants to defer a portion of their annual compensation on a pretax basis. Company contributions to the 401(k) Plan may be made at the discretion of the board of directors. During the year ended December 31, 2014, the Company implemented a matching contribution to the 401(k) Plan, matching 50% of an employee's contribution up to a maximum of 3% of the participant's compensation. Company contributions to the 401(k) plan totaled $0.6 million, $0.5 million and $0.5 million in the years ended December 31, 2019, 2018 and 2017, respectively.

14. Loss per Share

As described in Note 2, *Summary of Significant Accounting Policies*, the Company computes basic and diluted earnings (loss) per share using a methodology that gives effect to the impact of outstanding participating securities (the "two-class method"). The two-class method was not applied for the years ended December 31, 2019, 2018, and 2017 due to the net loss recognized in each of those periods. In 2019 the net loss applicable to common stockholders did not equal net loss due to the accretion of the beneficial conversion feature of Series A Preferred Stock in the amount of $2.9 million. The beneficial conversion feature was initially recorded as a discount on the Series A Preferred Stock with a corresponding amount recorded to Additional Paid-in Capital. The discount on the Series A Preferred Stock was then immediately written off as a deemed dividend as the Series A Preferred Stock does not have a stated redemption date and is immediately convertible at the option of the holder.

Basic and diluted loss per share allocable to common stockholders are computed as follows:

	Year Ended December 31,		
	2019	2018	2017
	(In thousands except per share data)		
Net loss	$ (170,295)	$ (123,630)	$ (134,309)
Accretion of Series A Preferred Stock	(2,940)	—	—
Net loss attributable to common stockholders	$ (173,235)	$ (123,630)	$ (134,309)
Weighted average shares outstanding	89,891	71,864	61,471
Basic and diluted loss per share allocable to common stockholders	$ (1.93)	$ (1.72)	$ (2.18)

The following common stock equivalents were excluded from the calculation of diluted loss per share allocable to common stockholders because their inclusion would have been anti-dilutive:

	Year Ended December 31,		
	2019	2018	2017
	(In thousands)		
Stock options	8,087	5,153	4,576
Restricted stock units	757	—	—
Shares issuable under employee stock purchase plan	38	28	23
Series A Preferred Stock (if converted)	3,500	—	—
Warrants	2,500	—	—
	14,882	5,181	4,599

The above table does not include the up to 6,250,000 shares subject to the Company's option to sell additional shares to RPI pursuant to the Put Option as the decision to exercise this option was within the Company's control. On December 30, 2019, the Company exercised its option to sell 2,500,000 shares of Common Stock to RPI for an aggregate of $50.0 million. The sale was effected on February 11, 2020, as further discussed in Note 16, *Subsequent Events*.

15. Unaudited Quarterly Results

The results of operations on a quarterly basis for the years ended December 31, 2019 and 2018 are set forth below:

	Quarter Ended			
	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
	(In thousands, except per share data)			
Collaboration revenue	$ 7,891	$ 5,900	$ 5,715	$ 4,294
Operating expenses:				
Research and development	26,896	40,907	26,579	38,257
General and administrative	11,986	15,698	17,089	23,530
Total operating expenses	38,882	56,605	43,668	61,787
Operating loss	(30,991)	(50,705)	(37,953)	(57,493)
Other income, net	1,652	2,240	1,864	1,149
Income tax (provision)	—	—	—	(58)
Net loss	$ (29,339)	$ (48,465)	$ (36,089)	$ (56,402)
Reconciliation of net loss to net loss attributable to common stockholders				
Net loss	$ (29,339)	$ (48,465)	$ (36,089)	$ (56,402)
Accretion of convertible preferred stock	(2,940)	—	—	—
Net loss attributable to common stockholders	$ (32,279)	$ (48,465)	$ (36,089)	$ (56,402)
Loss per share allocable to common stockholders:				
Basic	$ (0.39)	$ (0.53)	$ (0.40)	$ (0.59)
Diluted	$ (0.39)	$ (0.53)	$ (0.40)	$ (0.59)
Weighted-average common shares outstanding used in net loss per share attributable to common stockholders:				
Basic	82,424	90,876	91,044	95,074
Diluted	82,424	90,876	91,044	95,074

	Quarter Ended			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
	(In thousands, except per share data)			
Collaboration revenue	$ —	$ 12,000	$ —	$ 9,700
Operating expenses:				
Research and development	25,622	31,346	27,027	21,838
General and administrative	9,360	10,914	11,528	12,170
Total operating expenses	34,982	42,260	38,555	34,008
Operating loss	(34,982)	(30,260)	(38,555)	(24,308)
Other income, net	917	1,132	1,063	1,420
Income tax (provision)	—	—	—	(57)
Net loss	$ (34,065)	$ (29,128)	$ (37,492)	$ (22,945)
Loss per share allocable to common stockholders:				
Basic	$ (0.49)	$ (0.42)	$ (0.54)	$ (0.29)
Diluted	$ (0.49)	$ (0.42)	$ (0.54)	$ (0.29)
Weighted average shares outstanding:				
Basic	69,386	69,490	69,539	78,962
Diluted	69,386	69,490	69,539	78,962

16. Subsequent Events

In January 2020, we triggered the payment of the $25.0 million milestone payment upon regulatory approval by the FDA of tazemetostat for epithelioid sarcoma and subsequently paid the milestone in February 2020.

On February 11, 2020, the Company sold 2,500,000 shares of Common Stock to RPI for an aggregate of $50.0 million pursuant to the Put Option.

EXHIBIT 4.4

DESCRIPTION OF SECURITIES REGISTERED UNDER SECTION 12 OF THE EXCHANGE ACT

The following description of the common stock, par value $0.0001 per share (the "Common Stock") of Epizyme, Inc. ("us," "our," "we" or the "Company"), which is the only security of the Company registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is intended as a summary only and does not purport to be complete. This description is subject to, and qualified in its entirety by, reference to our Restated Certificate of Incorporation (the "Certificate of Incorporation"), our Amended and Restated By-laws (the "By-laws"), the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (the "Certificate of Designation"), and the applicable provisions of the Delaware General Corporation Law (the "DGCL"). You should read the Certificate of Incorporation, the By-laws and the Certificate of Designation, which are incorporated by reference as Exhibit 3.1, Exhibit 3.2 and Exhibit 4.3, respectively, to the Annual Report on Form 10-K of which this Exhibit 4.4 is a part.

Authorized Capital Stock

Our authorized capital stock consists of 125,000,000 shares of Common Stock and 5,000,000 shares of preferred stock, par value $0.0001 per share (the "Preferred Stock").

Common Stock

Voting Rights. Holders of our Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Subject to the supermajority votes for some matters, other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter. Our Certificate of Incorporation and By-laws also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our restated certificate of incorporation described below under "Provisions of Our Restated Certificate of Incorporation and By-laws and Delaware Law That May Have Anti-Takeover Effects—Removal of Directors" and "—Stockholder Action by Written Consent; Special Meetings."

Dividends. Holders of Common Stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of outstanding Preferred Stock.

Liquidation and Dissolution. In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock.

Other Rights. Holders of our Common Stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of Common Stock are subject to and may be adversely affected by the rights of the holders of shares of any series of Preferred Stock that we may designate and issued in the future.

Preferred Stock

Our Certificate of Incorporation authorizes our board of directors to issue up to 5,000,000 shares of our Preferred Stock, which may be issued in one or more series upon authorization of our board of directors. Subject to the limitations prescribed by our Certificate of Incorporation, our board of directors is authorized to establish the number of shares constituting each series of Preferred Stock and to fix the designation of the series, the number of authorized shares of the series, dividend rights and terms, conversion rights, voting rights, redemption rights and terms, liquidation preferences and any other rights, powers, preferences and limitations applicable to each series of Preferred Stock. The authorized shares of our Preferred Stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. If the approval of our stockholders is not required for the issuance of shares of our Preferred Stock, our board may determine not to seek stockholder approval. The issuance of Preferred Stock could impede the completion of a merger, tender offer or other takeover attempt.

Series A Convertible Preferred Stock

Our board of directors has designated 350,000 share of the 5,000,000 authorized shares of Preferred Stock as Series A Preferred Stock (the "Series A Convertible Preferred Stock").

Rank. With respect to dividend rights and rights upon our liquidation, dissolution or winding up of our affairs, the Series A Convertible Preferred Stock ranks senior to all of our Common Stock.

Dividends. Share of Series A Convertible Preferred Stock will be entitled to receive dividends equal to (on an as-if-converted-to-common stock basis), and in the same form and manner as, dividends actually paid on shares of Common Stock.

Liquidation Preference. In the event of our liquidation, dissolution or winding up, holders of the Series A Convertible Preferred Stock will receive a payment equal to $0.001 per share of Series A Convertible Preferred Stock before any proceeds are distributed to the holders of our Common Stock.

Conversion. Each share of the Series A Convertible Preferred Stock is convertible into 10 shares of our Common Stock (subject to adjustment as provided in the related Certificate of Designation) at any time at the option of the holder, provided that the holder will be prohibited, subject to certain exceptions, from converting Series A Convertible Preferred Stock into shares of our Common Stock if, as a result of such conversion, the holder, together with its affiliates and other attribution parties, would own more than 9.99% of the total number of shares of our Common Stock then issued and outstanding, which percentage may be changed at the holders' election to a higher or lower percentage upon 61 days' notice to us.

Voting Rights. Shares of Series A Convertible Preferred Stock will generally have no voting rights, except as required by law and except that the consent of the holders of the outstanding Series A Convertible Preferred Stock will be required to amend the terms of the Series A Convertible Preferred Stock or take certain other actions with respect to the Series A Convertible Preferred Stock.

Provisions of Our Certificate of Incorporation, By-laws and the Delaware General Corporation Law That May Have Anti-Takeover Effects

Delaware law contains, and our Certificate of Incorporation and our Bylaws contain, provisions that 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 coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

Removal of Directors

A director may be removed only for cause and only by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Stockholder Action by Written Consent; Special Meetings

Our Certificate of Incorporation provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Our Certificate of Incorporation and By-laws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors.

Advance Notice Requirements for Stockholder Proposals

Our By-laws have established an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Amendment of Restated Certificate of Incorporation and Bylaws

The DGCL provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's restated certificate of incorporation or bylaws, unless a corporation's restated certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our By-laws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our Certificate of Incorporation described above under "Removal of Directors" and "Stockholder Action by Written Consent; Special Meetings."

Delaware Law

We are subject to Section 203 of the DGCL. Subject to specified exceptions, Section 203 of the DGCL restricts some types of transactions and business combinations between a corporation and a 15% stockholder. A 15% stockholder is generally considered by Section 203 to be a person owning 15% or more of the corporation's outstanding voting stock. Section 203 refers to a 15% stockholder as an "interested stockholder." Section 203 restricts these transactions for a period of three years from the date the stockholder acquires 15% or more of our outstanding voting stock. With some exceptions, unless the transaction is approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation, Section 203 prohibits significant business transactions such as:

- a merger with, disposition of significant assets to or receipt of disproportionate financial benefits by the interested stockholder, and
- any other transaction that would increase the interested stockholder's proportionate ownership of any class or series of our capital stock.

The shares held by the interested stockholder are not counted as outstanding when calculating the two-thirds of the outstanding voting stock needed for approval. The prohibition against these transactions does not apply if:

- prior to the time that any stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction in which such stockholder acquired 15% or more of our outstanding voting stock, or
- the interested stockholder owns at least 85% of our outstanding voting stock as a result of a transaction in which such stockholder acquired 15% or more of our outstanding voting stock. Shares held by persons who are both directors and officers or by some types of employee stock plans are not counted as outstanding when making this calculation.

Exhibit 10.43
EXECUTION VERSION

LOAN AGREEMENT

Dated as of November 4, 2019

among

EPIZYME, INC.

(as ***Borrower***),

BIOPHARMA CREDIT PLC

(as ***Collateral Agent*** and a ***Lender***),

and

BIOPHARMA CREDIT INVESTMENTS V (MASTER) LP

(as a ***Lender***)

LOAN AGREEMENT

THIS LOAN AGREEMENT (this "**Agreement**"), dated as of November 4, 2019 (the "**Execution Date**") by and among EPIZYME, INC., a Delaware corporation (as "**Borrower**"), BIOPHARMA CREDIT PLC, a public limited company incorporated under the laws of England and Wales (as the "**Collateral Agent**" and a "**Lender**") and BIOPHARMA CREDIT INVESTMENTS V (MASTER) LP, a Cayman Islands exempted limited partnership (as a "**Lender**"), provides the terms on which each Lender shall make, and Borrower shall repay, the Credit Extensions (as hereinafter defined). The parties hereto agree as follows:

1. ACCOUNTING AND OTHER TERMS

1.1. Except as otherwise expressly provided herein, all accounting terms not otherwise defined in this Agreement shall have the meanings assigned to them in conformity with Applicable Accounting Standards. Calculations and determinations must be made following Applicable Accounting Standards. If at any time any change in Applicable Accounting Standards would affect the computation of any financial requirement set forth in any Loan Document, and either Borrower or the Collateral Agent shall so request, the Collateral Agent and Borrower shall negotiate in good faith to amend such requirement to preserve the original intent thereof in light of such change in Applicable Accounting Standards; provided, that, until so amended, such requirement shall continue to be computed in accordance with Applicable Accounting Standards prior to such change therein. Without limiting the foregoing, leases shall continue to be classified on a basis consistent with that reflected in the audited consolidated financial statements of Borrower for the fiscal year ended December 31, 2018 for all purposes of this Agreement, notwithstanding any change in Applicable Accounting Standards relating thereto or the application thereof, unless Borrower and the Collateral Agent shall enter into a mutually acceptable amendment addressing such changes, as provided for above. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. All references to "Dollars" or "$" are United States Dollars, unless otherwise noted.

1.2. Notwithstanding any provision of this Agreement to the contrary, this Section 1.2 and Sections 2.4, 9, 10, 11, 12 and 13 of this Agreement shall be binding and effective on each party hereto from and after the Execution Date, and each other Section of this Agreement shall be binding and effective on each party hereto from and after the Effective Date.

2. LOANS AND TERMS OF PAYMENT

2.1. Promise to Pay.

Borrower hereby unconditionally promises to pay Lenders the outstanding principal amount of the Term Loans advanced to Borrower by Lenders and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2. Term Loans**.**

(a) Availability. Subject to the terms and conditions of this Agreement (including Sections 3.1, 3.2, 3.3, 3.4 and 3.6):

(i) Each Lender severally agrees to make a term loan to Borrower on the Tranche A Closing Date in an original principal amount equal to such Lender's Tranche A Commitment (collectively, the "**Tranche A Loan**");

(ii) Each Lender severally agrees to make a term loan to Borrower on the Tranche B Closing Date in an original principal amount equal to such Lender's Tranche B Commitment (collectively, the "**Tranche B Loan**"); and

(iii) Each Lender severally agrees to make a term loan to Borrower on the Tranche C Closing Date in an original principal amount equal to such Lender's Tranche C Commitment (the "**Tranche C Loan**").

After repayment or prepayment (in whole or in part), no Term Loan (or any portion thereof) may be re-borrowed.

(b) Repayment. Borrower shall make eight (8) equal quarterly payments of principal of the Term Loans commencing on the first Payment Date on or following the 39th-month anniversary of the Tranche A Closing Date. All unpaid principal with respect to the Term Loans (and, for the avoidance of doubt, all accrued and unpaid interest, all due and unpaid Lender Expenses and any other amounts payable under the Loan Documents) is due and payable in full on the Term Loan Maturity Date. The Term Loans may be prepaid only in accordance with Section 2.2(c), except as provided in Section 8.1.

(c) Prepayment of Term Loans.

(i) Borrower shall have the option, at any time after the Closing Date, to prepay, in whole or in part (in an amount not less than $10,000,000 and in multiples of not less than $5,000,000 thereafter or such lesser amount as may then be outstanding), the Term Loans advanced by Lenders under this Agreement; provided that (A) Borrower provides written notice to the Collateral Agent of its election (which shall be irrevocable unless the Collateral Agent otherwise consents in writing) to prepay all or the applicable portion of the Term Loans, which such notice shall include the amount of the Term Loans to be prepaid, at least five (5) Business Days prior to such prepayment, and (B) such prepayment shall be accompanied by any and all accrued and unpaid interest on the aggregate principal amount to be prepaid to the date of prepayment and any amounts payable solely with respect to the prepayment of such principal amount under this Section 2.2(c)(i) pursuant to Section 2.2(e) or Section 2.2(f) (as applicable), and, in the case of a prepayment in whole of the Term Loans, all other amounts payable or accrued and not yet paid under this Agreement and the other Loan Documents. The Collateral Agent will promptly notify each Lender of its receipt of such notice, and the amount of such Lender's Applicable Percentage of such prepayment.

(ii) Upon a Change in Control, Borrower shall promptly, and in any event no later than ten (10) days after the consummation of such Change in Control, notify the Collateral Agent in writing of the occurrence of a Change in Control, which notice shall include reasonable detail as to the nature, timing and other circumstances of such Change in Control (such notice, a "**Change in Control Notice**"). Borrower shall prepay in full all of the Term Loans advanced by Lenders under this Agreement, no later than ten (10) Business Days after delivery to the Collateral Agent of the Change in Control Notice, in an amount equal to the sum of (A) all unpaid principal and any and all accrued and unpaid interest with respect to the Term Loans (or such remaining outstanding portion thereof), and (B) any applicable amounts payable with respect to the prepayment under this Section 2.2(c)(ii) pursuant to Section 2.2(e) or Section 2.2(f) and all other amounts payable or accrued and not yet paid under this Agreement and the other Loan Documents. The Collateral Agent will promptly notify each Lender of its receipt of the Change in Control Notice, and the amount of such Lender's Applicable Percentage of such prepayment.

(iii) Borrower shall have the option, (x) during the 30-day period following the expiration of Borrower's right to request and of each Lender's right to make any Credit Extensions relating to the Additional Facility Amount, pursuant to Section 2.9(f)(i), or (y) during the 30-day period (or such longer period as Borrower and the Required Lenders may agree) following Borrower's agreement to borrow an Additional Facility Amount in excess of One Hundred and Fifty Million Dollars ($150,000,000.00), pursuant to Section 2.9(f)(ii), to prepay, in whole but not in part, the Term Loans advanced by Lenders under this Agreement for the Committed Facility Amount; provided that (A) Borrower provides written notice to the Collateral Agent of its election (which shall be irrevocable unless the Collateral Agent otherwise consents in writing) to prepay all of such Term Loans (or such remaining outstanding portion thereof) at least five (5) Business Days prior to such prepayment, and (B) such prepayment shall be accompanied by any and all accrued and unpaid interest on the aggregate principal amount to be prepaid to the date of prepayment and all other amounts payable or accrued and not yet paid under this Agreement and the other Loan Documents. For the avoidance of doubt, no Makewhole Amount shall be payable pursuant to Section 2.2(e) and no Prepayment Premium shall be payable pursuant to Section 2.2(f) solely with respect to the prepayment of such principal amount under this Section 2.2(c)(iii). The Collateral Agent will promptly notify each Lender of its receipt of such notice, and the amount of such Lender's Applicable Percentage of such prepayment.

(d) Prepayment Application. Any prepayment of the Term Loans pursuant to Section 2.2(c) (together with the accompanying Makewhole Amount or Prepayment Premium that is payable pursuant to Section 2.2(e) or Section 2.2(f), as applicable) shall be paid to Lenders in accordance with their respective Applicable Percentages for application to the Obligations in the following order: (i) first, to due and unpaid Lender Expenses, (ii) second, to accrued and unpaid interest at the Default Rate, if any, (iii) third, without duplication of amounts paid pursuant to clause (ii) above, to accrued and unpaid interest at the non-Default Rate, (iv) fourth, to the greater of (x) the Prepayment Premium, if applicable and (y) the Makewhole Amount, if applicable, (v) fifth, to the outstanding principal amount of the Term Loan being prepaid, and (vi) sixth, in the case of a prepayment of the Term Loans in whole, to any remaining amounts then due and payable under this Agreement and the other Loan Documents.

(e) Makewhole Amount.

(i) Any prepayment of the Tranche A Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a), in each case occurring prior to the 36th-month anniversary of the Tranche A Closing Date shall, in any such case, be accompanied by payment of an amount equal to the greater of (x) the Tranche A Makewhole Amount and (y) the Tranche A Prepayment Premium.

(ii) Any prepayment of the Tranche B Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a), in each case occurring prior to the 36th-month anniversary of the Tranche B Closing Date shall, in any such case, be accompanied by payment of an amount equal to the greater of (x) the Tranche B Makewhole Amount and (y) the Tranche B Prepayment Premium.

(iii) Any prepayment of the Tranche C Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a), in each case occurring prior to the 36th-month anniversary of the Tranche C Closing Date shall, in any such case, be accompanied by payment of an amount equal to the greater of (x) the Tranche C Makewhole Amount and (y) the Tranche C Prepayment Premium.

(f) Prepayment Premium.

(i) Any prepayment of the Tranche A Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a) shall, in any such case, be accompanied by payment of an amount equal to the Tranche A Prepayment Premium; provided, however, that if such prepayment occurs prior to the 36th-month anniversary of the Tranche A Closing Date, then, in lieu of the foregoing, such prepayment of the Tranche A Loan shall be accompanied by payment of an amount equal to the greater of (x) the Tranche A Prepayment Premium and (y) the Tranche A Makewhole Amount.

(ii) Any prepayment of the Tranche B Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a) shall, in any such case, be accompanied by payment of an amount equal to the Tranche B Prepayment Premium; provided, however, that if such prepayment occurs prior to the 36th-month anniversary of the Tranche B Closing Date, then, in lieu of the foregoing, such prepayment of the Tranche B Loan shall be accompanied by payment of an amount equal to the greater of (x) the Tranche B Prepayment Premium and (y) the Tranche B Makewhole Amount.

(iii) Any prepayment of the Tranche C Loan by Borrower (i) pursuant to Section 2.2(c)(i) or Section 2.2(c)(ii), or (ii) as a result of the acceleration of the maturity of the Term Loans pursuant to Section 8.1(a) shall, in any such case, be accompanied by payment of an amount equal to the Tranche C Prepayment Premium; provided, however, that if such prepayment occurs prior to the 36th-month anniversary of the Tranche C Closing Date, then, in lieu of the foregoing, such prepayment of the Tranche C Loan shall be accompanied by payment of an amount equal to the greater of (x) the Tranche C Prepayment Premium and (y) the Tranche C Makewhole Amount.

2.3. Payment of Interest on the Credit Extensions.

(a) Interest Rate.

(i) Subject to Section 2.3(b), the principal amount outstanding under each Term Loan shall accrue interest at a per annum rate equal to the LIBOR Rate plus seven and three-quarters percent (7.75%) per annum (the "**Term Loan Rate**"), which interest shall be payable quarterly in arrears in accordance with this Section 2.3.

(ii) Interest shall accrue on each Term Loan commencing on, and including, the day on which such Term Loan is made, and shall accrue on such Term Loan, or any portion thereof, for the day on which such Term Loan or such portion is paid.

(b) Default Rate. In the event Borrower fails to pay any of the Obligations when due, immediately (and without notice to Borrower or demand by the Collateral Agent or any Lender for payment thereof), such past due Obligations shall bear interest at a rate per annum which is three percentage points (3.00%) above the rate that is otherwise applicable thereto (the "**Default Rate**"), and such interest shall be payable entirely in cash on demand of the Collateral Agent or any Lender. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of the Collateral Agent or any Lender.

(c) 360-Day Year. Interest shall be computed on the basis of a year of 360 days and the actual number of days elapsed.

(d) Payments. Except as otherwise expressly provided herein, all loan payments and any other payments hereunder by (or on behalf of) Borrower shall be made on the date specified herein to such bank account of each Lender as such Lender (or the Collateral Agent) shall have designated in a written notice to Borrower delivered on or before the Tranche A Closing Date (which such notice may be updated by such Lender (or the Collateral Agent) from time to time after the Tranche A Closing Date). Interest is payable quarterly on the Interest Date of each calendar quarter. Payments of principal or interest received after 2:00 p.m. on such date are considered received at the opening of business on the next Business Day. When any payment is due on a day that is not a Business Day, such payment is due the immediately next Business Day and additional fees or interest, as applicable, shall continue to accrue until paid. All payments to be made by Borrower hereunder or under any other Loan Document, including payments of principal and interest made hereunder and pursuant to any other Loan Document, and all fees, expenses, indemnities and reimbursements, shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds.

(e) If at any time the Collateral Agent determines (which determination shall be conclusive absent manifest error) that (i) adequate and reasonable means do not exist for determining the rate described in clause (a) of the definition of "LIBOR Rate" and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in the immediately preceding clause (i) have not arisen but the supervisor for the administrator of the three-month LIBOR Rate or a Governmental Authority having jurisdiction over any Lender has made a public statement identifying a specific date after which the three-month LIBOR Rate shall no longer be used for determining interest rates for loans, then Lenders (or the Collateral Agent on their behalf) and Borrower shall endeavor to establish an alternate rate of interest to the three-month LIBOR Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable.

2.4. Expenses. Borrower shall pay to each Lender and the Collateral Agent, as applicable, all of such Person's Lender Expenses incurred through and after the Execution Date, promptly after receipt of a written demand therefor by such Lender or the Collateral Agent (with, in the case of any Lender, a copy of such demand to the Collateral Agent), setting forth in reasonable detail such Person's Lender Expenses.

2.5. Requirements of Law; Increased Costs. In the event that any applicable Change in Law:

(a) Does or shall subject any Lender to any Tax of any kind whatsoever with respect to this Agreement or the Term Loan made hereunder (except, in each case, Indemnified Taxes, Taxes described in clause (b) through (d) of the definition of Excluded Taxes, and Connection Income Taxes);

(b) Does or shall impose, modify or hold applicable any reserve, capital requirement, special deposit, compulsory loan, insurance charge or similar requirements against assets held by, or deposits or other liabilities in or for the account of, advances or loans by, or other credit extended by, or any other acquisition of funds by, any Lender; or

(c) Does or shall impose on any Lender any other condition (other than Taxes); and the result of any of the foregoing is to increase the cost to such Lender (as determined by such Lender in good faith using calculation methods customary in the industry) of making, renewing or maintaining the Term Loans or to reduce any amount receivable in respect thereof or to reduce the rate of return on the capital of such Lender or any Person controlling such Lender,

then, in any such case, Borrower shall promptly pay to the applicable Lender, within thirty (30) days of its receipt of the certificate described below, any additional amounts necessary to compensate such Lender for such additional cost or reduced amounts receivable or rate of return as reasonably determined by such Lender with respect to this Agreement or the Term Loan made hereunder; provided, (x) such Lender shall be generally seeking, or intending generally to seek, comparable compensation from similarly situated borrowers under similar facilities (to the extent such Lender has the right under such similar facilities to do so) with respect to such Change in Law regarding such increased cost or reduction and (y) that such additional amounts shall not be duplicative of any amounts otherwise payable under any other provision of this Agreement. If any Lender becomes entitled to claim any additional amounts pursuant to this Section 2.5, it shall promptly notify Borrower in writing of the event by reason of which it has become so entitled (with a copy of such notice to the Collateral Agent), and a certificate as to any additional amounts payable pursuant to the foregoing sentence containing the calculation thereof in reasonable detail submitted by such Lender to Borrower (with a copy of such certificate to the Collateral Agent) shall be conclusive in the absence of manifest error. The provisions hereof shall survive the termination of this Agreement and the payment of the outstanding Term Loans and all other Obligations. Failure or delay on the part of any Lender to demand compensation for any increased costs or reduction in amounts received or receivable or reduction in return on capital under this Section 2.5 shall not constitute a waiver of such Lender's right to demand such compensation; provided that Borrower shall not be under any obligation to compensate such Lender under this Section 2.5 with respect to increased costs or reductions with respect to any period prior to the date that is 180 days prior to the date of the delivery of the notice required pursuant to the foregoing provisions of this paragraph; provided, further, that if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 180-day period referred to above shall be extended to include the period of retroactive effect thereof.

2.6. Taxes; Withholding, Etc.

(a) All sums payable by any Credit Party hereunder and under the other Loan Documents shall (except to the extent required by Requirements of Law) be paid free and clear of, and without any deduction or withholding on account of, any Tax imposed, levied, collected, withheld or assessed by any Governmental Authority. In addition, Borrower agrees to pay, and shall indemnify and hold each Lender harmless from, Other Taxes, and as soon as practicable after the date of paying such sum, Borrower shall furnish to each Lender (as applicable, with a copy to the Collateral Agent) the original or a certified copy of a receipt evidencing payment thereof or other evidence reasonably satisfactory to such Lender.

(b) If any Credit Party or any other Person is required by Requirements of Law to make any deduction or withholding on account of any Tax (as determined in the good faith discretion of an applicable Credit Party or other applicable withholding agent) from any sum paid or payable by any Credit Party to any Lender under any of the Loan Documents: (i) Borrower shall notify such Lender in writing (with a copy to the Collateral Agent) of any such requirement or any change in any such requirement promptly after Borrower becomes aware of it; (ii) Borrower shall make any such withholding or deduction; (iii) Borrower shall pay any such Tax before the date on which penalties attach thereto, such payment to be made (if the liability to pay is imposed on any Credit Party) for its own account or (if that liability is imposed on such Lender, as the case may be) on behalf of and in the name of

such Lender in accordance with Requirements of Law; (iv) if the Tax is an Indemnified Tax, the sum payable by such Credit Party in respect of which the relevant deduction, withholding or payment of Indemnified Tax is required shall be increased to the extent necessary to ensure that, after the making of that deduction, withholding or payment (including any deductions for Indemnified Taxes applicable to additional sums payable under this Section 2.6(b)), such Lender receives on the due date a net sum equal to what it would have received had no such deduction, withholding or payment of Indemnified Tax been required or made; and (v) as soon as practicable after paying any sum from which it is required by Requirements of Law to make any deduction or withholding, Borrower shall deliver to such Lender (with a copy to the Collateral Agent) evidence reasonably satisfactory to such Lender of such deduction, withholding or payment and of the remittance thereof to the relevant taxing or other Governmental Authority.

(c) Borrower shall indemnify each Lender for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 2.6(c)) paid by such Lender and any liability (including 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. Any indemnification payment pursuant to this Section 2.6(c) shall be made to the applicable Lender within thirty (30) days from written demand therefor.

(d) 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, at the time or times reasonably requested by Borrower, such properly completed and executed documentation reasonably requested by Borrower as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, such Lender, if reasonably requested by Borrower, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower as will enable Borrower 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 Section 2.6(d)(i), (ii) or (iv) below) shall not be required if in such 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. For avoidance of doubt, for the purposes of this Section 2.6(d), the term "Lender" shall include each applicable assignee. Without limiting the generality of the foregoing:

(i) If any Lender is organized under the laws of the United States of America or any state thereof, such Lender shall deliver, and shall cause each applicable assignee thereof to deliver, to Borrower two (2) executed copies of Internal Revenue Service Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax.

(ii) If any Lender is a Foreign Lender, such Lender shall deliver, and shall cause each applicable assignee thereof to deliver, to Borrower, on or prior to, the Closing Date and, the date on which a Lender Transfer involving such Lender occurs, as applicable, and at such other times as may be necessary in the determination of Borrower (in the reasonable exercise of its discretion):

(1) In the case that such Lender is 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, a properly completed and duly executed copy of Internal Revenue Service ("**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, a properly completed and duly executed copy 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 "business profits" or "other income" article of such tax treaty;

(2) a completed and duly executed copy of IRS Form W-8ECI;

(3) two (2) properly completed and duly executed original copies of Internal Revenue Service Form W-8BEN, W-8BEN-E, W-8ECI or W-8IMY (along with Form W-9, W-8BEN-E or W-8BEN for each beneficial owner that will receive, directly or indirectly, a payment of principal, interest, fees or other amounts payable under any of the Loan Documents), or any successor forms; and

(4) if such Lender is claiming an exemption from United States withholding Tax pursuant to the "portfolio interest exemption", it shall provide Borrower with the applicable executed IRS Form W-8BEN-E or IRS Form W-8BEN, or

(5) to the extent any Foreign Lender is not the beneficial owner, an executed copy of IRS Form W-8IMY, accompanied by a withholding statement, IRS Form W-8ECI, IRS Form W-8BEN-E, IRS Form W-9 or other certification documents from each beneficial owner, as applicable.

(iii) If any Lender is a Foreign Lender it shall, to the extent it is legally entitled to do so, deliver to Borrower (in such number of copies as shall be requested by the recipient) on or prior to the date on which it becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of Borrower), 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 Borrower to determine the withholding or deduction required to be made.

(iv) If a payment made to any 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 at the time or times prescribed by law and at such time or times reasonably requested by Borrower 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 Borrower as may be necessary for Borrower to comply with their obligations under FATCA and to determine that Lender has complied with its obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (iv), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(v) If any Lender is required to deliver any forms, statements, certificates or other evidence with respect to United States federal Tax or backup withholding matters pursuant to this Section 2.6(d), such Lender hereby agrees, from time to time after the initial delivery by such Lender of such forms, certificates or other evidence, whenever a lapse in time, change in circumstances or law, or additional guidance by a Governmental Authority renders such forms, certificates or other evidence obsolete or inaccurate in any material respect, to promptly deliver to Borrower two (2) new original copies.

(vi) Borrower shall not be required to pay any additional amount to any Lender under Section 2.6(b)(iii) if such Lender shall have failed (1) to timely deliver to Borrower the forms, certificates or other evidence referred to in this Section 2.6(d) (each of which shall be complete, accurate and duly executed), or (2) to notify Borrower of its inability to deliver any such forms, certificates or other evidence, as the case may be; provided that, if such Lender shall have satisfied the requirements of this Section 2.6(d) on the Tranche A Closing Date (or on the date such Lender initially acquires an interest in a Term Loan), nothing in this last sentence of this Section 2.6(d) shall relieve Borrower of its obligations to pay any additional amounts pursuant to this Section 2.6 in the event that, solely as a result of any change in any Requirements of Law or any change in the interpretation, administration or application thereof by any applicable Governmental Authority, such Lender is no longer legally entitled to deliver forms, certificates or other evidence at a subsequent date establishing the fact that such Lender is not subject to withholding as described herein and in the forms, certificates or other evidence initially provided by such Lender.

(e) If any party hereto determines, in its discretion exercised in good faith, that it has received a refund of any Taxes or a credit or offset for any Taxes as to which it has been indemnified pursuant to this Section 2.6 (including by the payment of additional amounts pursuant to this Section 2.6), it shall pay to the indemnifying party an amount equal to such refund, credit or offset (but only to the extent of indemnity payments made, or additional amounts paid, under this Section 2.6 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 clause (e) in the event that such indemnified party is required to repay, credit or offset such refund to such Governmental Authority and the requirement to repay such refund to such Governmental Authority is not due to the indemnified party's failure to timely provide complete and accurate Internal Revenue Service forms and other documentation required pursuant to Section 2.6(d) or Section 2.8. Notwithstanding anything to the contrary in this clause (e), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this clause (e) if the payment of such amount would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the indemnification payments or additional amounts 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 clause (e) 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.

2.7. Additional Consideration. As additional consideration for the obligation to make the Term Loans and the making of the Term Loans, on the Tranche A Closing Date, Borrower shall pay to each Lender an amount equal to such Lender's Applicable Percentage of the product of (i) the Committed Facility Amount, multiplied by (ii) two percent (2.00%) (such product, the "**Additional Consideration**"). The Additional Consideration shall be fully earned when paid and shall not be refundable for any reason whatsoever and such Additional Consideration shall be treated as original issue discount for U.S. federal income tax purposes.

2.8. Evidence of Debt; Register; Collateral Agent's Books and Records; Term Loan Notes.

(a) Evidence of Debt; Register. Notwithstanding anything herein to the contrary, Borrower hereby designates the Collateral Agent to serve as Borrower's agent solely for purposes of maintaining at all times at the Collateral Agent's principal office a "book entry system" as described in IRC Treasury Regulation Section 5f.103-1(c)(1)(ii) that identifies each beneficial owner that is entitled to a payment of principal and stated interest on each Term Loan (the "**Register**") so that each Term Loan is at all times in "registered form" as described in IRC Treasury Regulations Section 5f.103-1(c). The Collateral Agent is hereby authorized by Borrower to record in the manual or data processing records of the Collateral Agent, the date and amount of each advance and the amount of the outstanding Obligations and the date and amount of each repayment of principal and each payment of interest or otherwise on account of the Obligations. Absent manifest error, such records of the Collateral Agent shall be conclusive as to the outstanding principal amount of the total outstanding Obligations, and the payment of interest, principal and other sums due hereunder; provided, however, that the failure of the Collateral Agent to make any such record entry with respect to any payment shall not limit or otherwise affect the obligations of Borrower under the Loan Documents. Each Term Loan: (i) shall, pursuant to this clause (a), be also registered as to both principal and any stated interest with Borrower or its agent, and (ii) may be transferred by any Lender only by (1) surrender of the old instrument and either (x) the reissuance by Borrower of the old instrument to the new Lender or (y) the issuance by Borrower of a new instrument to the new Lender, or (2) confirmation with Borrower that the right to the principal and stated interest on such Term Loan is maintained through the book entry system kept by the Collateral Agent. Each Lender (and, for the avoidance of doubt, each applicable assignee of a Lender), severally and not jointly, represents that any interest that may become due and owing under this Agreement qualifies for the portfolio interest exception from withholding on interest payments pursuant to IRC Sections 871(h) and 881(c).

(b) Term Loan Notes. Borrower shall execute and deliver to each Lender to evidence such Lender's Term Loans (i) on the Tranche A Closing Date, the Tranche A Note, (ii) on the Tranche B Closing Date, the Tranche B Note, and (iii) on the Tranche C Closing Date, the Tranche C Note (each, a "**Term Loan Note**").

2.9. Additional Facility Amount

(a) Availability. Borrower shall have the right, but not the obligation, to request in writing (the "**Additional Facility Amount Request**") that the Lenders make one or more term loans to Borrower in an aggregate principal amount up to the Additional Facility Amount by delivering to the Collateral Agent and each Lender, no earlier than the date on which the Product is approved by the FDA for follicular lymphoma in the United States and no later than the 24th-month anniversary of the Tranche A Closing Date; provided, however, that such right, and any obligations of the Collateral Agent or any Lender under this Section 2.9, shall terminate automatically without any further action by any party hereto and be of no further force and effect if any prepayment of the Tranche A Loan, Tranche B Loan or Tranche C Loan is made, in whole or in part, on or before the valid delivery by Borrower of the Additional Facility Amount Request. In the event Borrower fails to deliver the Additional Facility Amount Request on or before the 24th-month anniversary of the Tranche A Closing Date, Borrower shall be deemed to have declined to exercise its right under this Section 2.9 to request that the Lenders make one or more term loans to Borrower in an aggregate principal amount equal to the Additional Facility Amount and such right shall automatically expire.

(b) Terms and Conditions. Promptly upon confirmation by the Collateral Agent of the receipt of the Additional Facility Amount Request by each Lender, at the Collateral Agent's request, representatives of Borrower and the Required Lenders shall meet (in person or telephonically) to discuss in good faith: (i) the exact Additional Facility Amount that Borrower intends to borrow, the number of term loans that Borrower intends be made to it with respect to such Additional Facility Amount and the dates on which Borrower intends for such term loans to be advanced to it by Lenders; (ii) the amortization of such term loans, the timing of which shall be no shorter than the timing applicable to the amortization of the Term Loans set forth in Section 2.2(b); (iii) the inclusion of additional and amended terms, which would be applicable to all of the Term Loans; and (iv) the date on which all unpaid principal with respect to such term loans (and, for the avoidance of doubt, all accrued and unpaid interest thereon and any other amounts payable with respect thereto under the Loan Documents) shall be due and payable in full; provided, however, that no Lender is under any obligation to agree to make any such term loans. The parties hereto agree that, unless otherwise agreed by the Required Lenders in their sole discretion, all other terms and conditions applicable to the term loans proposed to be made to Borrower with respect to the Additional Facility Amount shall be as set forth in this Agreement, except for such deviations thereto as may be reasonably necessary to reflect the terms described in clauses (i) – (iv) above which are mutually agreed to by Borrower and the Required Lenders and such other changes are as reasonably necessary to incorporate herein the making of such term loans.

(c) Additional Lenders. In connection with the Additional Facility Amount Request, the Collateral Agent and the Required Lenders may invite, to become a Lender for purposes of making Credit Extensions relating to the Additional Facility Amount, (i) one or more investment funds managed by Pharmakon Advisors, LP, in each case without Borrower's consent or the consent of any other Lender, or (ii) one or more prospective third-party lenders identified by Pharmakon Advisors, LP, in each case with Borrower's prior written consent (not to be unreasonably withheld, conditioned or delayed) but without the consent of any other Lender. The Collateral Agent shall endeavor to cause each such Person that agrees to make any term loan with respect to the Additional Facility Amount and makes any such term loan to timely provide complete and accurate Internal Revenue Service forms and other documentation required pursuant to Section 2.6(d) or Section 2.8 and the Collateral Agent shall update the Register as required to reflect any such term loan made by such Person.

(d) Lender Approval. Following the mutual agreement of the terms described in Sections 2.9(a)(i) –(iv) above, each Lender shall have the right, but not the obligation, to agree to make the Credit Extensions relating to the Additional Facility Amount in accordance with such terms and otherwise in accordance with the terms and conditions herein; provided, however, that if such terms are agreed to by the Required Lenders and this Agreement is amended or restated as provided in Section 2.9(e) below, such Lender agrees to execute and deliver a counterpart of such amendment or restatement to effect such amendment or restatement irrespective of whether such Lender agrees to make any Credit Extensions relating to the Additional Facility Amount (so long as, for the avoidance of doubt, such amendment or restatement does not commit such Lender to make any such Credit Extension that such Lender declines to make).

(e) Amendment to Loan Agreement. In the event Borrower and the Required Lenders mutually agree on the terms described in Sections 2.9(a)(i) –(iv) above, the parties hereto agree to amend or restate this Agreement to reflect such terms in this Agreement and to otherwise incorporate in this Agreement the term loans to be made with respect to the Additional Facility Amount, including such amendments or restatements as may be reasonably necessary to confirm that such term loans are "Term Loans" for all purposes hereunder.

(f) Borrower Prepayment Rights.

(i) In the event Borrower and the Required Lenders fail to mutually agree on the terms described in Sections 2.9(a)(i) –(iv) above within sixty (60) days of the date of the Additional Facility Amount Request (or such longer period as Borrower and the Required Lenders may agree), the rights of Borrower to request and of each Lender to make any Credit Extensions relating to the Additional Facility Amount under this Section 2.9 shall automatically expire and Borrower shall have the option to prepay the Term Loans advanced by Lenders under this Agreement for the Committed Facility Amount in accordance with the terms and conditions of Section 2.2(c)(iii).

(ii) In the event Borrower and the Required Lenders mutually agree on the terms described in Sections 2.9(a)(i) –(iv) above within sixty (60) days of the date of the Additional Facility Amount Request (or such longer period as Borrower and the Required Lenders may agree), and the Additional Facility Amount that Borrower agrees to borrow is in excess of One Hundred and Fifty Million Dollars ($150,000,000.00), Borrower shall have the option to prepay the Term Loans advanced by Lenders under this Agreement for the Committed Facility Amount in accordance with the terms and conditions of Section 2.2(c)(iii).

3. CONDITIONS OF TERM LOAN

3.1. Conditions Precedent to Tranche A Loan. Each Lender's obligation to advance its applicable percentage of the Tranche A Loan is subject to the satisfaction (or waiver in accordance with Section 11.5 hereof) of the following conditions:

(a) The Collateral Agent's and each Lender's receipt of copies of the Loan Documents (including the Tranche A Note, executed by Borrower, and the Collateral Documents but excluding any Control Agreements and any other Loan Document described in Schedule 5.14 of the Disclosure Letter to be delivered after the Tranche A Closing Date) executed and delivered by each applicable Credit Party, the Disclosure Letter, if and to the extent any update thereto is necessary between the Effective Date and the Tranche A Closing Date (provided, that in no event may the Disclosure Letter be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update)) and each other schedule to such Loan Documents (the Disclosure Letter and such other schedules to be in form and substance reasonably satisfactory to the Collateral Agent);

(b) The Collateral Agent's receipt of (i) true, correct and complete copies of the Operating Documents of each of the Credit Parties, and (ii) a Secretary's Certificate, dated the Closing Date, certifying that the foregoing copies are true, correct and complete (such Secretary's Certificate to be in form and substance reasonably satisfactory to the Collateral Agent);

(c) The Collateral Agent's receipt of the Perfection Certificate for Borrower and its Subsidiaries, in form and substance reasonably satisfactory to the Collateral Agent, if and to the extent any update thereto is necessary between the Effective Date and the Tranche A Closing Date (provided, that in no event may the Perfection Certificate be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update));

(d) The Collateral Agent's receipt of a good standing certificate for each Credit Party (where applicable), certified by the Secretary of State (or the equivalent thereof) of the jurisdiction of incorporation or formation of such Credit Party as of a date no earlier than thirty (30) days prior to the Tranche A Closing Date;

(e) The Collateral Agent's receipt of a Secretary's Certificate with completed Borrowing Resolutions with respect to the Loan Documents and the Tranche A Loan for each Credit Party, in form and substance reasonably satisfactory to the Collateral Agent;

(f) each Credit Party shall have obtained all Governmental Approvals and all consents of other Persons, if any, in each case that are necessary in connection with the transactions contemplated by the Loan Documents and each of the foregoing shall be in full force and effect and in form and substance reasonably satisfactory to the Collateral Agent;

(g) The Collateral Agent's receipt of an opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to all of the Credit Parties, addressed to the Collateral Agent and each Lender, in form and substance reasonably satisfactory to the Collateral Agent;

(h) The Collateral Agent's receipt of (i) evidence that the products liability and general liability insurance policies maintained regarding any Collateral are in full force and effect and (ii) appropriate evidence showing loss payable or additional insured clauses or endorsements in favor of the Collateral Agent for the benefit of the Lenders and the other Secured Parties (such evidence to be in form and substance reasonably satisfactory to the Collateral Agent);

(i) The Collateral Agent's receipt of all documentation and other information required by bank regulatory authorities under applicable "know-your-customer" and anti-money laundering rules and regulations, including the U.S.A. Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "**Patriot Act**");

(j) RESERVED;

(k) payment of Lender Expenses and other fees then due as specified in Section 2.4 hereof;

(l) The Collateral Agent's receipt of a certificate, dated the Tranche A Closing Date and signed by a Responsible Officer of Borrower, confirming there is no Adverse Proceeding pending or, to the Knowledge of Borrower, threatened, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, except as set forth on Schedule 4.7 of the Disclosure Letter (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent); and

(m) The Collateral Agent's receipt of a certificate, dated the Tranche A Closing Date and signed by a Responsible Officer of Borrower, confirming satisfaction of the conditions precedent set forth in this Section 3.1 and in Section 3.4 and Section 3.6 (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent).

3.2. Conditions Precedent to Tranche B Loan. Each Lender's obligation to advance its Applicable Percentage of the Tranche B Loan is subject to the satisfaction (or waiver in accordance with Section 11.5 hereof) of the following conditions:

(a) Such Lender's receipt of the Tranche B Note, executed by Borrower, and the Collateral Agent's and such Lender's receipt of an updated Disclosure Letter, if and to the extent any update thereto is necessary between the Tranche A Closing Date and the Tranche B Closing Date (provided, that in no event may the Disclosure Letter be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update)) (to be in form and substance reasonably satisfactory to the Collateral Agent);

(b) The Collateral Agent's receipt of an updated Perfection Certificate for Borrower and its Subsidiaries, if and to the extent any update thereto is necessary between the Tranche A Closing Date and the Tranche B Closing Date (provided, that in no event may the Perfection Certificate be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update)), in form and substance reasonably satisfactory to the Collateral Agent;

(c) The Collateral Agent's receipt of a Secretary's Certificate with completed Borrowing Resolutions with respect to the Loan Documents and the Tranche B Loan for each Credit Party, in form and substance reasonably satisfactory to the Collateral Agent;

(d) payment of Lender Expenses and other fees then due as specified in Section 2.4 hereof; and

(e) The Collateral Agent's receipt of a certificate, dated the Tranche B Closing Date and signed by a Responsible Officer of Borrower, confirming there is no Adverse Proceeding pending or, to the Knowledge of Borrower, threatened, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, except as set forth on Schedule 4.7 of the Disclosure Letter delivered in accordance with Section 3.1(k) (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent) or advised prior to the Tranche B Closing Date pursuant to Section 5.2(b);

(f) there should not have been any prepayment of the Tranche A Loan pursuant to Section 2.1(c)(i), Section 2.2(c)(ii) or Section 2.2(c)(iii) or as a result of the acceleration of the maturity of the Tranche A Loan pursuant to Section 8.1(a);

(g) the Contingent Obligation of the Borrower with respect to Regulatory Approval of the Product by the FDA for any indication in the United States shall have become due and payable pursuant to the Amended and Restated Collaboration and License Agreement, dated as of March 12, 2015, by and between Borrower and Eisai Co., Ltd. (without taking into account any amendment, restatement, supplement or modification thereto); and

(h) The Collateral Agent's receipt of a certificate, dated the Tranche B Closing Date and signed by a Responsible Officer of Borrower, confirming satisfaction of the conditions precedent set forth in this Section 3.2 and in Section 3.4 and Section 3.6 (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent).

3.3. Conditions Precedent to Tranche C Loan. Each Lender's obligation to advance its Applicable Percentage of the Tranche C Loan is subject to the satisfaction (or waiver in accordance with Section 11.5 hereof) of the following conditions:

(a) Such Lender's receipt of the Tranche C Note, executed by Borrower, and the Collateral Agent's and such Lender's receipt of an updated Disclosure Letter, if and to the extent any update thereto is necessary between the Tranche B Closing Date (or Tranche A Closing Date if the Tranche B Loan is not funded) and the Tranche C Closing Date (provided, that in no event may the Disclosure Letter be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update)) (to be in form and substance reasonably satisfactory to the Collateral Agent);

(b) The Collateral Agent's receipt of an updated Perfection Certificate for Borrower and its Subsidiaries, if and to the extent any update thereto is necessary between the Tranche B Closing Date (or the Tranche A Closing Date if the Tranche B Loan is not funded) and the Tranche C Closing Date (provided, that in no event may the Perfection Certificate be updated in a manner that would reflect or evidence a Default or Event of Default (with or without such update)), in form and substance reasonably satisfactory to the Collateral Agent;

(c) The Collateral Agent's receipt of a Secretary's Certificate with completed Borrowing Resolutions with respect to the Loan Documents and the Tranche C Loan for each Credit Party, in form and substance reasonably satisfactory to the Collateral Agent;

(d) payment of Lender Expenses and other fees then due as specified in Section 2.4 hereof; and

(e) The Collateral Agent's receipt of a certificate, dated the Tranche C Closing Date and signed by a Responsible Officer of Borrower, confirming there is no Adverse Proceeding pending or, to the Knowledge of Borrower, threatened, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, except as set forth on Schedule 4.7 of the Disclosure Letter delivered in accordance with Section 3.1(k) (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent) or advised prior to the Tranche B Closing Date pursuant to Section 5.2(b);

(f) there should not have been any prepayment of the Tranche A Loan or the Tranche B Loan pursuant to Section 2.1(c)(i), Section 2.2(c)(ii) or Section 2.2(c)(iii) or as a result of the acceleration of the maturity of the Tranche B Loan pursuant to Section 8.1(a);

(g) the Contingent Obligation of the Borrower with respect to Regulatory Approval by the FDA for the commercialization of products to treat follicular lymphoma in the United States shall have become due and payable pursuant to the Amended and Restated Collaboration and License Agreement, dated as of March 12, 2015, by and between Borrower and Eisai Co., Ltd. (without taking into account any amendment, restatement, supplement or modification thereto); and

(h) The Collateral Agent's receipt of a certificate, dated the Tranche C Closing Date and signed by a Responsible Officer of Borrower, confirming satisfaction of the conditions precedent set forth in this Section 3.3 and in Section 3.4 and Section 3.6 (such certificate to be in form and substance reasonably satisfactory to the Collateral Agent).

3.4. Additional Conditions Precedent to Term Loans. The obligation of each Lender to advance its Applicable Percentage of each Term Loan is subject to the following additional conditions precedent:

(a) the representations and warranties made by the Credit Parties in Section 4 of this Agreement and in the other Loan Documents are true and correct in all material respects, unless any such representation or warranty is stated to relate to a specific earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date (it being understood that any representation or warranty that is qualified as to "materiality," "Material Adverse Change," or similar language shall be true and correct in all respects, in each case, on the date on which each Term Loan is made (both with and without giving effect to such Term Loan) or as of such earlier date, as applicable); and

(b) there shall not have occurred (i) any Material Adverse Change or (ii) any Default or Event of Default.

3.5. Covenant to Deliver. The Credit Parties agree to deliver to the Collateral Agent or each Lender, as applicable, each item required to be delivered to Collateral Agent or each Lender, as applicable, under this Agreement as a condition precedent to any Credit Extension; provided, however, that any such items set forth on Schedule 5.14 of the Disclosure Letter shall be delivered to the Collateral Agent within the time period prescribed therefor on such schedule. The Credit Parties expressly agree that a Credit Extension made prior to the receipt by the Collateral Agent or any Lender, as applicable, of any such item shall not constitute a waiver by the Collateral Agent or any Lender of the Credit Parties' obligation to deliver such item, and the making of any Credit Extension in the absence of any such item required to have been delivered by the date of such Credit Extension shall be in the applicable Lender's sole discretion.

3.6. Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making of each Term Loan set forth in this Agreement, to obtain any Term Loan, Borrower shall deliver to the Collateral Agent and Lenders by electronic mail or facsimile a completed Payment/Advance Form in the form of Exhibit A hereto for such Term Loan executed by a Responsible Officer of Borrower (which notice shall be irrevocable on and after the date on which such notice is given and Borrower shall be bound to make a borrowing in accordance therewith); provided, however, that with respect to the Tranche B Loan and the Tranche C Loan, Borrower shall deliver to the Collateral Agent and Lenders by electronic mail or facsimile such completed Payment/Advance Form on such date that is at least fifteen (15) days (or such shorter period as may be agreed to by the Collateral Agent) prior to the Tranche B Closing Date or Tranche B Closing Date, as applicable, set forth in such notice, in which case each Lender agrees to advance its Applicable Percentage of the Tranche B Loan or Tranche C Loan, as applicable, to Borrower on the Tranche B Closing Date or the Tranche Closing Date, as applicable, by wire transfer of same day funds in Dollars, to such account(s) in the United States as may be designated in writing to the Collateral Agent by Borrower.

4. REPRESENTATIONS AND WARRANTIES

In order to induce each Lender and the Collateral Agent to enter into this Agreement and for each Lender to make the Credit Extensions to be made on the Closing Date, each Credit Party, jointly and severally, represents and warrants to each Lender and the Collateral Agent that the following statements are true and correct as of the Effective Date and on the date on which each Term Loan is made (both with and without giving effect to such Term Loan):

4.1. Due Organization, Power and Authority. Each of Borrower and each of its Subsidiaries (a) is duly incorporated, organized or formed, and validly existing and, where applicable, in good standing under the laws of its jurisdiction of incorporation, organization or formation identified on Schedule 4.15 of the Disclosure Letter, (b) has all requisite power and authority to (i) own, lease, license and operate its assets and properties and to carry on its business as currently conducted and (ii) execute and deliver the Loan Documents to which it is a party and to perform its obligations thereunder and otherwise carry out the transactions contemplated thereby, (c) is duly qualified and, where applicable, in good standing under the laws of each jurisdiction where its ownership, lease, license or operation of assets or properties or the conduct of its business requires such qualification, and (d) has all requisite Governmental Approvals to operate its business as currently conducted; except in each case referred to clauses (a) (other than with respect to Borrower and any other Credit Party), (b)(i), (c) or (d) above, to the extent that failure to do so could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change.

4.2. Equity Interests. All of the outstanding Equity Interests in each Subsidiary of the Borrower, the Equity Interests in which are required to be pledged pursuant to the Collateral Documents, have been duly authorized and validly issued, are fully paid and, in the case of Equity Interests representing corporate interests, are non-assessable and, on the Closing Date, all such Equity Interests owned directly by Borrower or any other Credit Party are owned free and clear of all Liens except for Permitted Liens. Schedule 4.2 of the Disclosure Letter identifies each Person, the Equity Interests in which are required to be pledged on the Closing Date pursuant to the Collateral Documents.

4.3. Authorization; No Conflict. Except as set forth on Schedule 4.3 of the Disclosure Letter, the execution, delivery and performance by each Credit Party of the Loan Documents to which it is a party, and the consummation of the transactions contemplated thereby, (a) have been duly authorized by all necessary corporate or other organizational action and (b) do not and will not (i) contravene the terms of any of such Credit Party's Operating Documents, (ii) conflict with or result in any breach or contravention of, or require any payment to be made under (A) any provision of any security issued by such Credit Party or of any agreement, instrument or other undertaking to which such Credit Party is a party or affecting such Credit Party or the assets or properties of such Credit Party or any of its Subsidiaries or (B) any order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Credit Party or any of its properties or assets are subject, (iii) result in the creation of any Lien (other than under the Loan Documents) or (iv) violate any Requirements of Law, except, in the cases of clauses (b)(ii) and (b)(iv) above, to the extent that such conflict, breach, contravention, payment or violation could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change.

4.4. Government Consents; Third Party Consents. Except as set forth on Schedule 4.4 of the Disclosure Letter, no Governmental Approval or other approval, consent, exemption or authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person (including any counterparty to any Current Company IP Agreement or other Material Contract) is necessary or required in connection with (a) the execution, delivery or performance by, or enforcement against, any Credit Party of this Agreement or any other Loan Document, or for the consummation of the transactions contemplated hereby or thereby, (b) the grant by any Credit Party of the Liens granted by it pursuant to the Collateral Documents, (c) the perfection or maintenance of the Liens created under the Collateral Documents (including the priority thereof) or (d) the exercise by the Collateral Agent or any Lender of its rights under the Loan Documents or the remedies in respect of the Collateral pursuant to the Collateral Documents, except for (i) filings necessary to perfect the Liens on the Collateral granted by the Credit Parties to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties, (ii) the approvals, consents, exemptions, authorizations, actions, notices and filings which have been duly obtained, taken, given or made and are in full force and effect, (iii) filings under state or federal securities laws and (iv) those approvals, consents, exemptions, authorizations or other actions, notices or filings, the failure of which to obtain or make could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change.

4.5. Binding Obligation. Each Loan Document has been duly executed and delivered by each Credit Party that is a party thereto and constitutes a legal, valid and binding obligation of such Credit Party, enforceable against such Credit Party in accordance with its respective terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by general principles of equity.

4.6. Collateral. In connection with this Agreement, each Credit Party has delivered to the Collateral Agent a completed certificate signed by such Credit Party (with respect to all Credit Parties, collectively, the "**Perfection Certificate**"). Each Credit Party, jointly and severally, represents and warrants to the Collateral Agent and each Lender that:

(a) (i) its exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (ii) it is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (iii) the Perfection Certificate accurately sets forth its organizational identification number or accurately states that it has none; (iv) the Perfection Certificate accurately sets forth as of the Closing Date its place of business, or, if more than one, its chief executive office as well as its mailing address (if different than its chief executive office); (v) it (and each of its predecessors) has not, in the five (5) years prior to the Closing Date, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (vi) all other information set forth on the Perfection Certificate pertaining to it and each of its Subsidiaries is accurate and complete in all material respects as of the Closing Date. If any Credit Party is not now a Registered Organization but later becomes one, it shall promptly notify the Collateral Agent of such occurrence and provide the Collateral Agent with such Credit Party's organizational identification number.

(b) (i) it has good title to, has rights in, and subject to Permitted Subsidiary Distribution Restrictions, the power to transfer each item of the Collateral upon which it purports to grant a Lien under any Collateral Document, free and clear of any and all Liens except Permitted Liens, except for such minor irregularities or defects in title as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change and (ii) it has no deposit accounts maintained at a bank or other depository or financial institution located in the United States other than the deposit accounts described in the Perfection Certificate delivered to the Collateral Agent in connection herewith.

(c) A true, correct and complete list of each pending, registered or issued Patent, Copyright and Trademark that, individually or together with any other such Patents, Copyrights or Trademarks, is material to the business of Borrower and its Subsidiaries, taken as a whole, relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory, and is owned or co-owned by or exclusively or non-exclusively licensed to any Credit Party or any of its Subsidiaries (collectively, the "**Current Company IP**"), including its name/title, current owner or co-owners (including ownership interest), registration, patent or application number, and registration or application date, in each jurisdiction where issued or filed is set forth on Schedule 4.6(c) of the Disclosure Letter. Except as set forth on Schedule 4.6(c) of the Disclosure Letter, (i)(A) each item of owned Current Company IP is valid, subsisting and enforceable and no such item of Current Company IP has lapsed, expired, been cancelled or invalidated or become abandoned or unenforceable, and (B) to the Knowledge of Borrower, no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP, and (ii) to the Knowledge of Borrower, (A) each such item of Current Company IP which is licensed from another Person is valid, subsisting and enforceable and no such item of Current Company IP has lapsed, expired, been cancelled or invalidated, or become abandoned or unenforceable, and (B) no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP. To the Knowledge of Borrower, there are no published patents, patent applications, articles or prior art references that could reasonably be expected to materially adversely affect the Product. Except as set forth on Schedule 4.6(c) of the Disclosure Letter, (i) each Person who has or has had any rights in or to owned Current Company IP or any trade secrets owned by any Credit Party or any of its Subsidiaries, including each inventor named on the Patents within such owned Current Company IP filed by any Credit Party or any of its Subsidiaries, and has executed an agreement assigning his, her or its entire right, title and interest in and to such owned Current Company IP and such trade secrets, and the inventions, improvements, ideas, discoveries, writings, works of authorship, information and other intellectual property embodied, described or claimed therein, to the stated owner thereof and, (ii) to the Knowledge of Borrower, no such Person has any contractual or other obligation that would preclude or conflict with such assignment or the exploitation of the Product in the Territory or entitle such Person to ongoing payments.

(d) (i) Each Credit Party or any of its Subsidiaries possesses valid title to the Current Company IP for which it is listed as the owner or co-owner, as applicable, on Schedule 4.6(c) of the Disclosure Letter; and (ii) there are no Liens on any Current Company IP, other than Permitted Liens.

(e) There are no maintenance, annuity or renewal fees that are currently overdue beyond their allotted grace period for any of the Current Company IP which is owned by or exclusively licensed to any Credit Party or any of its Subsidiaries, except, in each case, that could not reasonably be expected to have a materially adverse impact on such Credit Party's or Subsidiary's rights to such Current Company IP, nor have any applications or registrations therefor lapsed or become abandoned, been cancelled or expired. There are no maintenance, annuity or renewal fees that are currently overdue beyond their allotted grace period for any of the Current Company IP which is non-exclusively licensed to any Credit Party or any of its Subsidiaries, except, in each case, that could not reasonably be expected to have a materially adverse impact on such Credit Party's or Subsidiary's rights to such Current Company IP, nor to the Knowledge of Borrower, have any applications or registrations therefor lapsed or become abandoned, been cancelled or expired.

(f) There are no unpaid fees or royalties under any Current Company IP Agreement that have become due, or are expected to become overdue. Each Current Company IP Agreement is in full force and effect and, to the Knowledge of Borrower, is legal, valid, binding, and enforceable in accordance with its respective terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by equitable principles relating to enforceability. Neither Borrower nor any of its Subsidiaries, as applicable, is in breach of or default under any Current Company IP Agreement to which it is a party or may otherwise be bound, and to the Knowledge of Borrower, no circumstances or grounds exist that would give rise to a claim of breach or right of rescission, termination, non-renewal, revision, or amendment of any of the Current Company IP Agreements, including the execution, delivery and performance of this Agreement and the other Loan Documents.

(g) No payments by any Credit Party or any of its Subsidiaries are due to any other Person in respect of the Current Company IP, other than pursuant to the Current Company IP Agreements and those fees payable to patent offices in connection with the prosecution and maintenance of the Current Company IP and associated attorney fees.

(h) No Credit Party or any of its Subsidiaries has undertaken or omitted to undertake any acts, and, to the Knowledge of Borrower, no circumstance or grounds exist that would invalidate or reduce, in whole or in part, the enforceability or scope of (i) the Current Company IP in any manner that could reasonably be expected to materially adversely affect the Product, or (ii) in the case of Current Company IP owned or co-owned or exclusively or non-exclusively licensed by any Credit Party or any of its Subsidiaries, except as set forth on Schedule 4.6(h) of the Disclosure Letter, such Credit Party's or Subsidiary's entitlement to own or license and exploit such Current Company IP.

(i) Except as set forth on Schedule 4.7 of the Disclosure Letter or advised pursuant to Section 5.2(b), there is no pending, decided or settled opposition, interference proceeding, reissue proceeding, reexamination proceeding, inter-partes review proceeding, post-grant review proceeding, cancellation proceeding, injunction, litigation, paragraph IV patent certification or lawsuit under the Hatch-Waxman Act, hearing, investigation, complaint, arbitration, mediation, demand, International Trade Commission investigation, decree, or any other dispute, disagreement, or claim, in each case alleged in writing to Borrower or any of its Subsidiaries (collectively referred to hereinafter as "**Specified Disputes**"), nor to the Knowledge of Borrower, has any such Specified Dispute been threatened in writing, in each case challenging the legality, validity, enforceability or ownership of any Current Company IP. Except as set forth on Schedule 4.6(i) of the Disclosure Letter, to the Knowledge of Borrower, there is no product or other technology of any third party that could reasonably be expected to infringe a Patent within the Current Company IP.

(j) Except as noted on Schedule 4.6(j) of the Disclosure Letter, no Credit Party is a party to, nor is it bound by, any Restricted License.

(k) In each case where an issued Patent within the Current Company IP is owned or co-owned by any Credit Party or its Subsidiaries by assignment, the assignment has been duly recorded with the U.S. Patent and Trademark Office and all similar offices and agencies anywhere in the world in which foreign counterparts are registered or issued.

(l) There are no pending or, to the Knowledge of Borrower, threatened (in writing) claims against Borrower or any of its Subsidiaries alleging (i) that any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory infringes or violates (or in the past infringed or violated) the rights of any third parties in or to any Intellectual Property ("**Third Party IP**") or constitutes a misappropriation of (or in the past constituted a misappropriation of) any Third Party IP, or (ii) that any Current Company IP is invalid or unenforceable.

(m) The manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory does not and will not, to the Knowledge of Borrower, infringe or violate (or in the past infringed or violated) any valid, issued or registered Third Party IP (including any valid, issued Patent within the Third Party IP) or, to the Knowledge of Borrower, constitutes a misappropriation of (or in the past constituted a misappropriation of) any Third Party IP.

(n) To the Knowledge of Borrower, there are no settlements, covenants not to sue, consents, judgments, orders or similar obligations which: (i) restrict the rights of any Credit Party or any of its Subsidiaries to use any Intellectual Property relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory (in order to accommodate any Third Party IP or otherwise), or (ii) permit any third parties to use any Company IP.

(o) Except as set forth in Schedule 4.6(o) of the Disclosure Letter, to the Knowledge of Borrower, (i) there is no, nor has there been any, infringement or violation by any Person of any of the Company IP or the rights therein, and (ii) there is no, nor has there been any, misappropriation by any Person of any of the Company IP or the subject matter thereof.

(p) Each Credit Party and each of its Subsidiaries has taken all commercially reasonable measures customary in the pharmaceutical industry to protect the confidentiality and value of all trade secrets owned by such Credit Party or any of its Subsidiaries or used or held for use by such Credit Party or any of its Subsidiaries, in each case relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory.

(q) To the Knowledge of Borrower, the Product made, used or sold under the Patents within the Current Company IP has been marked with the proper patent notice.

(r) To the Knowledge of Borrower, at the time of any shipment of Product in the Territory occurring prior to the Closing Date (if any), the units thereof so shipped complied with their relevant specifications and were developed and manufactured in accordance with current FDA Good Manufacturing Practices, FDA Good Clinical Practices and FDA Good Laboratory Practices.

4.7. Adverse Proceedings, Compliance with Laws. Except as set forth on Schedule 4.7 of the Disclosure Letter or advised pursuant to Section 5.2(b), there are no Adverse Proceedings pending or, to the Knowledge of Borrower, threatened in writing, at law, in equity, in arbitration or before any Governmental Authority, by or against Borrower or any of its Subsidiaries or against any of their respective assets or properties or revenues (including involving allegations of sexual harassment or misconduct by any officer of Borrower or any of its Subsidiaries) that, either individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change. Neither Borrower nor any of its Subsidiaries (a) is in violation of any Requirements of Law (including Environmental Laws) that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, or (b) is subject to or in default with respect to any final judgments, orders, writs, injunctions, decrees, rules or regulations of any court or any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change.

4.8. Exchange Act Documents; Financial Statements; Financial Condition; No Material Adverse Change; Books and Records.

(a) The documents filed by Borrower with the SEC pursuant to the Exchange Act since January 1, 2019 (the "**Exchange Act Documents**"), when they were filed with the SEC, conformed in all material respects to the requirements of the Exchange Act, and as of the time they were filed with the SEC, none of such documents contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein (excluding any projections and forward-looking statements, estimates, budgets and general economic or industry data of a general nature), in the light of the circumstances under which they were made, not misleading; provided, that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time (it being understood that such projections are not a guarantee of financial performance and are subject to uncertainties and contingencies, many of which are beyond the control of Borrower or any Subsidiary, and neither Borrower nor any Subsidiary can give any assurance that such projections will be attained, that actual results may differ in a material manner from such projections and any failure to meet such projections shall not be deemed to be a breach of any representation or covenant herein);

(b) The financial statements (including the related notes thereto) of Borrower and its Subsidiaries included in the Exchange Act Documents present fairly in all material respects the consolidated financial condition of Borrower and such Subsidiaries and their consolidated results of operations as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified. Such financial statements have been prepared in conformity with Applicable Accounting Standards applied on a consistent basis throughout the periods covered thereby, except as otherwise disclosed therein and, in the case of unaudited, interim financial statements, subject to normal year-end audit adjustments and the exclusion of certain footnotes, and any supporting schedules included in the Exchange Act Documents present fairly in all material respects the information required to be stated therein;

(c) Since December 31, 2018, there has not occurred or failed to occur any change or event that has had or could reasonably be expected to have, either alone or in conjunction with any other change(s), event(s) or failure(s), a Material Adverse Change, except as has been disclosed in the Exchange Act Documents; and

(d) The Books of Borrower and each of its Subsidiaries in existence immediately prior to the Effective Date contain full, true and correct entries of all dealings and transactions in relation to its business and activities in conformity with Applicable Accounting Standards and all Requirements of Law.

4.9. Solvency. Borrower and its Subsidiaries, on a consolidated basis, are Solvent. Without limiting the generality of the foregoing, there has been no proposal made or resolution adopted by any competent corporate body for the dissolution or liquidation of Borrower, nor do any circumstances exist which may result in the dissolution or liquidation of Borrower.

4.10. Payment of Taxes. All foreign, federal and state income and other material Tax returns and reports (or extensions thereof) of each Credit Party and each of its Subsidiaries required to be filed by any of them have been timely filed and are correct in all material respects, and all material Taxes which are due and payable by any Credit Party or any of its Subsidiaries and all material assessments, fees and other governmental charges upon any Credit Party or any of its Subsidiaries and upon their respective properties, assets, income, businesses and franchises which are due and payable have been paid when due and payable except where the validity or amount thereof is being contested in good faith by appropriate proceedings; provided that (a) the applicable Credit Party has set aside on its books adequate reserves therefor in conformity with Applicable Accounting Standards and (b) the failure to pay such Taxes, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Change.

4.11. Environmental Matters. Neither Borrower nor any of its Subsidiaries nor any of their respective Facilities or operations is subject to any outstanding written order, consent decree or settlement agreement with any Person relating to any Environmental Law, any Environmental Claim, or any Hazardous Materials Activity that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change. There are and, to the Knowledge of Borrower, have been, no conditions, occurrences, or Hazardous Materials Activities which would reasonably be expected to form the basis of an Environmental Claim against Borrower or any of its

Subsidiaries that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change. To the Knowledge of Borrower, no predecessor of Borrower or any of its Subsidiaries has filed any notice under any Environmental Law indicating past or present treatment of Hazardous Materials at any Facility, which would reasonably be expected to form the basis of an Environmental Claim against Borrower or any of its Subsidiaries that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change (but, for the avoidance of doubt, Borrower has not undertaken any investigation of or made any inquiries to, or relating to, any of its or its Subsidiaries' predecessors), and neither Borrower's nor any of its Subsidiaries' operations involves the generation, transportation, treatment, storage or disposal of hazardous waste, as defined under 40 C.F.R. Parts 260 270 or any state equivalent, which would reasonably be expected to form the basis of an Environmental Claim against Borrower or any of its Subsidiaries that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change. No event or condition has occurred or is occurring with respect to any Credit Party relating to any Environmental Law, any Release of Hazardous Materials, or any Hazardous Materials Activity which, individually or in the aggregate, has resulted in, or could reasonably be expected to result in, a Material Adverse Change.

4.12. Material Contracts. A true, correct and complete list of all Material Contracts is set forth on Schedule 4.12 of the Disclosure Letter. After giving effect to the consummation of the transactions contemplated by this Agreement, except as described on Schedule 4.12 of the Disclosure Letter, each Material Contract is a valid and binding obligation of the applicable Credit Party and, to the Knowledge of Borrower, each other party thereto, and is in full force and effect, and neither the applicable Credit Party nor, to the Knowledge of Borrower, any other party thereto is in material breach thereof or default thereunder, except where such breach or default (which default has not been cured or waived) could not reasonably be expected to give rise to any cancellation, termination or acceleration right of the applicable counterparty thereto or result in the invalidation thereof. No Credit Party or any of its Subsidiaries has received any written notice from any party thereto asserting or, to the Knowledge of Borrower threatening to assert, circumstances that could reasonably be expected to result in the cancellation, termination or invalidation of any Material Contract or the acceleration of such Credit Party's or Subsidiary's obligations thereunder.

4.13. Regulatory Compliance. No Credit Party is or is required to be, or is a company "controlled" by, an "investment company" as defined in, or is subject to regulation under, the Investment Company Act of 1940, as amended. Each Credit Party has complied in all material respects with the Federal Fair Labor Standards Act. Except as could not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Change, each Plan is in compliance with the applicable provisions of ERISA, the IRC and other U.S. federal or state Requirements of Law, respectively. (i) No ERISA Event has occurred or is reasonably expected to occur; (ii) neither any Credit Party nor any ERISA Affiliate has incurred, or reasonably expects to incur, any liability (and no event has occurred which, with the giving of notice under Section 4219 of ERISA, would result in such liability) under Section 4201 *et seq*. or 4243 of ERISA with respect to a Multiemployer Plan; and (iii) neither any Credit Party nor any ERISA Affiliate has engaged in a transaction that would be subject to Section 4069 or 4212(c) of ERISA, except, with respect to each of clauses (i), (ii) and (iii) above, as could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Change.

4.14. Margin Stock. No Credit Party is engaged principally, or as one of its important activities, in extending credit for the purpose of, whether immediate or ultimate, of purchasing or carrying Margin Stock. No Credit Party owns any Margin Stock. No Credit Party or any of its Subsidiaries has taken or permitted to be taken any action that might cause any Loan Document to violate Regulation T, U or X of the Federal Reserve Board.

4.15. Subsidiaries. Schedule 4.15 of the Disclosure Letter (a) sets forth the name and jurisdiction of incorporation, organization or formation of Borrower and each of its Subsidiaries and (b) sets forth the ownership interest of Borrower and any other Credit Party in each of their respective Subsidiaries, including the percentage of such ownership.

4.16. Employee Matters. Neither Borrower nor any of its Subsidiaries is engaged in any unfair labor practice that could reasonably be expected to result in a Material Adverse Change. There is (a) no unfair labor practice complaint pending against Borrower or any of its Subsidiaries or, to the Knowledge of Borrower, threatened in writing against any of them before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under any collective bargaining agreement that is pending against Borrower or any of its Subsidiaries or, to the Knowledge of Borrower, threatened in writing against any of them, (b) no strike or work

stoppage in existence or, to the Knowledge of Borrower, threatened in writing involving Borrower or any of its Subsidiaries, and (c) to the Knowledge of Borrower, no union representation question existing with respect to the employees of Borrower or any of its Subsidiaries and, to the Knowledge of Borrower, no union organization activity that is taking place that in each case specified in any of clauses (a), (b) and (c), individually or together with any other matter specified in clause (a), (b) or (c), could reasonably be expected to result in a Material Adverse Change.

4.17. Full Disclosure. None of the documents, certificates or written statements (excluding any projections and forward-looking statements, estimates, budgets and general economic or industry data of a general nature) furnished or otherwise made available to the Collateral Agent or any Lender by or on behalf of any Credit Party for use in connection with the transactions contemplated hereby (in each case, taken as a whole and as modified or supplemented by other information so furnished promptly after the same becomes available) contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained herein or therein, as of the time when made or delivered, not misleading in light of the circumstances in which the same were made; provided, that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time (it being understood that such projections are not a guarantee of financial performance and are subject to uncertainties and contingencies, many of which are beyond the control of Borrower or any Subsidiary, and neither Borrower nor any Subsidiary can give any assurance that such projections will be attained, that actual results may differ in a material manner from such projections and any failure to meet such projections shall not be deemed to be a breach of any representation or covenant herein). To the Knowledge of Borrower, there are no facts (other than matters of a general economic or industry nature) that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change and that have not been disclosed herein or in such other documents, certificates and written statements furnished or made available to the Collateral Agent or any Lender for use in connection with the transactions contemplated hereby.

4.18. FCPA; Patriot Act; OFAC.

(a) None of Borrower, its Subsidiaries or, to the Knowledge of Borrower, any director, officer, agent or employee of Borrower or any Subsidiary of Borrower has (i) used any corporate funds of Borrower or any of its Subsidiaries for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity, (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds of Borrower or any of its Subsidiaries, (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**") or (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment, and no part of the proceeds of any Credit Extension will be used, directly or indirectly, for any payments 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 to obtain any improper advantage, in violation of the FCPA;

(b) (i) The operations of Borrower and its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the Bank Secrecy Act of 1970, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act of 2001 and the anti-money laundering laws, rules and regulations of each jurisdiction (foreign or domestic) in which Borrower or any of its Subsidiaries is subject to such jurisdiction's Requirements of Law (collectively, the "**Anti-Money Laundering Laws**") and (ii) no action, suit or proceeding by or before any Governmental Authority or any arbitrator involving Borrower or any of its Subsidiaries with respect to the Anti-Money Laundering Laws is pending or to the Knowledge of Borrower, threatened in writing; and

(c) None of Borrower, its Subsidiaries or, to the Knowledge of Borrower, any director, officer, agent or employee of Borrower or any Subsidiary of Borrower is currently the target of or subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("**OFAC**") or imposed by the Trading with the Enemy Act, 50 U.S.C. App. 1 et seq. Borrower will not, directly or, to the Knowledge of Borrower, indirectly through an agent, use the proceeds of the Credit Extension, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other Person, for the purpose of financing the activities of any Person currently the target of or subject to any U.S. sanctions administered by OFAC.

4.19. Health Care Matters.

(a) *Compliance with Health Care Laws*. Each Credit Party and, to the Knowledge of Borrower, each of its Subsidiaries and each officer, Affiliate, and employee acting on behalf of such Credit Party or any of its Subsidiaries, is in compliance in all material respects with all Health Care Laws applicable to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory.

(b) *Compliance with FDA Laws*. Each Credit Party and, to the Knowledge of Borrower, each of its Subsidiaries, are in compliance in all material respects with all applicable FDA Laws, including those related to the adulteration or misbranding of products within the meaning of Sections 501 and 502 of the Food Drug and Cosmetics Act (including any foreign equivalent, the "**FDCA**"), relating to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory. The Product distributed or sold in the Territory at all times during the past five (5) years has been (i) manufactured in all material respects in accordance with current FDA Good Manufacturing Practices, FDA Good Clinical Practices, and FDA Good Laboratory Practices, and (ii) if and to the extent the Product is required to be approved or cleared by the FDA pursuant to the FDCA, except as set forth on Schedule 4.19(b) of the Disclosure Letter, the Product has been so approved or cleared and no inquiries regarding material issues have been initiated by FDA.

(c) *Compliance with DEA Laws.* Each Credit Party and, to the Knowledge of Borrower, each of its Subsidiaries, is in compliance in all material respects with all applicable DEA Laws, including those related to the reporting of controlled substances within the meaning of the Controlled Substances Act (including any foreign and state equivalent, the "**CSA**"**)**, relating to any development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory. The Product distributed or sold in the Territory at all times during the past five (5) years has been (i) stored, transported, imported, offered for sale, documented, secured, and distributed in all material respects in accordance with DEA Laws and any state laws applicable to controlled substances, as defined under the CSA and applicable state laws, and implementing regulations, and (ii) to the extent the Product is required to be authorized by the DEA pursuant to the CSA and its implementing regulations, the Product has been so authorized, and no inquiries regarding material issues have been initiated by the DEA.

(d) *Material Statements*. Within the past five (5) years, neither any Credit Party, nor, to the Knowledge of Borrower, any Subsidiary or any officer, Affiliate or employee of any Credit Party or Subsidiary in its capacity as a Subsidiary or as an officer, Affiliate or employee of a Credit Party or Subsidiary (as applicable), nor, to the Knowledge of Borrower, any agent of any Credit Party or Subsidiary, (i) has made an untrue statement of a material fact or a fraudulent statement to any Governmental Authority, (ii) has failed to disclose a material fact to any Governmental Authority, or (iii) has otherwise committed an act, made a statement or failed to make a statement that, at the time such statement or disclosure was made (or, in the case of such failure, should have been made) or such act was committed, would reasonably be expected to constitute a material violation of any Health Care Law.

(e) *Proceedings; Audits*. Except as set forth on Schedule 4.19(e) of the Disclosure Letter, there is no material investigation, suit, claim, audit, action (legal or regulatory) or proceeding (legal or regulatory) by a Governmental Authority pending or, to the Knowledge of Borrower, threatened in writing against any Credit Party or any of its Subsidiaries relating to any of the Health Care Laws, Data Protection Laws, FDA Laws or DEA Laws. To the Knowledge of Borrower, there are no facts, circumstances or conditions which could reasonably be expected to form the basis for any such material investigation, suit, claim, audit, action or proceeding, except as has been disclosed in the Exchange Act Documents.

(f) *Safety Notices*. Neither any Credit Party nor any of its Subsidiaries has engaged in any Recalls, field notifications, warnings, "dear doctor" letters, investigator notices, safety alerts or other notices of action, including as a result of any Risk Evaluation and Mitigation Strategy proposed by the FDA, relating to an alleged lack of safety or regulatory compliance of the Products that could reasonably be expected to result in a Material Adverse Change.

(g) *Prohibited Transactions*. Within the past six (6) years, neither any Credit Party, nor, to the Knowledge of Borrower, any Subsidiary or any of officer, Affiliate or employee of a Credit Party or Subsidiary, nor any other Person acting on behalf of any Credit Party or any Subsidiary, directly or indirectly: (i) has offered or paid any remuneration, in cash or in kind, to, or made any financial arrangements with, any past, present or potential patient, supplier, physician or contractor, in order to illegally obtain business or payments from such Person in material violation of any Health Care Law; (ii) has given or made, or is party to any illegal agreement to give or make, any illegal gift or gratuitous payment of any kind, nature or description (whether in money, property or services) to any past, present or potential patient, supplier, physician or contractor, or any other Person in material violation of any Health Care Law; (iii) has given or made, or is party to any agreement to give or make on behalf of any Credit Party or any of its Subsidiaries, any contribution, payment or gift of funds or property to, or for the private use of, any governmental official, employee or agent where either the contribution, payment or gift or the purpose of such contribution, payment or gift is or was a material violation of the laws of any Governmental Authority having jurisdiction over such payment, contribution or gift; (iv) has established or maintained any unrecorded fund or asset for any purpose or made any materially misleading, false or artificial entries on any of its books or records for any reason; or (v) has made, or is party to any agreement to make, any payment to any Person with the intention or understanding that any part of such payment would be in material violation of any Health Care Law. To the Knowledge of Borrower, there are no actions pending or threatened (in writing) against any Credit Party or any of its Subsidiaries or any of their respective Affiliates under any foreign, federal or state whistleblower statute, including under the False Claims Act of 1863 (31 U.S.C. § 3729 et seq.).

(h) *Exclusion*. Neither any Credit Party nor, to the Knowledge of Borrower, any Subsidiary or any officer, Affiliate or employee having authority to act on behalf of any Credit Party or any Subsidiary, is or, to the Knowledge of Borrower, has been threatened in writing to be: (i) excluded from any Governmental Payor Program pursuant to 42 U.S.C. § 1320a-7b and related regulations; (ii) "suspended" or "debarred" from selling any products to the U.S. government or its agencies pursuant to the Federal Acquisition Regulation relating to debarment and suspension applicable to federal government agencies generally (42 C.F.R. Subpart 9.4), or other U.S. Requirements of Law; (iii) debarred, disqualified, suspended or excluded from participation in Medicare, Medicaid or any other Governmental Payor Program or is listed on the General Services Administration list of excluded parties; or (iv) a party to any other action or proceeding by any Governmental Authority that would prohibit the applicable Credit Party or Subsidiary from distributing or selling the Product in the Territory or providing any services to any governmental or other purchaser pursuant to any Health Care Laws.

(i) *HIPAA*. Each Credit Party and, to the Knowledge of Borrower, each of its Subsidiaries, to the extent applicable, is in material compliance with all applicable, foreign, federal, state and local laws and regulations regarding the privacy, security, and notification of breaches of health information and regarding electronic transactions, including HIPAA, and each Credit Party and, to the Knowledge of Borrower, each of its Subsidiaries, to the extent applicable, has implemented policies, procedures and training customary in the pharmaceutical industry or otherwise adequate to assure continued compliance and to detect non-compliance. No Credit Party is a "covered entity" as defined in 45 C.F.R. § 160.103. Except as set forth in Schedule 4.19(i) of the Disclosure Letter, each Credit Party and each of its Subsidiaries is not required to comply with the General Data Protection Regulation (EU 2016/679).

(j) *Corporate Integrity Agreement*. Neither any Credit Party or Subsidiary, nor any of their respective Affiliates, nor any officer, director, managing employee or, to the Knowledge of Borrower, agent (as those terms are defined in 42 C.F.R. § 1001.1001) of any Credit Party or Subsidiary, is a party or is otherwise subject to any order, individual integrity agreement, or corporate integrity agreement with any U.S. Governmental Authority concerning compliance with any laws, rules, or regulations, issued under or in connection with a Governmental Payor Program.

4.20. Regulatory Approvals.

(a) Each Credit Party and each Subsidiary involved in any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory has all Regulatory Approvals material to its business and operations.

(b) Each Credit Party, each Subsidiary (as applicable) and, to the Knowledge of Borrower, each licensee of a Credit Party or a Subsidiary of any Intellectual Property, is in compliance with, and at all times during the past five (5) years, has complied with, all applicable, federal, state and local laws, rules, and regulations, governing the research, development, manufacture, production, use, commercialization, marketing, importing, distribution or sale of the Product in the Territory, including all such regulations promulgated by each applicable Regulatory Agency (including the FDA and DEA), the failure of compliance with which, individually or together with any other such failures, could reasonably be expected to result in a Material Adverse Change. No Credit Party or its Subsidiaries has received any written notice from any Regulatory Agency citing action or inaction by any Credit Party or any of its Subsidiaries that would constitute a violation of any applicable foreign, federal, state or local laws, rules, or regulations, including a Warning Letter or Untitled Letter from FDA, which could reasonably be expected to result in a Material Adverse Change.

4.21. Supply and Manufacturing.

(a) To the Knowledge of Borrower, the Product at all times has been manufactured in sufficient quantities and of a sufficient quality to satisfy demand of the Product during its clinical trials, without the occurrence of any event causing inventory of the Product to have become exhausted prior to satisfying such demand. To the Knowledge of Borrower, at all times following the approval of the Product by the FDA for any indication in the United States, no event has occurred that has caused or could reasonably be expected to cause (i) the Product to be manufactured in a quantity or of a quality insufficient to satisfy demand of the Product in the United States for such indication or (ii) inventory of the Product in the United States for such indication to have become exhausted prior to satisfying such demand.

(b) Except as disclosed in the Exchange Act Documents or set forth on Schedule 4.21(b) of the Disclosure Letter, to the Knowledge of Borrower, no manufacturer of the Product has received in the past five (5) years a Form 483 or is currently subject to a Form 483 impacting the Product with respect to any facility manufacturing the Product and that, with respect to each such Form 483, all scientific and technical violations or other issues relating to good manufacturing practice requirements documented therein, and any disputes regarding any such violations or issues, have been corrected or otherwise resolved.

(c) No Credit Party or any of its Subsidiaries has received any notice, oral or written, from any third party to any Manufacturing Agreement, containing any indication by or intent or threat of, such third party to reduce or cease, in any material respect, the supply of Product or the active pharmaceutical ingredient incorporated therein through calendar year 2025 (or such earlier date in accordance with the terms and conditions of such Manufacturing Agreement, as applicable).

4.22. Cybersecurity and Data Protection.

(a) The information technology systems used in the business of Borrower and its Subsidiaries operate and perform in all material respects as required to permit Borrower and its Subsidiaries to conduct their business as presently conducted. Neither Borrower, nor any of its Subsidiaries, nor to the Knowledge of Borrower, any vendor of Borrower or any of its Subsidiaries, has suffered any data breaches that (A) have resulted in any unauthorized access, acquisition, use, control, disclosure, destruction, or modification of any information subject to Data Protection Laws or any Company IP, or (B) have resulted in unauthorized access to, control of, or disruption of the information technology systems of Borrower or any of its Subsidiaries. Except as would not cause or could not be reasonably expected to result in, individually or in the aggregate, a Material Adverse Change, (i) Borrower and its Subsidiaries have implemented and maintain a reasonable enterprise-wide privacy and information security program with plans, policies and procedures for privacy, physical and cyber security, disaster recovery, business continuity and incident response, including reasonable and appropriate administrative, technical and physical safeguards to protect information subject to Data Protection Laws and the information technology systems of Borrower and each of its Subsidiaries from any unauthorized access, use, control, disclosure, destruction or modification, (ii) Borrower and each of its Subsidiaries is in compliance with all applicable Requirements of Law and Material Contracts regarding the privacy and security of customer, consumer, patient, employee and other personal data and is compliant with their respective published privacy policies and (iii) there have not been any incidents of, or, to the Knowledge of Borrower, any third party claims related to, any loss, theft, unauthorized access to, or unauthorized acquisition, modification, disclosure, corruption, destruction, or other misuse of any information subject to Data Protection Laws (including any ransomware incident) that Borrower or any of its Subsidiaries creates, receives, maintains, or transmits.

(b) Except as would not cause or could not be reasonably expected to result in, individually or in the aggregate, a Material Adverse Change, neither Borrower nor any of its Subsidiaries has received any written notice of any claims, investigations (including investigations by any Governmental Authority), or alleged violations of any Requirements of Law with respect to information subject to Data Protection Laws created, received, maintained, or transmitted by Borrower or any of its Subsidiaries.

4.23. Additional Representations and Warranties.

(a) After giving effect to consummation of the transactions contemplated by this Agreement, there is no Indebtedness other than Permitted Indebtedness described in clauses (a) and (b) of the definition of "Permitted Indebtedness".

(b) There are no Hedging Agreements that are not Permitted Hedging Agreements permitted under clause (t) of the definition of "Permitted Indebtedness".

5. AFFIRMATIVE COVENANTS

Each Credit Party covenants and agrees that, until payment in full of all Obligations (other than inchoate indemnity obligations), each Credit Party shall, and shall cause each of its Subsidiaries to:

5.1. Maintenance of Existence. (a) Preserve, renew and maintain in full force and effect its and all its Subsidiaries' legal existence under the Requirements of Law in their respective jurisdictions of organization, incorporation or formation; (b) take all commercially reasonable action to maintain all rights, privileges (including its good standing), permits, licenses and franchises necessary or desirable for it and all of its Subsidiaries in the ordinary course of its business, except in the case of clause (a) (other than with respect to Borrower) and clause (b) above, (i) to the extent that failure to do so could not reasonably be expected to result in a Material Adverse Change or (ii) pursuant to a transaction permitted by this Agreement; and (c) comply with all Requirements of Law of any Governmental Authority to which it is subject, except where the failure to do so could not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change.

5.2. Financial Statements, Notices. Deliver to the Collateral Agent:

(a) Financial Statements.

(i) Annual Financial Statements. As soon as available, but in any event within ninety (90) days after the end of each fiscal year of Borrower (or such earlier date on which Borrower is required to file a Form 10-K under the Exchange Act, as applicable), beginning with the fiscal year ending December 31, 2019, a consolidated balance sheet of Borrower and its Subsidiaries as of the end of such fiscal year, and the related consolidated statements of income, cash flows and stockholders' equity for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all prepared in accordance with Applicable Accounting Standards, with such consolidated financial statements to be audited and accompanied by (x) a report and opinion of Borrower's independent certified public accounting firm of recognized national standing (which report and opinion shall be prepared in accordance with Applicable Accounting Standards and shall not be subject to any qualification as to "going concern" or scope of audit), stating that such financial statements fairly present, in all material respects, the consolidated financial condition, results of operations and cash flows of Borrower and its Subsidiaries as of the dates and for the periods specified in accordance with Applicable Accounting Standards, and (y) if and only if Borrower is required to comply with the internal control provisions pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 requiring an attestation report of such independent certified public accounting firm, an attestation report of such independent certified public accounting firm as to Borrower's internal controls pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 attesting to management's assessment that such internal controls meet the requirements of the Sarbanes-Oxley Act of 2002; provided, however, that Borrower shall be deemed to have made such delivery of such consolidated financial statements if such consolidated financial statements shall have been made available within the time period specified above on the SEC's EDGAR system (or any successor system adopted by the SEC);

(ii) Quarterly Financial Statements. As soon as available, but in any event within forty-five (45) days after the end of each of the first three (3) fiscal quarters of each fiscal year of Borrower (or such earlier date on which Borrower is required to file a Form 10-Q under the Exchange Act, as applicable), beginning with the fiscal quarter ending March 31, 2020, a consolidated balance sheet of Borrower and its Subsidiaries as of the end of such fiscal quarter, and the related consolidated statements of income and cash flows and for such fiscal quarter and (in respect of the second and third fiscal quarters of such fiscal year) for the then-elapsed portion of Borrower's fiscal year, setting forth in each case in comparative form the figures for the comparable period or periods in the previous fiscal year, all prepared in accordance with Applicable Accounting Standards, subject to normal year-end audit adjustments and the absence of disclosures normally made in footnotes; provided, however, that Borrower shall be deemed to have made such delivery of such consolidated financial statements if such consolidated financial statements shall have been made available within the time period specified above on the SEC's EDGAR system (or any successor system adopted by the SEC). Such consolidated financial statements shall be certified by a Responsible Officer of Borrower as, to his or her knowledge, fairly presenting, in all material respects, the consolidated financial condition, results of operations and cash flows of Borrower and its Subsidiaries as of the dates and for the periods specified in accordance with Applicable Accounting Standards consistently applied, and on a basis consistent with the audited consolidated financial statements referred to under Section 5.2(a)(i), subject to normal year-end audit adjustments and the absence of footnotes;

(iii) Quarterly Compliance Certificate. Upon delivery (or within five (5) Business Days of any deemed delivery) of financial statements pursuant to Section 5.2(a)(i) and Section 5.2(a)(ii), a duly completed Compliance Certificate signed by a Responsible Officer, certifying, among other things, that (i) such financial statements fairly present, in all material respects, the consolidated financial condition, results of operations and cash flows of Borrower and its Subsidiaries as of applicable the dates and for the applicable periods in accordance with Applicable Accounting Standards consistently applied and (ii) no Event of Default or Default has occurred or, if such an Event of Default or Default has occurred, specifying the nature and extent thereof and any corrective action taken or proposed to be taken with respect thereto; and

(iv) Information During Event of Default. As promptly as practicable (and in any event within five (5) Business Days of the request therefor), such additional information regarding the business or financial affairs of Borrower or any of its Subsidiaries, or compliance with the terms of this Agreement or any other Loan Documents, as the Collateral Agent may from time to time reasonably request during the existence of any Event of Default (subject to reasonable requirements of confidentiality, including requirements imposed by Requirements of Law or contract; provided that Borrower shall not be obligated to disclose any information that is reasonably subject to the assertion of attorney-client privilege or attorney work-product).

(b) Notice of Defaults or Events of Default, ERISA Events and Material Adverse Changes. Written notice as promptly as practicable (and in any event within five (5) Business Days) after a Responsible Officer of Borrower shall have obtained Knowledge thereof, of the occurrence of any (i) Default or Event of Default, (ii) ERISA Event or (iii) Material Adverse Change.

(c) Legal Action Notice. Prompt written notice (which shall be deemed given to the extent reported in the Borrower's periodic reporting under the Exchange Act and available on the SEC's EDGAR system (or any successor system adopted by the SEC)) of any legal action, litigation, investigation or proceeding pending or threatened in writing against any Credit Party or any Subsidiary (i) that could reasonably be expected to result in uninsured damages or costs to such Credit Party or such Subsidiary in an amount in excess of the materiality thresholds applied by Borrower in accordance with the Exchange Act and related regulations and standards for purposes of its Exchange Act reporting or (ii) which alleges potential violations of the Health Care Laws, the FDA Laws or any applicable statutes, rules, regulations, standards, guidelines, policies and order administered or issued by any foreign Governmental Authority, which, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change; and in each case, provide such additional information (including any material development therein) as the Collateral Agent may reasonably request in relation thereto; provided that Borrower shall not be obligated to disclose any information that is reasonably subject to the assertion of attorney-client privilege or attorney work-product).

5.3. **Taxes**. Timely file all foreign, federal and state income and other material required Tax returns and reports or extensions therefor and timely pay all material foreign, federal, state and local Taxes, assessments, deposits and contributions imposed upon it or any of its properties or assets or in respect of any of its income, businesses or franchises before any penalty or fine accrue thereon; provided, however, that no such Tax or any claim for Taxes that have become due and payable and have or may become a Lien on any Collateral shall be required to be paid if (a) it is being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as adequate reserves therefor have been set aside on its books and maintained in conformity with Applicable Accounting Standards and (b) solely in the case of a Tax or claim that has or may become a Lien against any Collateral, such contest proceedings conclusively operate to stay the sale or forfeiture of any portion of any Collateral to satisfy such Tax or claim. No Credit Party will, nor will it permit any of its Subsidiaries to, file or consent to the filing of any consolidated income Tax return with any Person (other than Borrower or any of its Subsidiaries).

5.4. **Insurance**. Maintain with financially sound and reputable insurance companies, insurance with respect to its properties and business against loss or damage of the kinds customarily insured against by Persons of comparable size engaged in the same or similar business, of such types and in such amounts (after giving effect to any self-insurance reasonable and customary for similarly situated Persons of comparable size engaged in the same or similar businesses as Borrower and its Subsidiaries) as are customarily carried under similar circumstances by such other Persons. Any products liability or general liability insurance maintained in the United States regarding Collateral shall name the Collateral Agent, on behalf of the Lenders and the other Secured Parties, as additional insured or loss payee, as applicable. So long as no Event of Default shall have occurred and be continuing, the Borrower and its Subsidiaries may retain all or any portion of the proceeds of any insurance of the Borrower and its Subsidiaries (and each Lender shall promptly remit to the Borrower any proceeds with respect to any insurance received by it).

5.5. **Operating Accounts**. In the case of any Credit Party, contemporaneously with the establishment of any new Collateral Account at or with any bank or other depository or financial institution located in the United States, subject such account to a Control Agreement that is reasonably acceptable to the Collateral Agent. For each Collateral Account that each Credit Party at any time maintains, such Credit Party shall cause the applicable bank or other depository or financial institution located in the United States at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect the Collateral Agent's Lien in favor and for the benefit of Lenders and the other Secured Parties in such Collateral Account in accordance with the terms hereunder, which Control Agreement may not be terminated without the prior written consent of the Collateral Agent. The provisions of the previous two (2) sentences shall not apply to deposit accounts exclusively used for payroll, payroll Taxes and other employee wage and benefit payments to or for the benefit of any Credit Party's employees, zero balance accounts, accounts (including trust accounts) used exclusively for escrow, customs, insurance or fiduciary purposes, merchant accounts, accounts used exclusively for compliance with any Requirements of Law to the extent such Requirements of Law prohibit the granting of a Lien thereon, accounts which constitute cash collateral in respect of a Permitted Lien and any other account designated as an Excluded Account by a Responsible Officer of Borrower in writing delivered to the Collateral Agent, the cash balance of which does not exceed $10,000,000 in the aggregate at any time (all such accounts, collectively, the "**Excluded Accounts**"). Notwithstanding the foregoing, the Credit Parties shall have until the date that is ninety (90) days (or such longer period as the Collateral Agent may agree in its sole discretion) following (i) the Closing Date to comply with the provisions of this Section 5.5 with regard to Collateral Accounts of the Credit Parties in existence on the Closing Date (or opened during such 90-day period (or such longer period as the Collateral Agent may agree in its sole discretion)) and (ii) the closing date of any Acquisition or other Investment to comply with the provisions of this Section 5.5 with regard to Collateral Accounts of the Credit Parties acquired in connection with such Acquisition or other Investment.

5.6. **Compliance with Laws**. Comply in all respects with the Requirements of Law and all orders, writs, injunctions, decrees and judgments applicable to it or to its business or its assets or properties (including Environmental Laws, ERISA, Anti-Money Laundering Laws, OFAC, FCPA, Health Care Laws, FDA Laws, DEA Laws, Data Protection Laws, and the Federal Fair Labor Standards Act), except if the failure to comply therewith could not, individually or together with any other such failures, reasonably be expected to result in a Material Adverse Change.

5.7. Protection of Intellectual Property Rights.

(a) Except as could not reasonably be expected to result in a Material Adverse Change, (i) protect, defend and maintain the validity and enforceability of the Company IP material to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory, including defending any future or current oppositions, interference proceedings, reissue proceedings, reexamination proceedings, inter-partes review proceedings, post-grant review proceedings, cancellation proceedings, injunctions, lawsuits, paragraph IV patent certifications or lawsuits under the Hatch-Waxman Act, hearings, investigations, complaints, arbitrations, mediations, demands, International Trade Commission investigations, decrees, or any other disputes, disagreements, or claims, challenging the legality, validity, enforceability or ownership of any Company IP; (ii) maintain the confidential nature of any material trade secrets and trade secret rights used in any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory; and (iii) not allow any Company IP material to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory to be abandoned, forfeited or dedicated to the public or any Current Company IP Agreement to be terminated by Borrower or any of its Subsidiaries, as applicable, without the Collateral Agent's prior written consent (such consent not to be unreasonably withheld or delayed); provided, however, that with respect to any such Company IP that is not owned by Borrower or any of its Subsidiaries, the obligations in clauses (i) and (iii) above shall apply only to the extent Borrower or any of its Subsidiaries have the right to take such actions or to cause any licensee or other third party to take such actions pursuant to applicable agreements or contractual rights.

(b) (i) Except as required under any applicable Current Company IP Agreement or as Borrower may otherwise determine in its reasonable business judgment, use commercially reasonable efforts, at its (or its Subsidiaries', as applicable) sole expense, either directly or indirectly, with respect to any licensee or licensor under the terms of any Credit Party's (or any of its Subsidiary's) agreement with the respective licensee or licensor, as applicable, take any and all actions (including taking legal action to specifically enforce the applicable terms of any license agreement) and prepare, execute, deliver and file agreements, documents or instruments which are necessary or desirable to (A) prosecute and maintain the Company IP material to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory and (B) diligently defend or assert the Company IP material to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory against material infringement, misappropriation, violation or interference by any other Persons and, in the case of Copyrights, Trademarks and Patents within the Company IP, against any claims of invalidity or unenforceability (including by bringing any legal action for infringement, dilution, violation or defending any counterclaim of invalidity or action of a non-Affiliate third party for declaratory judgment of non-infringement or non-interference); and (ii) use commercially reasonable efforts to cause any licensee or licensor of any Company IP not to, and such Credit Party shall not, disclaim or abandon, or fail to take any action necessary or desirable to prevent the disclaimer or abandonment of Company IP material to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory.

(c) Use commercially reasonable efforts to protect, defend and maintain market exclusivity for the manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory through the Term Loan Maturity Date, and not allow for the manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of a generic version of the Product in the Territory before the Term Loan Maturity Date, without the Collateral Agent's prior written consent. Borrower agrees to use commercially reasonable efforts to (i) notify the Collateral Agent in writing, (ii) keep the Collateral Agent informed, and, (iii) at the request of the Collateral Agent in writing, consult with and consider in good faith any comments of the Collateral Agent on any filings in any opposition, interference proceeding, reissue proceeding, reexamination proceeding, inter-partes review proceeding, post-grant review proceeding, cancellation proceeding, injunction, lawsuit, paragraph IV patent certification or lawsuits under the Hatch-Waxman Act, hearing, investigation, complaint, arbitration, mediation, demand, International Trade Commission investigation, decree, or any other dispute, disagreement, or claim, in each case challenging the legality, validity, enforceability or ownership of any Company IP.

5.8. Books and Records. Maintain proper Books, in which entries that are full, true and correct in all material respects and are in conformity with Applicable Accounting Standards consistently applied shall be made of all material financial transactions and matters involving the assets, properties and business of such Credit Party (or such Subsidiary), as the case may be.

5.9. Access to Collateral; Audits. Allow the Collateral Agent, or its agents or representatives, at any time during the occurrence and continuance of an Event of Default during normal business hours and upon reasonable advance notice, to visit and inspect the Collateral and inspect, copy and audit any Credit Party's Books. The foregoing inspections and audits shall be at the relevant Credit Party's expense.

5.10. Use of Proceeds. (a) Use the proceeds of the Term Loans to fund its general corporate requirements, and (b) not use the proceeds of the Term Loans or any other Credit Extensions, directly or indirectly, for the purpose of purchasing or carrying any Margin Stock, for the purpose of reducing or retiring any Indebtedness that was originally incurred to purchase or carry any Margin Stock, for the purpose of extending credit to any other Person for the purpose of purchasing or carrying any Margin Stock or for any other purpose that might cause any Term Loan or other Credit Extension to be considered a "purpose credit" within the meaning of Regulation T, U or X of the Federal Reserve Board. If requested by the Collateral Agent, Borrower shall complete and sign Part I of a copy of Federal Reserve Form G-3 referred to in Regulation U and deliver such copy to the Collateral Agent.

5.11. Further Assurances. Promptly upon the reasonable written request of the Collateral Agent, execute, acknowledge and deliver such further documents and do such other acts and things in order to effectuate or carry out more effectively the purposes of this Agreement and the other Loan Documents at its expense, including after the Closing Date taking such steps as are reasonably deemed necessary or desirable by the Collateral Agent to maintain, protect and enforce its Lien in favor and for the benefit of Lenders and the other Secured Parties on Collateral securing the Obligations created under the Security Agreement and the other Loan Documents in accordance with the terms of the Security Agreement and the other Loan Documents, subject to Permitted Liens.

5.12. Additional Collateral; Guarantors.

(a) From and after the Closing Date, except as otherwise approved in writing by the Collateral Agent, each Credit Party shall cause each of its Subsidiaries (other than Excluded Subsidiaries) to guarantee the Obligations and to cause each such Subsidiary to grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties a first priority security interest in and Lien upon, and pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties, subject to Permitted Liens, all of such Subsidiary's properties and assets constituting Collateral, whether now existing or hereafter acquired or existing, to secure such guaranty; provided, that such Credit Party's obligations to cause any Subsidiaries formed or acquired after the Closing Date to take the foregoing actions shall be subject to the timing requirements of Section 5.13. Furthermore, except as otherwise approved in writing by the Collateral Agent, each Credit Party, from and after the Closing Date, shall, and shall cause each of its Subsidiaries (other than Excluded Subsidiaries) to grant the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties a first priority security interest in and Lien upon, and pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties, subject to Permitted Liens, the limitations set forth herein and the limitations set forth in the other Loan Documents, all of the Equity Interests (other than Excluded Equity Interests) in each of its Subsidiaries (including, for the avoidance of doubt, Epizyme Securities Corporation). In connection with each pledge of certificated Equity Interests required under the Loan Documents, the Credit Parties shall deliver, or cause to be delivered, to the Collateral Agent, such certificate(s) together with stock powers or assignments, as applicable, properly endorsed for transfer to the Collateral Agent or duly executed in blank, in each case reasonably satisfactory to the Collateral Agent. In connection with each pledge of uncertificated Equity Interests required under the Loan Documents, the Credit Parties shall deliver, or cause to be delivered, to the Collateral Agent an executed uncertificated stock control agreement among the issuer, the registered owner and the Collateral Agent substantially in the form attached as an Annex to the Security Agreement.

(b) In the event any Credit Party acquires any fee title to real estate in the U.S. with a fair market value (reasonably determined in good faith by a Responsible Officer of Borrower) in excess of $5,000,000, unless otherwise agreed by the Collateral Agent, such Person shall execute or deliver, or cause to be executed or delivered, to the Collateral Agent, (i) within sixty (60) days after such acquisition, an appraisal complying with the

Financial Institutions Reform, Recovery and Enforcement Act of 1989, (ii) within forty-five (45) days after receipt of notice from the Collateral Agent that such real estate is located in a Special Flood Hazard Area, Federal Flood Insurance, (iii) within sixty (60) days after such acquisition, a fully executed Mortgage, in form and substance reasonably satisfactory to the Collateral Agent, together with an A.L.T.A. lender's title insurance policy issued by a title insurer reasonably satisfactory to the Collateral Agent, in form and substance (including any endorsements) and in an amount reasonably satisfactory to the Collateral Agent insuring that the Mortgage is a valid and enforceable first priority Lien on the respective property, free and clear of all defects, encumbrances and Liens (other than Permitted Liens), (iv) simultaneously with such acquisition, then-current A.L.T.A. surveys, certified to the Collateral Agent by a licensed surveyor sufficient to allow the issuer of the lender's title insurance policy to issue such policy without a survey exception and (v) within sixty (60) days after such acquisition, an environmental site assessment prepared by a qualified firm reasonably acceptable to the Collateral Agent, in form and substance satisfactory to the Collateral Agent.

5.13. Formation or Acquisition of Subsidiaries. If Borrower or any of its Subsidiaries (other than Excluded Subsidiaries) at any time after the Closing Date forms or acquires a Subsidiary (other than an Excluded Subsidiary) (including by division), as promptly as practicable but in no event later than thirty (30) days (or such longer period as the Collateral Agent may agree in its sole discretion) after such formation or acquisition: (a) without limiting the generality of clause (d) below, Borrower will cause such Subsidiary to execute and deliver to the Collateral Agent a joinder to the Security Agreement in the form attached thereto and any relevant IP Security Agreement or other Collateral Documents, as applicable; (b) Borrower will deliver to the Collateral Agent (i) true, correct and complete copies of the Operating Documents of such Subsidiary, (ii) a Secretary's Certificate, certifying that the copies of such Operating Documents are true, correct and complete (such Secretary's Certificate to be in form and substance reasonably satisfactory to the Collateral Agent) and (iii) a good standing certificate for such Subsidiary certified by the Secretary of State (or the equivalent thereof) of its jurisdiction of organization, incorporation or formation; (c) Borrower will deliver to the Collateral Agent a Perfection Certificate, updated to reflect the formation or acquisition of such Subsidiary; and (d) Borrower will cause such Subsidiary to satisfy all requirements contained in this Agreement (including Section 5.12) and each other Loan Document if and to the extent applicable to such Subsidiary. Borrower, Lenders and the Collateral Agent hereby agree that any such Subsidiary shall constitute a Credit Party for all purposes hereunder as of the date of the execution and delivery of the joinder contemplated by clause (a) above. Any document, agreement or instrument executed or issued pursuant to this Section 5.13 shall be a Loan Document.

5.14. Post-Closing Requirements. Borrower will, and will cause each of its Subsidiaries to, take each of the actions set forth on Schedule 5.14 of the Disclosure Letter within the time period prescribed therefor on such schedule (or such longer period as the Collateral Agent may agree in its sole discretion), which shall include, among other things, that notwithstanding anything to the contrary in Section 5.5, the Credit Parties shall have until the date that is ninety (90) days following the Closing Date (or such longer period as the Collateral Agent may agree in its sole discretion) to comply with the provisions of Section 5.5 with regard to Collateral Accounts of the Credit Parties in existence on the Closing Date or opened during such 90-day period (or such longer period as the Collateral Agent may agree in its sole discretion). All representations and warranties and covenants contained in this Agreement and the other Loan Documents shall be deemed modified to the extent necessary to take the actions set forth on Schedule 5.14 of the Disclosure Letter within the time periods set forth therein, rather than elsewhere provided in the Loan Documents, such that to the extent any such action set forth in Schedule 5.14 of the Disclosure Letter is not overdue, the applicable Credit Party shall not be in breach of any representation or warranty or covenant contained in this Agreement or any other Loan Document applicable to such action for the period from the Closing Date until the date on which such action is required to be fulfilled as set forth on Schedule 5.14 of the Disclosure Letter.

5.15. Environmental.

(a) Deliver to the Collateral Agent:

(i) as soon as practicable following receipt thereof, copies of all environmental audits, investigations, analyses and reports of any kind or character, whether prepared by personnel of Borrower or any of its Subsidiaries or by independent consultants, governmental authorities or any other Persons, with respect to significant environmental matters at any Facility or with respect to any material Environmental Claims;

(ii) promptly upon a Responsible Officer of any Credit Party or any of its Subsidiaries obtaining knowledge of the occurrence thereof, written notice describing in reasonable detail (A) any Release required to be reported to any federal, state or local governmental or regulatory agency under any applicable Environmental Laws, (B) any remedial action taken by any Credit Party or any other Person in response to (x) any Hazardous Materials Activities, the existence of which, individually or in the aggregate, could reasonably be expected to result in one or more Environmental Claims resulting in a Material Adverse Change, or (y) any Environmental Claims that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, and (C) any Credit Party's discovery of any occurrence or condition on any real property adjoining or in the vicinity of any Facility that could cause such Facility or any part thereof to be subject to any material restrictions on the ownership, occupancy, transferability or use thereof under any Environmental Laws, provided, that with respect to real property adjoining or in the vicinity of any Facility, Borrower shall have no duty to affirmatively investigate or make any efforts to become or stay informed regarding any such adjoining or nearby properties;

(iii) as soon as practicable following the sending or receipt thereof by any Credit Party, a copy of any and all written communications with respect to (A) any Environmental Claims that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, (B) any Release required to be reported to any federal, state or local governmental or regulatory agency, or (C) any request for information from any Governmental Authority that suggests such Governmental Authority is investigating whether any Credit Party or any of its Subsidiaries may be potentially responsible for any Hazardous Materials Activity that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change;

(iv) prompt written notice describing in reasonable detail (A) any proposed acquisition of stock, assets, or property by Borrower or any of its Subsidiaries that, individually or in the aggregate, could reasonably be expected to (x) expose Borrower or any of its Subsidiaries to, or result in, Environmental Claims that could reasonably be expected to result in a Material Adverse Change or (y) affect the ability of Borrower or any of its Subsidiaries to maintain in full force and effect all material Governmental Approvals required under any Environmental Laws for their respective operations, and (B) any proposed action to be taken by Borrower or any of its Subsidiaries to modify current operations in a manner that, individually or together with any other such proposed actions, could reasonably be expected to subject Borrower or any of its Subsidiaries to any additional material obligations or requirements under any Environmental Laws; and

(v) with reasonable promptness, such other documents and information as from time to time may be reasonably requested by the Collateral Agent in relation to any matters disclosed pursuant to this Section 5.15(a).

(b) Each Credit Party shall, and shall cause each of its Subsidiaries to, promptly take any and all actions reasonably necessary to (i) cure any violation of applicable Environmental Laws by Borrower or any of its Subsidiaries that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change, and (ii) make an appropriate response to any Environmental Claim against Borrower or any of its Subsidiaries and discharge any obligations it may have to any Person thereunder where failure to do so, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Change.

5.16. Inventory; Returns; Maintenance of Properties. Keep all Inventory in good and marketable condition, free from material defects and otherwise keep all Inventory in material compliance with all applicable FDA Good Manufacturing Practices. Returns and allowances between Borrower and its Account Debtors shall follow Borrower's customary practices as they exist at the Effective Date or, solely with respect to the Acquired Business, any new returns and allowances practices established thereafter in good faith by Borrower. Each Credit Party will, and will cause each of its Subsidiaries to, maintain or cause to be maintained in good repair, working order and condition, ordinary wear and tear, casualty and condemnation excepted, all material tangible properties used or useful in its respective business, and from time to time will make or cause to be made all appropriate repairs, renewals and replacements thereof except where failure to do so could not reasonably be expected to result in a Material Adverse Change.

6. NEGATIVE COVENANTS

Each Credit Party covenants and agrees that, until payment in full of all Obligations (other than inchoate indemnity obligations), such Credit Party shall not, and shall cause each of its Subsidiaries not to:

6.1. Dispositions. Convey, sell, lease, transfer, assign, covenant not to sue, enter into a coexistence agreement, exclusively or non-exclusively license out, or otherwise dispose of (including any sale-leaseback or any transfer of assets pursuant to a plan of division), directly or indirectly and whether in one or a series of transactions (collectively, "**Transfer**"), all or any part of its properties or assets constituting Collateral or any Company IP that does not constitute Collateral under the Loan Documents but is related to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory; except, in each case of this Section 6.1, for Permitted Transfers (unless otherwise expressly provided in Section 6.6(b)).

6.2. Fundamental Changes; Location of Collateral.

(a) Without at least ten (10) days prior written notice to the Collateral Agent, solely in the case of a Credit Party: (i) change its jurisdiction of organization, incorporation or formation, (ii) change its organizational structure or type, (iii) change its legal name, or (iv) change any organizational number (if any) assigned by its jurisdiction of organization, incorporation or formation.

(b) Not deliver any material portion of the Collateral to one or more leased locations or bailees, unless (i) such Credit Party has delivered at least fifteen (15) days' prior written notice to the Collateral Agent, which such notice shall in reasonable detail identify such Collateral and indicate the location from which it is being delivered and the location to which it is being delivered (and may be in the form of an updated Perfection Certificate; provided that any update to the Perfection Certificate by any Credit Party pursuant to this Section 6.2(b) shall not relieve any Credit Party of any other Obligation under this Agreement), and (ii) the Collateral Agent and such landlord or bailee are already parties to a landlord's consent in favor of the Collateral Agent for the benefit of the Lenders and the other Secured Parties for such leased location or a bailee agreement governing both such Collateral and the location to which such Collateral will be delivered (in form and substance reasonably satisfactory to the Collateral Agent).

6.3. Mergers, Acquisitions, Liquidations or Dissolutions.

(a) Merge, divide itself into two (2) or more entities, consolidate, liquidate or dissolve, or permit any of its Subsidiaries to merge, divide itself into two (2) or more entities, consolidate, liquidate or dissolve with or into any other Person, except that:

(i) any Subsidiary of Borrower may merge or consolidate with or into Borrower, provided that Borrower is the surviving entity,

(ii) any Subsidiary of Borrower may merge or consolidate with any other Subsidiary of Borrower, provided that if any party to such merger or consolidation is a Credit Party then either (x) such Credit Party is the surviving entity or (y) the surviving or resulting entity executes and delivers to the Collateral Agent a joinder to the Security Agreement in the form attached thereto and any relevant IP Security Agreement or other Collateral Documents, as applicable, and otherwise satisfies the requirements of Section 5.13 substantially contemporaneously with completion of such merger or consolidation to;

(iii) any Subsidiary of Borrower may divide itself into two (2) or more entities or be dissolved or liquidated, provided that the properties and assets of such Subsidiary are allocated or distributed to an existing or newly-formed Credit Party; and

(iv) any Permitted Investment may be structured as a merger or consolidation; or

(b) make, or permit any of its Subsidiaries to make, Acquisitions outside the ordinary course of business, including any purchase of the assets of any division or line of business of any other Person, other than Permitted Acquisitions or Permitted Investments.

6.4. **Indebtedness**. Directly or indirectly, create, incur, assume or guaranty, or otherwise become or remain directly or indirectly liable with respect to, any Indebtedness (including any Indebtedness consisting of obligations evidenced by a bond, debenture, note or other similar instrument) that is not Permitted Indebtedness; provided, however, that the accrual of interest, the accretion of accreted value and the payment of interest in the form of additional Indebtedness shall not be deemed to be an incurrence of Indebtedness for purposes of this Section 6.4.

6.5. **Encumbrances**. Except for Permitted Liens, (i) create, incur, allow, or suffer to exist any Lien on any Collateral, or (ii) permit (other than pursuant to the terms of the Loan Documents) any material portion of the Collateral not to be subject to the first priority security interest granted in the Loan Documents or otherwise pursuant to the Collateral Documents, in each case of this clause (ii), other than as a direct result of any action by the Collateral Agent or any Lender or failure of the Collateral Agent or any Lender to perform an obligation thereof under the Loan Documents.

6.6. **No Further Negative Pledges; Negative Pledge.**

(a) No Credit Party nor any of its Subsidiaries shall enter into any agreement, document or instrument directly or indirectly prohibiting (or having the effect of prohibiting) or limiting the ability of such Credit Party or Subsidiary to create, incur, assume or suffer to exist any Lien upon any Collateral, whether now owned or hereafter acquired, in favor of the Collateral Agent for the benefit of Lenders and the other Secured Parties with respect to the Obligations or under the Loan Documents, in each case of this Section 6.6(a), other than Permitted Negative Pledges.

(b) Notwithstanding Section 6.1, no Credit Party will sell, assign, transfer, exchange or otherwise dispose of, or create, incur, allow or suffer to exist any Lien on, any Equity Interests constituting Collateral issued by any Subsidiary which are owned or otherwise held by such Credit Party, except for: (i) Permitted Liens; (ii) transfers between or among Credit Parties, provided that any and all steps as may be required to be taken in order to create and maintain a first priority security interest in and Lien upon such Equity Interests in favor of the Collateral Agent for the benefit of Lenders and the other Secured Parties are taken contemporaneously with the completion of any such transfer; and (iii) sales, assignments, transfers, exchanges or other dispositions to qualify directors if required by Requirements of Law or otherwise permitted under this Agreement, provided that such sale, assignment, transfer, exchange or other disposition shall be for the minimum number of Equity Interests as are necessary for such qualification under Requirements of Law.

6.7. **Maintenance of Collateral Accounts**. Maintain any Collateral Account except pursuant to the terms of Section 5.5 hereof.

6.8. **Distributions; Investments.**

(a) Pay any dividends or make any distribution or payment on or redeem, retire or purchase any Equity Interests, except, in each case of this Section 6.8, for Permitted Distributions.

(b) Directly or indirectly make any Investment other than Permitted Investments.

6.9. **No Restrictions on Subsidiary Distributions.** No Credit Party nor any of its Subsidiaries shall enter into any agreement, document or instrument directly or indirectly prohibiting (or having the effect of prohibiting) or limiting the ability of any Subsidiary of Borrower to (a) pay dividends or make any other distributions on any of such Subsidiary's Equity Interests owned by Borrower or any other Subsidiary of Borrower, (b) repay or prepay any Indebtedness owed by such Subsidiary to Borrower or any other Subsidiary of Borrower, (c) make loans or advances to Borrower or any other Subsidiary of Borrower, or (d) transfer, lease or license any Collateral to Borrower or any other Subsidiary of Borrower, except, in each case of this Section 6.9, for Permitted Subsidiary Distribution Restrictions.

6.10. **Subordinated Debt** Make or permit any voluntary or optional prepayment of any Subordinated Debt.

6.11. Amendments or Waivers of Organizational Documents. Amend, restate, supplement or otherwise modify, or waive, any provision of its Operating Documents in a manner that would reasonably be expected to result in a Material Adverse Change.

6.12. Compliance.

(a) Become an "investment company" under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose;

(b) No ERISA Affiliate shall cause or suffer to exist (i) any event that would result in the imposition of a Lien on any assets or properties of any Credit Party or a Subsidiary of a Credit Party with respect to any Plan or Multiemployer Plan or (ii) any other ERISA Event that, in the case of clauses (i) and (ii), could reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change; or

(c) Permit the occurrence of any other event with respect to any present pension, profit sharing or deferred compensation plan which could reasonably be expected to result in a Material Adverse Change.

6.13. Compliance with Anti-Terrorism Laws. The Collateral Agent and each Lender hereby notifies each Credit Party that pursuant to the requirements of Anti-Terrorism Laws, and such Person's policies and practices, the Collateral Agent and each Lender is required to obtain, verify and record certain information and documentation that identifies each Credit Party and its principals, which information includes the name and address of each Credit Party and its principals and such other information that will allow the Collateral Agent and each Lender to identify such party in accordance with Anti-Terrorism Laws. No Credit Party will, nor will any Credit Party permit any of its Subsidiaries or Affiliates to, directly or indirectly, knowingly enter into any documents or contracts with any Person listed on the OFAC Lists. Each Credit Party shall promptly (but in any event within three (3) Business Days) notify the Collateral Agent and each Lender in writing upon any Responsible Officer of Borrower having knowledge that any Credit Party or any Subsidiary or Affiliate of any Credit Party is listed on the OFAC Lists or (a) is convicted on, (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. No Credit Party will, nor will any Credit Party permit any of its Subsidiaries or Affiliates to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including 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, 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 violates, 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.

6.14. Amendments or Waivers of Current Company IP Agreements. (a) Waive, amend, cancel or terminate, exercise or fail to exercise, any material rights constituting or relating to any of the Current Company IP Agreements or (b) breach, default under, or take any action or fail to take any action that, with the passage of time or the giving of notice or both, would constitute a default or event of default under any of the Current Company IP Agreements, in each case of this Section 6.14, which could reasonably be expected to, individually or together with any other such waivers, amendments, cancellations, terminations, exercises or failures, result in a Material Adverse Change.

6.15. Minimum Liquidity. From and after the Effective Date and until the Product shall have been approved by the FDA for any indication in the United States, (a) after giving effect to the transactions contemplated hereunder and without violating any other term or provision of this Agreement, Borrower and its Subsidiaries shall have consolidated Liquidity, tested quarterly as of the last day of each fiscal quarter, of not less than $45,000,000, and (b) Borrower will provide the Collateral Agent with read-only access to Borrower's cash accounts.

7. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

7.1. Payment Default. Any Credit Party fails to (a) make any payment of any principal of the Term Loan when and as the same shall become due and payable, whether at the due date thereof (including pursuant to Section 2.2(c)) or at a date fixed for prepayment (whether voluntary or mandatory) thereof or by acceleration thereof or otherwise, or (b) within five (5) Business Days after the same becomes due, any payment of interest or premium pursuant to Section 2.2, including any applicable Additional Consideration, Makewhole Amount or Prepayment Premium, or any other Obligations (which five (5) Business Day cure period shall not apply to any such payments due on the Term Loan Maturity Date, such earlier date pursuant to Section 2.2(c)(ii) hereof or the date of acceleration pursuant to Section 8.1(a) hereof). A failure to pay any such interest, premium or Obligations pursuant to the foregoing clause (b) prior to the end of such five (5) Business Day-period shall not constitute an Event of Default (unless such payment is due on the Term Loan Maturity Date, such earlier date pursuant to Section 2.2(c)(ii) hereof or the date of acceleration pursuant to Section 8.1(a) hereof).

7.2. Covenant Default.

(a) The Credit Parties: (i) fail or neglect to perform any obligation in Sections 5.2, 5.3, 5.4, 5.5, 5.6, 5.10, 5.12, 5.13 or 5.14 or (ii) violate any covenant in Section 6; or

(b) The Credit Parties fail or neglect to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents on its part to be performed, kept or observed and such failure continues for thirty (30) days, after the earlier of the date on which (i) a Responsible Officer of any Credit Party becomes aware of such failure and (ii) written notice thereof shall have been given to the Borrower by the Collateral Agent or any Lender. Cure periods provided under this Section 7.2(b) shall not apply, among other things, to any of the covenants referenced in clause (a) above.

7.3. Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of any Credit Party or of any entity under the control of any Credit Party (including a Subsidiary) in excess of $10,000,000 on deposit or otherwise maintained with the Collateral Agent, or (ii) a notice of lien or levy is filed against any of material portion of Collateral by any Governmental Authority, and the same under sub-clauses (i) and (ii) hereof are not, within thirty (30) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, that no Credit Extensions shall be made during any thirty (30) day cure period; or

(b) (i) Any material portion of Collateral is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower and its Subsidiaries from conducting any material part of their business, taken as a whole.

7.4. Material Adverse Change. A Material Adverse Change occurs.

7.5. Insolvency.

(a) An involuntary proceeding shall be commenced or an involuntary petition shall be filed in a court of competent jurisdiction seeking: (i) relief in respect of any Credit Party, or of a substantial part of the property of any Credit Party, under Title 11 of the United States Code, as now constituted or hereafter amended, or any other federal, state or foreign bankruptcy, insolvency, receivership or similar law; (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Credit Party or for a substantial part of the property or assets of any Credit Party; or (iii) the winding-up or liquidation of any Credit Party, and such proceeding or petition shall continue undismissed or unstayed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered; or

(b) Any Credit Party shall: (i) voluntarily commence any proceeding or file any petition seeking relief under Title 11 of the United States Code, as now constituted or hereafter amended, or any other federal, state or foreign bankruptcy, insolvency, receivership or similar law; (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or the filing of any petition described in clause (a) above; (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Credit Party or for a substantial part of the property or assets of any Credit Party; (iv) file an

answer admitting the material allegations of a petition filed against it in any such proceeding; (v) make a general assignment for the benefit of creditors; (vi) become unable, admit in writing its inability or fail generally to pay its debts as they become due; (vii) take any action for the purpose of effecting any of the foregoing; or (viii) wind up or liquidate (except as otherwise expressly permitted hereunder).

7.6. Other Agreements. Any Credit Party fails to pay any Indebtedness (other than the Indebtedness represented by this Agreement and the other Loan Documents) within any applicable grace period after such payment is due and payable (including at final maturity) or after the acceleration of any such Indebtedness by the holder(s) thereof because of a default, in each case, if the total amount of such Indebtedness unpaid or accelerated exceeds $10,000,000.

7.7. Judgments. One or more final, non-appealable judgments, orders, or decrees for the payment of money in an amount in excess of $10,000,000 (but excluding any final judgments, orders, or decrees for the payment of money that are covered by independent third-party insurance as to which liability has not been denied by such insurance carrier or by an indemnification claim against a solvent and unaffiliated Person that is not a Credit Party as to which such Person has not denied liability for such claim), shall be rendered against one or more Credit Parties and the same are not, within thirty (30) days after the entry thereof, discharged or execution thereof stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay.

7.8. Misrepresentations. Any Credit Party or any Person acting for any Credit Party makes or is deemed to make any representation, warranty, or other statement now or later in this Agreement, any other Loan Document or in any writing delivered to the Collateral Agent or any Lender or to induce the Collateral Agent or any Lender to enter this Agreement or any other Loan Document, and such representation, warranty, or other statement is incorrect in any material respect (or, to the extent any such representation, warranty or other statement is qualified by materiality or Material Adverse Change, in any respect) when made or deemed to be made.

7.9. Loan Documents; Collateral. Any material provision of any Loan Document shall for any reason cease to be valid and binding on or enforceable against any Credit Party, or any Credit Party shall so state in writing or bring an action to limit its obligations or liabilities thereunder; or any Collateral Document shall for any reason (other than pursuant to the terms thereof) cease to create a valid security interest in any material portion of the Collateral purported to be covered thereby or such security interest shall for any reason (other than pursuant to the terms of the Loan Documents) cease to be a perfected and first priority security interest in any material portion of the Collateral subject thereto, subject only to Permitted Liens, in each case, other than as a direct result of any action by the Collateral Agent or any Lender or failure of the Collateral Agent or any Lender to perform an obligation thereof under the Loan Documents.

7.10. ERISA Event. An ERISA Event occurs that, individually or together with any other ERISA Events, results or could reasonably be expected to result in a Material Adverse Change or the imposition of a Lien on any Collateral.

8. RIGHTS AND REMEDIES UPON AN EVENT OF DEFAULT

8.1. Rights and Remedies. While an Event of Default occurs and continues, the Collateral Agent may, or at the request of the Required Lenders, will, without notice or demand:

(a) declare all Obligations (including, for the avoidance of doubt, the Makewhole Amount or Prepayment Premium that is payable pursuant to Section 2.2(e) and Section 2.2(f), as applicable) immediately due and payable (but if an Event of Default described in Section 7.5 occurs all Obligations, including the Makewhole Amount and Prepayment Premium that is payable pursuant to Section 2.2(e) and Section 2.2(f), as applicable, are automatically and immediately due and payable without any action by the Collateral Agent or any Lender), whereupon all Obligations for principal, interest, premium or otherwise (including, for the avoidance of doubt, the Makewhole Amount and Prepayment Premium that is payable pursuant to Section 2.2(e) and Section 2.2(f), as applicable) shall become due and payable by Borrower without presentment, demand, protest or other notice of any kind, which are all expressly waived by the Credit Parties hereby;

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement;

(c) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that the Collateral Agent considers advisable, notify any Person owing Borrower money of the Collateral Agent's security interest in favor and for the benefit of the Lenders and the other Secured Parties in such funds, and verify the amount of the Collateral Accounts;

(d) make any payments and do any acts it considers necessary or reasonable to protect the Collateral or the Collateral Agent's security interest in favor and for the benefit of Lenders and the other Secured Parties in the Collateral. Borrower shall assemble the Collateral if the Collateral Agent or the Required Lenders requests and make it available as the Collateral Agent designates or the Required Lenders designate. The Collateral Agent or its agents or representatives may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest in favor and for the benefit of Lenders and the other Secured Parties and pay all expenses incurred. Borrower grants the Collateral Agent a license to enter and occupy (and for its agents or representatives to enter and occupy) any of its premises, without charge, to exercise any of the Collateral Agent's or any Lender's rights or remedies;

(e) apply to the Obligations (i) any balances and deposits of Borrower it holds, or (ii) any amount held by the Collateral Agent owing to or for the credit or the account of Borrower;

(f) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. With respect to any and all Intellectual Property owned by any Credit Party and included in Collateral, each Credit Party hereby grants to the Collateral Agent, for the benefit of all Secured Parties, as of the Closing Date, a non-exclusive, royalty-free license or other right to use, without charge, such Intellectual Property in advertising for sale and selling any Collateral and, in connection with the Collateral Agent's exercise of its rights under this Section 8.1, Borrower's rights under all licenses and all franchise Contracts inure to the benefit of all Secured Parties. Each Credit Party shall retain the right to control the Collateral Agent's use of its trade names and Trademarks and such trade names and Trademarks, together with the goodwill associated therewith, are and remain the exclusive property of the Credit Parties, and any and all use of the same by the Collateral Agent shall inure to the benefit of the Credit Parties;

(g) place a "hold" on any account maintained with the Collateral Agent or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(h) demand and receive possession of Borrower's Books regarding Collateral; and

(i) exercise all rights and remedies available to the Collateral Agent or any Lender under the Collateral Documents or any other Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

The Collateral Agent and each Lender agrees that in connection with any foreclosure or other exercise of rights under this Agreement or any other Loan Document with respect to any Intellectual Property included in the Collateral, the rights of the licensees under any license of such Intellectual Property will not be terminated, limited or otherwise adversely affected so long as no default exists thereunder in a way that would permit the licensor to terminate such license (commonly termed a non-disturbance). Without limitation to any other provision herein or in any other Loan Document, while an Event of Default occurs and continues, at the Collateral Agent's or the Required Lenders' request, Borrower shall, promptly following the receipt of such request, take such actions as are required or necessary to allow the Collateral Agent to collect, receive, appropriate and realize upon Borrower's rights and interests in, to and under any Current Company IP Agreement, including in connection with any foreclosure or other exercise of the Collateral Agent's or any Lender's rights with respect thereto (including, for the avoidance of doubt, using reasonable best efforts to obtain the written consent of any counterparty to the exercise by the Collateral Agent or any Lender of any and all rights and remedies under this Agreement or any other Loan Document with respect to any Current Company IP Agreement, in form and substance reasonably satisfactory to the Collateral Agent).

8.2. Power of Attorney. Borrower hereby irrevocably appoints the Collateral Agent and any Related Party thereof as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's name on any checks or other forms of payment or security; (b) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Collateral Accounts directly with depository banks where the Collateral Accounts are maintained, for amounts and on terms the Collateral Agent determines reasonable; (d) make, settle, and adjust all claims under Borrower's products liability or general liability insurance policies maintained in the United States regarding Collateral; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of the Collateral Agent or a third party as the Code permits. Borrower hereby appoints the Collateral Agent and any Related Party thereof as its lawful attorney-in-fact to file or record any documents necessary to perfect or continue the perfection of the Collateral Agent's security interest in favor and for the benefit of Lenders and the other Secured Parties in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than inchoate indemnity obligations) have been satisfied in full and no Lender is under any further obligation to make Credit Extensions hereunder. The foregoing appointment of the Collateral Agent and any Related Party thereof as Borrower's attorney in fact, and all of the Collateral Agent's (or such Related Party's) rights and powers, coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations) have been fully repaid and performed and each Lender's obligation to provide Credit Extensions terminates.

8.3. Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, the Collateral Agent shall apply any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Collateral Accounts or disposition of any other Collateral, or otherwise, to the Obligations in such order as the Collateral Agent shall determine in its sole discretion. Any surplus shall be paid to Borrower or other Persons legally entitled thereto; Borrower shall remain liable to Lenders for any deficiency. If the Collateral Agent or any Lender directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, the Collateral Agent or such Lender, as applicable, shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by the applicable Lender(s) of cash therefor.

8.4. Collateral Agent's Liability for Collateral. So long as the Collateral Agent complies with Requirements of Law regarding the safekeeping of the Collateral in the possession or under the control of the Collateral Agent, the Collateral Agent shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; or (c) any act or default of any other Person. In no event shall the Collateral Agent or any Lender have any liability for any diminution in the value of the Collateral for any reason. Borrower bears all risk of loss, damage or destruction of the Collateral.

8.5. No Waiver; Remedies Cumulative. The Collateral Agent's or any Lender's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of the Collateral Agent or any Lender thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Each of the Collateral Agent's and Lender's rights and remedies under this Agreement and the other Loan Documents are cumulative. Each of the Collateral Agent and Lenders has all rights and remedies provided under the Code, by law, or in equity. The exercise by the Collateral Agent or any Lender of one right or remedy is not an election and shall not preclude the Collateral Agent or any Lender from exercising any other remedy under this Agreement or other remedy available at law or in equity, and the waiver by the Collateral Agent or any Lender of any Event of Default is not a continuing waiver. The Collateral Agent's or any Lender's delay in exercising any remedy is not a waiver, election, or acquiescence.

8.6. Demand Waiver; Makewhole Amount; Prepayment Premium. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by the Collateral Agent on which Borrower is liable. Borrower acknowledges and agrees that if the maturity of all Obligations shall be accelerated pursuant to Section 8.1(a) by reason of the occurrence of an Event of Default, the Makewhole Amount that is payable pursuant to Section 2.2(e) or the Prepayment Premium that is

payable pursuant to Section 2.2(f), as applicable, shall become due and payable by Borrower upon such acceleration, whether such acceleration is automatic or is effected by the Collateral Agent's or any Lender's declaration thereof, as provided in Section 8.1(a), and Borrower shall pay the Makewhole Amount that is payable pursuant to Section 2.2(e) or the Prepayment Premium that is payable pursuant to Section 2.2(f), as applicable, as compensation to Lenders for the loss of its investment opportunity and not as a penalty, and Borrower waives any right to object thereto in any voluntary or involuntary bankruptcy, insolvency or similar proceeding or otherwise.

9. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address (if any) indicated below. Any party to this Agreement may change its mailing or electronic mail address or facsimile number by giving all other parties hereto written notice thereof in accordance with the terms of this Section 9.

If to Borrower or any other Credit Party:

Epizyme, Inc.
400 Technology Square
Cambridge, MA 02139
Attention: Robert Bazemore
Telephone: (617) 229-5872
E-mail: rbazemore@epizyme.com

with a copy to (which shall not constitute notice) to:

WilmerHale
60 State Street
Boston, MA 02109
Attn: Stuart Falber and George Shuster
Telephone: (617) 526-6000
Facsimile: (617) 526-5000
Email: stuart.falber@wilmerhale.com; george.shuster@wilmerhale.com

If to the Collateral Agent: BioPharma Credit PLC
c/o Beaufort House
51 New North Road
Exeter EX4 4EP
United Kingdom
Attn: Company Secretary
Tel: +44 01 392 477 500
Fax: +44 01 392 253 282

with copies (which shall not constitute notice) to:

Pharmakon Advisors LP
110 East 59th Street, #3300
New York, NY 10022
Attn: Pedro Gonzalez de Cosio
Phone: +1 (212) 883-2296
Fax: +1 (917) 210-4048
Email: pg@PharmakonAdvisors.com

and

Akin Gump Strauss Hauer & Feld LLP
One Bryant Park
New York, NY 10036-6745
Attn: Geoffrey E. Secol
Phone: (212) 872-8081
Fax: (212) 872-1002
Email: gsecol@akingump.com

If to any Lender: To the address set forth on Exhibit E attached hereto.

10. CHOICE OF LAW, VENUE, AND JURY TRIAL WAIVER

THE LOAN DOCUMENTS SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO ANY PRINCIPLES OF CONFLICTS OF LAW THAT COULD REQUIRE THE APPLICATION OF THE LAW OF ANY OTHER JURISDICTION. Each party hereto submits to the exclusive jurisdiction of the courts of the State of New York sitting in New York County, and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, and agrees that all claims in respect of any such action, litigation or proceeding may be heard and determined in such New York State court or, to the fullest extent permitted by Requirements of Law, in such Federal court; provided, however, that nothing in this Agreement shall be deemed to operate to preclude the Collateral Agent or any Lender from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of the Collateral Agent or any Lender. Each Credit Party expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and each Credit Party hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or *forum non conveniens* and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Each Credit Party hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to such party at the address set forth in (or otherwise provided in accordance with the terms of) Section 9 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of such party's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY HERETO WAIVES ITS RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR ALL PARTIES HERETO TO ENTER INTO THIS AGREEMENT. EACH PARTY HERETO HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

11. GENERAL PROVISIONS

11.1. Successors and Assigns.

(a) This Agreement binds and is for the benefit of the parties hereto and their respective successors and permitted assigns.

(b) No Credit Party may transfer, pledge or assign this Agreement or any other Loan Document or any rights or obligations hereunder or thereunder without the prior written consent of each Lender. Each Lender may at any time sell, transfer, assign or pledge this Agreement or any other Loan Document or any of its rights or obligations hereunder or thereunder, including with respect to any Term Loan (or any portion thereof), to any third party without Borrower's consent, including to grant a participation in all or any part of, or any interest in, such Lender's obligations, rights or benefits under this Agreement and the other Loan Documents, including with respect to any Term Loan (or any portion thereof) (any such sale, transfer, assignment, pledge or grant of a participation, a "**Lender Transfer**"); provided, however, that, so long as no Default or Event of Default has

occurred and is then continuing, no Lender may make a Lender Transfer that is not in the form of a participation with respect to any Term Loan (or any portion thereof) that has not yet been funded hereunder and relating to which, a commitment of such Lender to make Credit Extensions relating to a Term Loan is then outstanding hereunder, without Borrower's prior written consent, not to be unreasonably withheld, delayed or conditioned and the parties hereto acknowledge and agree that any withholding, delaying or conditioning of such consent shall be reasonable only to the extent it is reasonably based in good faith on the financial wherewithal of the prospective third party transferee or purchaser to satisfy such commitment. For the avoidance of doubt, no Borrower consent shall be required in connection with any Lender Transfer to any other Lender or any Subsidiary or Affiliate of any Lender.

(c) In the case of a Lender Transfer in the form of a participation granted by any Lender to any third party, (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of its obligations hereunder, (iii) Borrower shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement and (iv) any agreement or instrument pursuant to which such Lender sells such participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification, or other modification hereto, in each case subject to the terms and conditions of this Agreement. Borrower agrees that each participant shall be entitled to the benefits of Sections 2.5 and 2.6 (subject to the requirements and limitations therein, including the requirements under Section 2.6(d) (it being understood that the documentation required under Section 2.6(d) shall be delivered to the applicable Lender)) to the same extent as if it were a Person that had acquired its interest by assignment pursuant to clause (b) above; provided that, with respect to any participation, such participant shall not be entitled to receive any greater payment under Sections 2.5 or 2.6 than the applicable Lender (i.e., the party that participated the interest) would have been entitled to receive, except to the extent of any entitlement to receive a greater payment resulting from a Change in Law that occurs after such participant acquired the applicable participation.

(d) The Collateral Agent shall record any Lender Transfer in the Register. Each Lender shall provide Borrower and the Collateral Agent with written notice of a Lender Transfer delivered no later than five (5) Business Days prior to the date on which such Lender Transfer is consummated. For the avoidance of doubt, if any Lender sells a participation, such Lender shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each participant and principal amounts (and stated interest) of each participant's interest in the Term Loan or other obligations under the Loan Documents (the "**Participant Register**"); provided, however, that such Lender shall have no obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and the Collateral Agent and each Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(e) Any attempted transfer, pledge or assignment of this Agreement or any other Loan Document or any rights or obligations hereunder or thereunder in violation of this Section 11.1 shall be null and void *ab initio* and of no effect.

11.2. Indemnification.

(a) Borrower agrees to indemnify and hold harmless each of the Collateral Agent, Lenders and its and their respective Affiliates (and its or their respective successors and assigns) and each manager, member, partner, controlling Person, director, officer, employee, agent or sub-agent, advisor and affiliate thereof (each such Person, an "**Indemnified Person**") from and against any and all Indemnified Liabilities; provided, however, that (i) Borrower shall have no obligation to any Indemnified Person hereunder with respect to any Indemnified Liabilities to the extent such Indemnified Liabilities arise from the bad faith, gross negligence or willful misconduct of that Indemnified Person (or its Affiliates or controlling Persons or their respective directors, officers, managers, partners, members, agents, sub-agents or advisors), in each case, as determined by a final, non-appealable judgment of a court of competent jurisdiction, (ii) Borrower shall have no obligation to any Indemnified Person hereunder with respect to any Indemnified Liabilities to the extent such Indemnified Liabilities arise from a material breach of any obligation of such Indemnified Person hereunder, and (iii) Borrower shall have no obligation to any Indemnified

Person hereunder with respect to any Indemnified Liabilities to the extent such Indemnified Liabilities arise from any claim by one Indemnified Person against another Indemnified Person that does not relate to any act or omission of any Credit Party, and (iv) no Credit Party shall be liable for any settlement of any claim or proceeding effected by any Indemnified Person without the prior written consent of such Credit Party (which consent shall not be unreasonably withheld or delayed), but if settled with such consent or if there shall be a final judgment against an Indemnified Person, each of the Credit Parties shall, jointly and severally, indemnify and hold harmless such Indemnified Person from and against any loss or liability by reason of such settlement or judgment in the manner set forth in this Agreement. This Section 11.2(a) shall not apply with respect to Taxes other than any Taxes that represent liabilities, obligations, losses, damages, penalties, claims, costs, expenses and disbursements arising from any non-Tax claim.

(b) To the extent permitted by Requirements of Law, no party to this Agreement shall assert, and each party to this Agreement hereby waives, any claim against any other party hereto (and its or their successors and assigns), and each manager, member, partner, controlling Person, director, officer, employee, agent or sub-agent, advisor and affiliate thereof, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) (whether or not the claim therefor is based on contract, tort or duty imposed by any applicable legal requirement) arising out of, in connection with, arising out of, as a result of, or in any way related to, this Agreement or any Loan Document or any agreement or instrument contemplated hereby or thereby or referred to herein or therein, the transactions contemplated hereby or thereby, the Term Loans or the use of the proceeds thereof or any act or omission or event occurring in connection therewith, and each party to this Agreement hereby waives, releases and agrees not to sue upon any such claim or any such damages, whether or not accrued and whether or not known or suspected to exist in its favor.

(c) Any action taken by any Credit Party under or with respect to any Loan Document, even if required under any Loan Document or at the request of the Collateral Agent or any Lender, shall be at the expense of such Credit Party, and neither the Collateral Agent nor any Secured Party shall be required under any Loan Document to reimburse any Credit Party or any Subsidiary of any Credit Party therefor except as expressly provided therein. In addition, Borrower agrees to pay or reimburse upon demand each of the Collateral Agent and Lenders (and their respective successors and assigns) and each of their respective Related Parties for (i) all reasonable out-of-pocket costs and expenses incurred by it in connection with the investigation, development, preparation, negotiation, syndication, execution, interpretation or administration of, any modification of any term of or termination of, any Loan Document, any commitment or proposal letter therefor, any other document prepared in connection therewith or the consummation and administration of any transaction contemplated therein, (ii) all reasonable costs and expenses incurred by it in connection with internal audit reviews and Collateral audits and (iii) all costs and expenses incurred by it in connection with (1) any refinancing or restructuring of the credit arrangements provided hereunder in the nature of a “work-out”, (2) the enforcement or preservation of any right or remedy under any Loan Document, any Obligation, with respect to the Collateral or any other related right or remedy or (3) the commencement, defense, conduct of, intervention in, or the taking of any other action with respect to, any proceeding (including any bankruptcy or insolvency proceeding) related to any Credit Party, Subsidiary of any Credit Party, Loan Document or Obligation (or the response to and preparation for any subpoena or request for document production relating thereto), including Lender Expenses.

11.3. Severability of Provisions. In case any provision in or obligation hereunder or under any other Loan Document shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

11.4. Correction of Loan Documents. The Collateral Agent or Required Lenders may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties hereto so long as the Collateral Agent or Required Lenders, as applicable, provides the Credit Parties and the other parties hereto with written notice of such correction and allows the Credit Parties at least ten (10) days to object to such correction in writing delivered to the Collateral Agent and each Lender. In the event of such objection, such correction shall not be made except by an amendment to this Agreement in accordance with Section 11.5.

11.5. Amendments in Writing; Integration.

(a) No amendment, restatement or modification of any provision of this Agreement or any other Loan Document, or waiver, discharge or termination of any obligation hereunder or thereunder, no approval or consent hereunder or thereunder (including any consent to any departure by Borrower or any other Credit Party herefrom or therefrom), shall in any event be effective unless the same shall be in writing and signed by Borrower (on its own behalf and on behalf of each other Credit Party) and the Required Lenders; provided, however, that no such amendment, restatement, modification, waiver, discharge, termination, approval or consent shall, unless in writing and signed by the Collateral Agent and the Required Lenders, affect the rights or duties of, or any amounts payable to, the Collateral Agent under this Agreement or any other Loan Document; provided, further, that no such amendment or restatement described in Section 2.9 shall in any event be effective unless the same shall be in writing and signed by Borrower, each other Credit Party, the Collateral Agent and each Lender. Any such waiver, approval or consent granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver, approval or consent.

(b) This Agreement and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations among the parties hereto about the subject matter of this Agreement and the Loan Documents merge into this Agreement and the Loan Documents.

11.6. Counterparts. This Agreement 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 Agreement.

11.7. Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been paid in full and satisfied. The obligation of Borrower or any other the Credit Parties in Section 11.2 to indemnify Indemnified Persons shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

11.8. Confidentiality. Any information regarding the Credit Parties and their Subsidiaries and their businesses provided to the Collateral Agent or any Lender by or on behalf of any Credit Party pursuant to the Loan Documents shall be deemed "Confidential Information"; provided, however, that Confidential Information does not include information that is either: (i) in the public domain or in the possession of the Collateral Agent, any Lender or any of their respective Affiliates or when disclosed to the Collateral Agent, any Lender or any of their respective Affiliates, or becomes part of the public domain after disclosure to the Collateral Agent, any Lender or any of their respective Affiliates, in each case, other than as a result of a breach by the Collateral Agent, any Lender or any of their respective Affiliates of the obligations under this Section 11.8; or (ii) disclosed to the Collateral Agent, any Lender or any of their respective Affiliates by a third party if the Collateral Agent, such Lender or such Affiliate, as applicable, does not know that the third party is prohibited from disclosing the information. Neither the Collateral Agent nor any Lender shall disclose any Confidential Information to a third party or use Confidential Information for any purpose other than the exercise of its rights and the performance of its duties or obligations under the Loan Documents. The foregoing in this Section 11.8 notwithstanding, the Collateral Agent and each Lender may disclose Confidential Information: (a) to any of its Subsidiaries or Affiliates; (b) to prospective transferees, purchasers or participants of any interest in the Credit Extensions (including, for the avoidance of doubt, in connection with any proposed Lender Transfer); (c) as required by law, regulation, subpoena, or other order, provided, that (x) prior to any disclosure under this clause (c), the Collateral Agent or such Lender, as applicable, agrees to endeavor to provide Borrower with prior written notice thereof and with respect to any law, regulation, subpoena or other order, to the extent that the Collateral Agent or such Lender is permitted to provide such prior notice to Borrower pursuant to the terms hereof, and (y) any disclosure under this clause (c) shall be limited solely to that portion of the Confidential Information as may be specifically compelled by such law, regulation, subpoena or other order; (d) to the extent requested by regulators having jurisdiction over the Collateral Agent or such Lender or as otherwise required in connection with the Collateral Agent's or such Lender's examination or audit by such regulators; (e) as the Collateral Agent or such Lender considers reasonably necessary in exercising remedies under the Loan Documents; (f) to third-party service providers of the Collateral Agent or such Lender; and (g) to any of the Collateral Agent's or such Lender's Related Parties; provided, however, that the third parties to which Confidential Information is disclosed pursuant to clauses (a), (b), (f) and (g) are bound by obligations of confidentiality and non-use that are no less restrictive than those contained herein.

The provisions of this Section 11.8 shall survive the termination of this Agreement.

11.9. Attorneys' Fees, Costs and Expenses. In any action or proceeding between any Credit Party and the Collateral Agent or any Lender arising out of or relating to the Loan Documents, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

11.10. Right of Set-Off. In addition to any rights now or hereafter granted under Requirements of Law and not by way of limitation of any such rights, upon the occurrence of an Event of Default and at any time thereafter during the continuance of any Event of Default, each Lender is hereby authorized by each Credit Party at any time or from time to time, without prior notice to any Credit Party, any such notice being hereby expressly waived by Borrower (on its own behalf and on behalf of each other Credit Party), to set off and to appropriate and to apply any and all deposits (general or special, including Indebtedness evidenced by certificates of deposit, whether matured or unmatured, but not including trust accounts) and any other Indebtedness at any time held or owing by such Lender to or for the credit or the account of any Credit Party against and on account of the obligations and liabilities of any Credit Party to such Lender hereunder and under the other Loan Documents, including all claims of any nature or description arising out of or connected hereto or with any other Loan Document, irrespective of whether or not (a) the Collateral Agent or such Lender shall have made any demand hereunder or (b) the principal of or the interest on the Term Loans or any other amounts due hereunder shall have become due and payable pursuant to Section 2 and although such obligations and liabilities, or any of them, may be contingent or unmatured. Each Lender agrees promptly to notify Borrower and the Collateral Agent after any such set off and application made by such Lender; provided that the failure to give such notice shall not affect the validity of such set off and application. Notwithstanding anything in this Agreement to the contrary, the parties hereto acknowledge and agree that no Credit Party or any of its Affiliates may, at any time, set off or apply any amount due to the Collateral Agent or any Lender hereunder or under the other Loan Documents against or on account of any obligations or liabilities of any Person under the Purchase Agreement, including any claims of any nature or description arising out of or connected to the Purchase Agreement, and no party to the Purchase Agreement or any of its Affiliates may, at any time, set off or apply any amount due to any Credit Party or its Affiliates under the Purchase Agreement against or on account of any obligations or liabilities of any Credit Party to the Collateral Agent or any Lender hereunder or under the other Loan Documents.

11.11. Marshalling; Payments Set Aside. Neither the Collateral Agent nor any Lender shall be under any obligation to marshal any assets in favor of any Credit Party or any other Person or against or in payment of any or all of the Obligations. To the extent that any Credit Party makes a payment or payments to any Lender, or the Collateral Agent or any Lender enforces any Liens or exercises its rights of setoff, and such payment or payments or the proceeds of such enforcement or setoff or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, receiver or any other party under any bankruptcy law, any other state or federal law, common law or any equitable cause, then, to the extent of such recovery, the obligation or part thereof originally intended to be satisfied, and all Liens, rights and remedies therefor or related thereto, shall be revived and continued in full force and effect as if such payment or payments had not been made or such enforcement or setoff had not occurred.

11.12. Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any Requirements of Law, including any state law based on the Uniform Electronic Transactions Act.

11.13. Captions. Section headings herein are included herein for convenience of reference only and shall not constitute a part hereof for any other purpose or be given any substantive effect.

11.14. Construction of Agreement. The parties hereto mutually acknowledge that they and their respective attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty, this Agreement shall be construed without regard to which of the parties hereto caused the uncertainty to exist.

11.15. Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) except as expressly provided in Section 11.2(a), confer any benefits, rights or remedies under or by reason of this Agreement on any Persons other than the express parties to it and their respective successors and permitted assigns; (b) relieve or discharge the obligation or liability of any Person not an express party to this Agreement; or (c) give any Person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

11.16. No Advisory or Fiduciary Duty. The Collateral Agent and each Lender may have economic interests that conflict with those of the Credit Parties. Each Credit Party agrees that nothing in the Loan Documents or otherwise will be deemed to create an advisory, fiduciary or agency relationship or fiduciary or other implied duty between any Lender or the Collateral Agent, on the one hand, and such Credit Party, its Subsidiaries, and any of their respective stockholders or affiliates, on the other hand. Each Credit Party acknowledges and agrees that (i) the transactions contemplated by the Loan Documents are arm's-length commercial transactions between each Lender and the Collateral Agent, on the one hand, and such Credit Party, its Subsidiaries and their respective affiliates, on the other hand, (ii) in connection therewith and with the process leading to such transaction, the Collateral Agent and each Lender is acting solely as a principal and not the advisor, agent or fiduciary of such Credit Party, its Subsidiaries or their respective affiliates, management, stockholders, creditors or any other Person, (iii) Neither the Collateral Agent nor any Lender has assumed an advisory or fiduciary responsibility in favor of any Credit Party, its Subsidiaries or their respective affiliates with respect to the transactions contemplated hereby or the process leading thereto (irrespective of whether the Collateral Agent or any Lender or any of their respective affiliates has advised or is currently advising such Credit Party, its Subsidiaries or their respective affiliates on other matters) or any other obligation to such Credit Party, its Subsidiaries or their respective affiliates except the obligations expressly set forth in the Loan Documents and (iv) each Credit Party, its Subsidiaries and their respective affiliates have consulted their own legal and financial advisors to the extent each deemed appropriate. Each Credit Party further acknowledges and agrees that it is responsible for making its own independent judgment with respect to such transactions and the process leading thereto. Each Credit Party agrees that it will not claim that the Collateral Agent or any Lender has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to such Credit Party, its Subsidiaries or their respective affiliates in connection with such transaction or the process leading thereto.

12. COLLATERAL AGENT

12.1. Appointment and Authority. Each of the Lenders hereby irrevocably appoints BioPharma Credit PLC to act on its behalf as the Collateral Agent hereunder and under the other Loan Documents and authorizes the Collateral Agent to take such actions on its behalf and to exercise such powers as are delegated to the Collateral Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. Except for the first sentence of Section 12.6 and the last paragraph of Section 12.8, the provisions of this Section 12 are solely for the benefit of the Collateral Agent and the Lenders, and neither Borrower nor any other Credit Party shall have rights as a third party beneficiary of any of such provisions. Subject to Section 12.8 and Section 11.5, any action required or permitted to be taken by the Collateral Agent hereunder shall be taken with the prior approval of the Required Lenders.

12.2. Rights as a Lender. The Person serving as the Collateral 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 the Collateral Agent and the term "Lender" or "Lenders" shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Collateral Agent hereunder in its individual capacity. Such Person and its Affiliates may lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of business with Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Collateral Agent hereunder and without any duty to account therefor to the Lenders.

12.3. Exculpatory Provisions.

(a) The Collateral Agent shall not have any duties or obligations to the Lenders except those expressly set forth herein and in the other Loan Documents to which it is a party. Without limiting the generality of the foregoing, with respect to the Lenders, the Collateral Agent:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default or Event of Default has occurred and is continuing;

(ii) shall not 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 to which it is a party that the Collateral Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in such other Loan Documents), provided that the Collateral Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Collateral Agent to liability or that is contrary to any Loan Document or Requirements of Law; and

(iii) shall not, except as expressly set forth herein and in the other Loan Documents to which it is a party, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Collateral Agent or any of its Affiliates in any capacity.

(b) The Collateral Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Collateral Agent shall believe in good faith shall be necessary, under the circumstances as provided in Section 11.5) or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. The Collateral Agent shall be deemed not to have knowledge of any Default or Event of Default unless and until notice describing such Default or Event of Default is given to the Collateral Agent in writing by Borrower or a Lender.

(c) The Collateral 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 3 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Collateral Agent.

12.4. Reliance by Collateral Agent. The Collateral Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Collateral Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. The Collateral Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

12.5. Delegation of Duties. The Collateral Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Collateral Agent. The Collateral Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Section 12 shall apply to any such sub-agent and to the Related Parties of the Collateral Agent and any such sub-agent. The Collateral Agent shall not be responsible for the negligence or misconduct of any sub-agent except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Collateral Agent acted with gross negligence or willful misconduct in the selection of such sub-agent.

12.6. Resignation of Collateral Agent. The Collateral Agent may at any time give notice of its resignation to the Lenders and Borrower. Upon the receipt of any such notice of resignation, the Required Lenders shall have the right, in consultation with Borrower so long as no Default has occurred and is continuing, to appoint a successor. If no successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days after the retiring Collateral Agent gives notice of its resignation, then the retiring Collateral Agent may, on behalf of the Lenders, appoint a successor Collateral Agent; provided that, whether or not a successor has been appointed or has accepted such appointment, such resignation shall become effective upon delivery of the notice thereof. Upon the acceptance of a successor's appointment as Collateral Agent hereunder,

such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or retired) Collateral Agent, and the retiring Collateral Agent shall be discharged from all of its duties and obligations under the Loan Documents (if not already discharged therefrom as provided above in this Section 12.6). After the retiring Collateral Agent's resignation, the provisions of this Section 12 and Section 10 shall continue in effect for the benefit of such retiring Collateral Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Collateral Agent was acting as Collateral Agent. Upon any resignation by the Collateral Agent, all payments, communications and determinations provided to be made by, to or through the Collateral Agent shall instead be made by, to or through each Lender directly, until such time as a Person accepts an appointment as Collateral Agent in accordance with this Section 12.6.

12.7. Non-Reliance on Collateral Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Collateral Agent or any other Lender or any of their respective Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement and make Credit Extensions hereunder. Each Lender also acknowledges that it will, independently and without reliance upon the Collateral Agent or any other Lender or any of their respective Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

12.8. Collateral and Guaranty Matters. Each Lender agrees that any action taken by the Collateral Agent or the Required Lenders in accordance with the provisions of this Agreement or of the other Loan Documents, and the exercise by the Collateral Agent or Required Lenders of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of the Lenders. Without limiting the generality of the foregoing, the Lenders irrevocably authorize the Collateral Agent, at its option and in its discretion:

(a) to release any Lien on any property granted to or held by the Collateral Agent under any Collateral Document (i) upon discharge of the Obligations, (ii) that is sold, transferred, disposed or to be sold, transferred, disposed as part of or in connection with any sale, transfer or other disposition (other than any sale to a Credit Party) permitted hereunder, (iii) subject to Section 11.5, if approved, authorized or ratified in writing by the Required Lenders or (iv) to the extent such property is owned by a Guarantor upon the release of such Guarantor from its obligations under the Security Agreement pursuant to clause (c) below;

(b) to subordinate any Lien on any property granted to or held by the Collateral Agent under any Loan Document to the holder of any Lien on such property that is permitted by clause (d), (e), (i), (n) and (q) of the definition of "Permitted Liens" (solely with respect to modifications, replacements, extensions or renewals of Liens permitted under clause (d), (e), (i) and (n) of the definition of "Permitted Liens");

(c) to release any Guarantor from its obligations under the Security Agreement if such Person ceases to be a Subsidiary as a result of a transaction permitted hereunder;

(d) to enter into non-disturbance and similar agreements in connection with the licensing of Intellectual Property permitted pursuant to the terms of this Agreement; and

(e) to enter into a subordination, intercreditor, or other similar agreement with respect to any Indebtedness that constitutes Subordinated Debt to the extent such Subordinated Debt is permitted under the definition of "Permitted Indebtedness".

Upon request by the Collateral Agent at any time the Required Lenders will confirm in writing the Collateral Agent's authority to release or subordinate its interest in particular types or items of property, or to release any Guarantor from its obligations under the Security Agreement pursuant to this Section 12.8.

In each case as specified in this Section 12.8, the Collateral Agent will (and each Lender irrevocably authorizes the Collateral Agent to), at Borrower's expense, execute and deliver to the applicable Credit Party such documents as such Credit Party may reasonably request (i) to evidence the release or subordination of such item of Collateral from the Liens and security interests granted under the Collateral Documents, (ii) to enter into non-disturbance or similar

agreements in connection with the licensing of Intellectual Property, (iii) to enter into a subordination, intercreditor, or other similar agreement with respect to any Indebtedness that constitutes Subordinated Debt to the extent such Subordinated Debt is permitted under the definition of "Permitted Indebtedness" or (iv) to evidence the release of any Guarantor from its obligations under the Security Agreement, in each case in accordance with the terms of the Loan Documents and this Section 12.8 and in form and substance reasonably acceptable to the Collateral Agent.

Without limiting the generality of Section 12.10 below, the Collateral Agent shall deliver to the Lenders notice of any action taken by it under this Section 12.8 promptly after the taking thereof; provided that delivery of or failure to deliver any such notice shall not affect the Collateral Agent's rights, powers, privileges and protections under this Section 12.

12.9. Reimbursement by Lenders. To the extent that Borrower for any reason fails to indefeasibly pay any amount required under Section 2.4 to be paid by it to the Collateral Agent (or any sub-agent thereof) or any Related Party of any of the foregoing, each Lender severally agrees to pay to the Collateral Agent (or any such sub-agent) or such Related Party, as the case may be, such Lender's *pro rata* share (based upon the percentages as used in determining the Required Lenders as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount; provided that the unreimbursed expense or indemnified loss, damage, liability or related expense, as the case may be, was incurred by or asserted against the Collateral Agent (or any such sub-agent) in its capacity as such or against any Related Party of any of the foregoing acting for the Collateral Agent (or any sub-agent) in connection with such capacity.

12.10. Notices and Items to Lenders. The Collateral Agent shall deliver to the Lenders each notice, report, statement, approval, direction, consent, exemption, authorization, waiver, certificate, filing or other item received by it pursuant to this Agreement or any other Loan Document (including any item received by it pursuant to Section 3 or set forth on Schedule 5.14 of the Disclosure Letter); provided, that any delivery of or failure to deliver any such notice, report, statement, approval, direction, consent, exemption, authorization, waiver, certificate, filing or item shall not otherwise alter or effect the rights of the Lenders or the Collateral Agent under this Agreement or any other Loan Document or the validity of such item. In addition, to the extent the Collateral Agent or the Required Lenders deliver any notices, approvals, authorizations, directions, consents or waivers to Borrower pursuant to this Agreement or any other Loan Document, the Collateral Agent or the Required Lenders, as applicable, will also deliver such notice, approval, authorization, direction, consent or waiver to the other Lenders on or about the same time such notice, approval, authorization, direction, consent or waiver is provided to Borrower; provided, that the delivery of or failure to deliver such notice, approval, authorization, direction, consent or waiver to the other Lenders shall not in any way effect the obligations of Borrower, or the rights of the Collateral Agent or the Required Lenders, in respect of such notice, approval, authorization, direction, consent or waiver or the validity thereof.

13. DEFINITIONS

13.1. Definitions. For the purposes of and as used in the Loan Documents: (a) references to any Person include its successors and assigns and, in the case of any Governmental Authority, any Person succeeding to its functions and capacities; (b) except as the context otherwise requires (including to the extent otherwise expressly provided in any Loan Document), (i) references to any law, statute, treaty, order, policy, rule or regulation include any amendments, supplements and successors thereto and (ii) references to any contract, agreement, instrument or other document include any amendments, restatements, supplements or modifications thereto or thereof from time to time to the extent permitted by the provisions thereof; (c) the word "shall" is mandatory; (d) the word "may" is permissive; (e) the word "or" has the inclusive meaning represented by the phrase "and/or"; (f) the words "include", "includes" and "including" are not limiting; (g) the singular includes the plural and the plural includes the singular; (h) numbers denoting amounts that are set off in parentheses are negative unless the context dictates otherwise; (i) each authorization herein shall be deemed irrevocable and coupled with an interest; (j) all accounting terms shall be interpreted, and all determinations relating thereto shall be made, in accordance with Applicable Accounting Standards; (k) references to any time of day shall be to New York time; (l) the words "herein", "hereof", "hereby", "hereto" and "hereunder" refer to this Agreement as a whole; and (m) unless otherwise expressly provided, references to specific sections, articles, clauses, sub-clauses, annexes and exhibits are to this Agreement and references to specific schedules are to the Disclosure Letter. As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" means any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes all accounts receivable, book debts, and other sums owing to Credit Parties.

"**Account Debtor**" means any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Acquisition**" means (a) any Stock Acquisition, or (b) any Asset Acquisition.

"**Additional Consideration**" is defined in Section 2.7.

"**Additional Facility Amount**" means, at Borrower's option, as agreed to by Borrower and Lenders in accordance with Section 2.9, an aggregate principal amount equal of not more than Three Hundred Million Dollars ($300,000,000.00).

"**Adverse Proceeding**" means any action, suit, proceeding, hearing (whether administrative, judicial or otherwise), governmental investigation or arbitration (whether or not purportedly on behalf of any Credit Party or any of its Subsidiaries) at law or in equity, or before or by any Governmental Authority, domestic or foreign (including any Environmental Claims), whether pending or, to the Knowledge of Borrower, threatened against or adversely affecting any Credit Party or any of its Subsidiaries or any property of any Credit Party or any of its Subsidiaries.

"**Affiliate**" means, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company or limited liability partnership, that Person's managers and members. As used in this definition, "control" means (a) direct or indirect beneficial ownership of at least fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) of the voting share capital or other equity interest in a Person or (b) the power to direct or cause the direction of the management of such Person by contract or otherwise. In no event shall the Collateral Agent or any Lender be deemed to be an Affiliate of Borrower or any of its Subsidiaries.

"**Agreement**" is defined in the preamble hereof.

"**Anti-Money Laundering Laws**" is defined in Section 4.18(b).

"**Anti-Terrorism Laws**" means any Anti-Money Laundering Laws or other laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the Patriot Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"**Applicable Accounting Standards**" means with respect to Borrower and its Subsidiaries, generally accepted accounting principles in the United States as set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination, consistently applied.

"**Applicable Percentage**" means, with respect to each Lender at any time of determination, (a) from the Effective Date to, but excluding, the Tranche B Closing Date, the percentage equal to a fraction, the numerator of which is the amount of such Lender's Tranche A Commitment and the denominator of which is the Tranche A Loan Amount, (b) from the Tranche B Closing Date to, but excluding, the Tranche C Closing Date, the percentage equal to a fraction, the numerator of which is the amount of the sum of such Lender's Tranche A Commitment and Tranche B Commitment and the denominator of which is the amount of the sum of the Tranche A Loan Amount and the Tranche B Loan Amount, and (c) from and after the Tranche C Closing Date, the percentage equal to a fraction, the numerator of which is the amount of the sum of such Lender's Tranche A Commitment, Tranche B Commitment and Tranche C Commitment and the denominator of which is the amount of the sum of the Tranche A Loan Amount, the Tranche B Loan Amount and the Tranche C Loan Amount; provided that, if all or any portion of the Term Loans or commitments held by any Lender are transferred or assigned pursuant to a Lender Transfer, the "Applicable Percentage" shall be calculated from and after the effective date of such Lender Transfer to give effect to any proportional change in such Lender's Tranche A Commitment, Tranche B Commitment and Tranche C Commitment, as applicable.

"**Asset Acquisition**" means, with respect to Borrower or any of its Subsidiaries, any purchase, in-license or other acquisition of any properties or assets of any other Person (including any purchase or other acquisition of any business unit, line of business or division of such Person). For the avoidance of doubt, "Asset Acquisition" includes any co-promotion or co-marketing arrangement pursuant to which Borrower or any Subsidiary acquires rights to promote or market the products of another Person.

"**Bankruptcy Code**" means Title 11 of the United States Code entitled "Bankruptcy," as now and hereafter in effect, or any successor statute.

"**Blocked Person**" means (a) any Person listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person fifty percent (50%) or more owned 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 the Collateral Agent or 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 of Directors**" means, with respect to any Person, (i) in the case of any corporation, the board of directors of such Person, (ii) in the case of any limited liability company, the board of managers of such Person, or if there is none, the Board of Directors of the managing member of such Person, (iii) in the case of any partnership, the Board of Directors of the general partner of such Person and (iv) in any other case, the functional equivalent of the foregoing.

"**Board of Governors**" means the Board of Governors of the United States Federal Reserve System, or any successor thereto.

"**Books**" means all books and records including ledgers, records regarding a Credit Party's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrower**" is defined in the preamble hereof.

"**Borrowing Resolutions**" means, with respect to any Person, those resolutions adopted by such Person's Board of Directors and delivered by such Person to the Collateral Agent pursuant to Section 3.1 approving the Loan Documents to which such Person is a party and the transactions contemplated thereby (including the Term Loans), together with a certificate executed by its Secretary on behalf of such Person certifying that (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) that attached as Exhibit A to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) and title(s) of the officers of such Person authorized to execute the Loan Documents to which such Person is a party on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that the Collateral Agent and each Lender may conclusively rely on such certificate with respect to the authority of such officers unless and until such Person shall have delivered to the Collateral Agent a further certificate canceling or amending such prior certificate.

"**Business Day**" means any day that is not a Saturday or a Sunday or a day on which banks are authorized or required to be closed in New York, New York, London or the Cayman Islands.

"**Capital Lease**" means, as applied to any Person, any lease of any property by that Person as lessee which, in accordance with Applicable Accounting Standards, is required to be accounted for as a capital lease on the balance sheet of that Person.

"**Cash Equivalents**" means

(a) securities issued or directly and fully guaranteed or insured by the United States government or any agency or instrumentality of the United States government or by the government of any other member country of O.E.C.D. (provided that the full faith and credit of the United States or such other member country of O.E.C.D., as applicable, is pledged in support of those securities), in each case, having maturities of not more than two (2) years from the date of acquisition;

(b) certificates of deposit, time deposits with maturities of one year or less from the date of acquisition, bankers' acceptances with maturities not exceeding one year and overnight bank deposits and demand deposits, in each case, with any commercial bank having (i) capital and surplus in excess of $500,000,000 in the case of U.S. banks or (ii) capital and surplus in excess of $100,000,000 (or the U.S. dollar equivalent as of the date of determination) in the case of non-U.S. banks;

(c) commercial paper or marketable short-term money market or readily marketable direct obligations and similar securities having one of the two highest ratings obtainable from Moody's Investors Services, Inc. or S&P Global Ratings and, in each case, maturing within two (2) years after the date of acquisition;

(d) repurchase obligations with a term of not more than seven (7) days for underlying securities of the types described in clauses (a) and (c) above entered into with any financial institution meeting the qualifications specified in clause (b) above;

(e) investment funds investing ninety-five percent (95.0%) of their assets in securities of the types described in clauses (a) through (d) above and clause (f) below;

(f) investments in money market funds rated "AAA" (or the equivalent thereof) or better by S&P Global Ratings or "Aaa" (or the equivalent thereof) or better by Moody's Investors Services, Inc. (or, if at any time neither Moody's Investors Services, Inc. nor S&P Global Ratings shall be rating such obligations, an equivalent rating from another rating agency) and that have portfolio assets of at least $1,000,000,000; and

(g) other investments in accordance with the Borrower's investment policy as of the Closing Date.

"**Change in Control**" means: (a) a transaction or series of transactions (including any merger or consolidation with Borrower) in which any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, but excluding any employee benefit plan of such Person or its Subsidiaries, and any Person acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a majority of shares of the then outstanding capital stock of Borrower ordinarily entitled to vote in the election of directors; (b) a sale of all or substantially all of the consolidated assets of Borrower and its Subsidiaries in one transaction or a series of transactions (whether by way of merger, stock purchase, asset purchase or otherwise); or (c) a merger or consolidation involving Borrower in which Borrower is not the surviving Person.

"**Change in Law**" means the occurrence, after the date of this Agreement, of any of the following: (a) the adoption or taking into effect of any law, treaty, order, policy, rule or regulation, (b) any change in any law, treaty, order, policy, rule or regulation or in the administration, interpretation or application thereof by any Governmental Authority or (c) the making or issuance of any request, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall be deemed to be a "Change in Law", regardless of the date enacted, adopted or issued.

"**Closing Date**" means the Tranche A Closing Date, the Tranche B Closing Date or the Tranche C Closing Date, as applicable.

"**Code**" means the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of New York; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles of the Code, the definition of such term contained in Article 9 of the Code shall govern; provided, further, 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, the Collateral Agent's Lien in favor and for the benefit of Lenders and the other Secured Parties on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of New York, the term "Code" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" means, collectively, "Collateral" (as such term is defined in the Security Agreement) and all other property of whatever kind and nature subject or purported to be subject from time to time to a Lien under any Collateral Document, but in any event excluding all Excluded Property (as such term is defined in the Security Agreement).

"**Collateral Account**" means any Deposit Account of a Credit Party maintained with a bank or other depository or financial institution located in the United States, any Securities Account of a Credit Party maintained with a securities intermediary located in the United States, or any Commodity Account of a Credit Party maintained with a commodity intermediary located in the United States, in each case, other than an Excluded Account.

"**Collateral Documents**" means the Security Agreement, the Control Agreements, the IP Agreements, any Mortgages and all other instruments, documents and agreements delivered by any Credit Party pursuant to this Agreement or any of the other Loan Documents, in each case, in order to grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties or perfect a Lien on any Collateral as security for the Obligations, and all amendments, restatements, modifications or supplements thereof or thereto.

"**Committed Facility Amount**" means the sum of the Tranche A Loan Amount, plus the Tranche B Loan Amount, plus the Tranche C Loan Amount.

"**Commodity Account**" means any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Company IP**" means any and all of the following, as they exist in and throughout the world: (a) Current Company IP; (b) improvements, continuations, continuations-in-part, divisions, provisionals or any substitute applications, any patent issued with respect to any of the Current Company IP, any patent right claiming the composition of matter of, or the method of making or using, the Product, any reissue, reexamination, renewal or patent term extension or adjustment (including any supplementary protection certificate) of any such patent, and any confirmation patent or registration patent or patent of addition based on any such patent; (c) trade secrets or trade secret rights, including any rights to unpatented inventions, know-how, show-how, operating manuals, confidential or proprietary information, research in progress, algorithms, data, databases, data collections, designs, processes, procedures, methods, protocols, materials, formulae, drawings, schematics, blueprints, flow charts, models, strategies, prototypes, techniques, and the results of experimentation and testing, including samples, in each case, as specifically related to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory; (d) any and all IP Ancillary Rights specifically relating to any of the foregoing; and (e) regulatory filings, submissions and approvals related to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory and all data provided in any of the foregoing.

"**Compliance Certificate**" means that certain certificate in the form attached hereto as Exhibit D.

"**Connection Income Taxes**" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"**Contingent Obligation**" means, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another Person directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligation for undrawn letters of credit for the account of that Person; or (c) any obligation of that Person to pay an earn-out, milestone payment or similar contingent or deferred consideration to a counterparty incurred or created in connection with an Acquisition, Transfer, Investment or other sale or disposition, including, with respect to any purchase price holdback in respect of a portion of the purchase price of an asset sold to that Person to satisfy unperformed obligations of the seller of such asset, any obligation to pay such seller the excess of such holdback over such obligations. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it reasonably determined by such Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" means, with respect to any Credit Party, any control agreement entered into among such Credit Party, the Collateral Agent and, in the case of a Deposit Account, the bank or other depository or financial institution located in the United States at which such Credit Party maintains such Deposit Account, or, in the case of a Securities Account or a Commodity Account, the securities intermediary or commodity intermediary located in the United States at which such Credit Party maintain such Securities Account or Commodities Account, in either case, pursuant to which the Collateral Agent obtains control (within the meaning of the Code) over such Collateral Account.

"**Copyrights**" means any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret (and all related IP Ancillary Rights).

"**Credit Extension**" means any Term Loan or any other extension of credit by any Lender for Borrower's benefit pursuant to this Agreement.

"**Credit Party**" means Borrower and each Guarantor.

"**CSA**" is defined in Section 4.19(c).

"**Current Company IP**" is defined in Section 4.6(c).

"**Current Company IP Agreement**" means each of: (a) the Amended and Restated Collaboration and License Agreement, dated as of March 12, 2015, by and between Borrower and Eisai Co., Ltd.; (b) the Amended and Restated Collaboration and License Agreement, dated as of July 8, 2015, by and among Borrower, Celegene Corporation and Celegene RIVOT Ltd.; (c) the Companion Diagnostics Agreement, dated as of December 18, 2012, between Borrower and Eisai Co., Ltd. on the one side, and Roche Molecular Systems, Inc. on the other side, and the Letter Agreement, dated as of December 21, 2012, between Borrower Eisai Co., Ltd. relating thereto; (d) the Collaboration and License Agreement, dated as of January 8, 2011, by and between Borrower and Glaxo Group Limited; (e) the Collaboration Agreement, dated as of November 14, 2018, by and between Borrower and Boehringer Ingelheim International GmbH; (f) the Exclusive License Agreement, effective as of May 23, 2016, by and between Borrower and Memorial Sloan Kettering Cancer Center; and (g) the License Agreement, dated as of October 22, 2014, by and between Borrower and The British Columbia Cancer Agency Branch.

"**Data Protection Laws**" means any and all current or future, foreign or domestic, statutes, ordinances, orders, rules, regulations, judgments, Governmental Approvals, or any other requirements of Governmental Authorities relating to the privacy, security, or confidentiality of personal data (including individually identifiable information) and other sensitive information, including HIPAA and Section 5 of the Federal Trade Commission Act (15 U.S.C. § 45).

"**DEA**" means the United States Drug Enforcement Administration.

"**DEA Laws**" means all applicable statutes, including the CSA, rules, regulations and orders implemented, administered, enforced or issued by DEA (and any foreign or United States state equivalent).

"**Default**" means any breach of or default under any term, provision, condition, covenant or agreement contained in this Agreement or any other Loan Document or any other event, in each case that, with the giving of notice or the lapse of time or both, would constitute an Event of Default.

"**Deposit Account**" means any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Disclosure Letter**" means the disclosure letter, dated as of the Effective Date, delivered by the Credit Parties to the Collateral Agent, as updated on the Closing Date (if required and as permitted).

"**Dollars**," "**dollars**" or use of the sign "**$**" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "$" sign to denote its currency or may be readily converted into lawful money of the United States.

"**Effective Date**" means the date on which the following conditions precedent have been satisfied: (a) the occurrence of the Closing (as such term is defined in the Purchase Agreement); (b) the Collateral Agent's and each Lender's receipt of the Perfection Certificate for Borrower and its Subsidiaries, in form and substance reasonably satisfactory to the Collateral Agent (in its sole discretion), dated the Effective Date; and (c) the Collateral Agent's and each Lender's receipt of the Disclosure Letter, in form and substance reasonably satisfactory to the Collateral Agent (in its sole discretion), dated the Effective Date; provided, however, that the parties hereto agree that the Effective Date shall not occur after November 11, 2019 unless the parties hereto otherwise mutually agree.

"**Environmental Claim**" means any investigation, notice, notice of violation, claim, action, suit, proceeding, demand, abatement order or other order or directive (conditional or otherwise), by any Governmental Authority or any other Person, arising (i) pursuant to or in connection with any actual or alleged violation of any Environmental Law; (ii) in connection with any Hazardous Material or any actual or alleged Hazardous Materials Activity; or (iii) in connection with any actual or alleged damage, injury, threat or harm to health, safety, natural resources or the environment.

"**Environmental Laws**" means any and all current or future, foreign or domestic, statutes, ordinances, orders, rules, regulations, judgments, Governmental Approvals, or any other requirements of Governmental Authorities relating to (i) environmental matters, including those relating to any Hazardous Materials Activity; (ii) the generation, use, storage, transportation or disposal of Hazardous Materials; or (iii) occupational safety and health, industrial hygiene, land use or the protection of human, plant or animal health or welfare, in each case, in any manner applicable to any Credit Party or any of its Subsidiaries or any Facility.

"**Equity Interests**" means, with respect to any Person, any and all shares, interests, participations or other equivalents (however designated) of capital stock of a corporation, any and all equivalent ownership interests in such Person (other than a corporation), including partnership interests and membership interests, and any and all warrants, rights or options to purchase or other arrangements or rights to acquire (by purchase, conversion, dividend, distribution or otherwise) any of the foregoing (and all other rights, powers, privileges, interests, claims and other property in any manner arising therefrom or relating thereto).

"**ERISA**" means the Employee Retirement Income Security Act of 1974, and its regulations.

"**ERISA Affiliate**" means, with respect to any Person, any trade or business (whether or not incorporated) that, together with such Person, is treated as a single employer under Section 414 of the IRC.

"**ERISA Event**" means (a) any "reportable event," as defined in Section 4043 of ERISA or the regulations issued thereunder, with respect to a Plan (other than an event for which the 30-day notice period is waived by regulation); (b) with respect to a Plan, the failure to satisfy the minimum funding standard of Section 412 of the IRC and Section 302 of ERISA, whether or not waived; (c) the failure to make by its due date a required installment under Section 430(j) of the IRC (or Section 430(j) of the IRC, as amended by the Pension Protection Act of 2006) with respect to any Plan or the failure to make any required contribution to a Multiemployer Plan; (d) the filing pursuant to Section 412(c) of the IRC or Section 303(d) of ERISA (or after the effective date of the Pension Protection Act of 2006, Section 412(c) of the IRC and Section 302(c) of ERISA) of an application for a waiver of the minimum funding standard with respect to any Plan; (e) the incurrence by Borrower or any of its ERISA

Affiliates of any liability under Title IV of ERISA with respect to the termination of any Plan; (f) the receipt by Borrower or its Subsidiaries or any of their respective ERISA Affiliates from the Pension Benefit Guaranty Corporation (referred to and defined in ERISA) or a plan administrator of any notice relating to the intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan, or the occurrence of any event or condition which would reasonably be expected to constitute grounds under ERISA for the termination of, or the appointment of a trustee to administer, any Plan; (g) the incurrence by Borrower or its Subsidiaries or any of their respective ERISA Affiliates of any liability with respect to the withdrawal from any Plan or Multiemployer Plan; (h) the receipt by Borrower or its Subsidiaries or any of their respective ERISA Affiliates of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent or in reorganization, within the meaning of Title IV of ERISA; (i) the "substantial cessation of operations" within the meaning of Section 4062(e) of ERISA with respect to a Plan; (j) the making of any amendment to any Plan which would result in the imposition of a lien or the posting of a bond or other security; and (k) the occurrence of a nonexempt prohibited transaction (within the meaning of Section 4975 of the IRC or Section 406 of ERISA) which would reasonably be expected to result in material liability to Borrower or its Subsidiaries.

"**Event of Default**" is defined in Section 7.

"**Exchange Act**" means the Securities Exchange Act of 1934.

"**Exchange Act Documents**" is defined in Section 4.8(a).

"**Excluded Accounts**" is defined in Section 5.5.

"**Excluded Equity Interests**" means, collectively: (i) any Equity Interests in any Subsidiary with respect to which the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of, such Equity Interests, to secure the Obligations (and any guaranty thereof) are validly prohibited by Requirements of Law; (ii) any Equity Interests in any Subsidiary with respect to which the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of, such Equity Interests, to secure the Obligations (and any guaranty thereof) require the consent, approval or waiver of any Governmental Authority or other third party and such consent, approval or waiver has not been obtained by Borrower following Borrower's commercially reasonable efforts to obtain the same; (iii) any Equity Interests in any Subsidiary that is a non-Wholly-Owned Subsidiary that the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of, such Equity Interests, to secure the Obligations (and any guaranty thereof) are validly prohibited by, or would give any third party (other than Borrower or an Affiliate of Borrower) the right to terminate its obligations under, the Operating Documents or the joint venture agreement or shareholder agreement with respect to, or any other contract with such third party relating to such non-Wholly-Owned Subsidiary, including any contract evidencing Indebtedness of such non-Wholly-Owned Subsidiary (other than customary non-assignment provisions which are ineffective under Article 9 of the Code or other Requirements of Law), but only, in each case, to the extent, and for so long as such Operating Document, joint venture agreement, shareholder agreement or other contract is in effect; and (iv) any Equity Interests in any other Subsidiary with respect to which, Borrower and the Collateral Agent reasonably determine by mutual agreement that the cost of granting the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties a security interest, in and Lien upon, and pledging to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties, such Equity Interests, to secure the Obligations (and any guaranty thereof) are excessive, relative to the value to be afforded to the Secured Parties thereby.

"**Excluded Subsidiaries**" means, collectively: (i) any Subsidiary with respect to which the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of, such Subsidiary's properties and assets subject or purported to be subject from time to time to a Lien under any Collateral Document and the Equity Interests in such Subsidiary to secure the Obligations (and any guaranty thereof) are validly prohibited by Requirements of Law; (ii) any Subsidiary with respect to which the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured

Parties of, such Subsidiary's properties and assets subject or purported to be subject from time to time to a Lien under any Collateral Document and the Equity Interests in such Subsidiary to secure the Obligations (and any guaranty thereof) require the consent, approval or waiver of any Governmental Authority or other third party (other than Borrower or an Affiliate of Borrower) and such consent, approval or waiver has not been obtained by Borrower or such Subsidiary following Borrower's and such Subsidiary's commercially reasonable efforts to obtain the same; (iii) any Subsidiary that is a non-Wholly-Owned Subsidiary, with respect to which, the grant to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of a security interest in and Lien upon, and the pledge to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties of, the properties and assets of such non-Wholly-Owned Subsidiary, to secure the Obligations (and any guaranty thereof) are validly prohibited by, or would give any third party (other than Borrower or an Affiliate of Borrower) the right to terminate its obligations under, such non-Wholly-Owned Subsidiary's Operating Documents or the joint venture agreement or shareholder agreement with respect thereto or any other contract with such third party relating to such non-Wholly-Owned Subsidiary, including any contract evidencing Indebtedness of such non-Wholly-Owned Subsidiary (other than customary non-assignment provisions which are ineffective under Article 9 of the Code or other Requirements of Law), but only, in each case, to the extent, and for so long as such Operating Document, joint venture agreement, shareholder agreement or other contract is in effect; (iv) any Subsidiary that owns properties and assets with an aggregate fair market value (reasonably determined in good faith by a Responsible Officer of Borrower) of less than $5,000,000; (v) Epizyme Securities Corporation, a Massachusetts corporation; and (vi) any other Subsidiary with respect to which, Borrower and the Collateral Agent reasonably determine by mutual agreement that the cost of granting the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties a security interest in and Lien upon, and pledging to the Collateral Agent in favor and for the benefit of Lenders and the other Secured Parties, such Subsidiary's properties and assets subject or purported to be subject from time to time to a Lien under any Collateral Document and the Equity Interests in such Subsidiary to secure the Obligations (and any guaranty thereof) are excessive relative to the value to be afforded to the Secured Parties thereby.

"**Excluded Taxes**" means any of the following Taxes imposed on or with respect to Lender or required to be withheld or deducted from a payment to Lender, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed by the United States or as a result of Lender being organized under the laws of, or having its principal office or its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) U.S. federal withholding Taxes imposed on amounts payable to or for the account of Lender with respect to any Obligation pursuant to a law in effect on the date on which (i) Lender acquires such interest in any Obligation or (ii) Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.6, amounts with respect to such Taxes were payable either to Lender's assignor immediately before Lender became a party hereto or to Lender immediately before it changed its lending office, (c) Taxes attributable to Lender's failure to comply with Section 2.6(d), and (d) any U.S. federal withholding Taxes imposed under FATCA.

"**Execution Date**" is defined in the preamble hereof.

"**Facility**" means, with respect to any Credit Party, any real property (including all buildings, fixtures or other improvements located thereon) now, hereafter or heretofore owned, leased, operated or used by such Credit Party or any of its Subsidiaries or any of their respective predecessors or Affiliates.

"**FATCA**" means Sections 1471 through 1474 of the IRC, as of the date of this Agreement (including, for the avoidance of doubt, any agreements between the governments of the United States and the jurisdiction in which the applicable Lender is resident implementing such provisions), or any amended or successor version that is substantively comparable and not materially more onerous to comply with, and any current or future regulations promulgated thereunder or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(i) of the IRC, any intergovernmental agreement entered into in connection with the implementation of the foregoing sections of the IRC and any fiscal or regulatory legislation, regulations, rules or practices adopted pursuant to, or official interpretations implementing such, intergovernmental agreements.

"**FCPA**" is defined in Section 4.18(a).

"**FDA**" means the United States Food and Drug Administration (and any foreign equivalent, including the European Agency for the Evaluation of Medicinal Products).

"**FDA Good Manufacturing Practices**" means the standards set forth in 21 C.F.R. Parts 210, 211 and 600 (and any foreign equivalents) and FDA's implementing guidance documents.

"**FDA Good Clinical Practices**" means the standards set forth in 21 C.F.R. Parts 50, 56, 312, and 314 (and any foreign equivalents) and FDA's implementing guidance documents.

"**FDA Good Laboratory Practices**" means the standards set forth in 21 C.F.R. Part 58 (and any foreign equivalents) and FDA's implementing guidance documents.

"**FDA Laws**" means all applicable statutes, including the FDCA, rules, regulations and orders implemented, administered, enforced or issued by FDA (and any foreign equivalent).

"**FDCA**" is defined in Section 4.19(b).

"**Federal Reserve Board**" means the Board of Governors of the Federal Reserve System.

"**Foreign Lender**" means a Lender that is not a "United States person" as defined in Section 7701(a)(30) of the IRC.

"**Governmental Approval**" means any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" means any nation or government, any state or other political subdivision thereof, any agency (including Regulatory Agencies), government department, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Governmental Payor Programs**" means all governmental third party payor programs in which any Credit Party or its Subsidiaries participates, including Medicare, Medicaid, TRICARE or any other federal or state health care programs.

"**Guarantor**" means any Subsidiary that is a present or future guarantor of the Obligations, which for the avoidance of doubt shall not include any Excluded Subsidiary.

"**Hazardous Materials**" means any chemical, material or substance, exposure to which is prohibited, limited or regulated by any Governmental Authority or which may or could pose a hazard to the health and safety of the owners, occupants or any Persons in the vicinity of any Facility or to the indoor or outdoor environment.

"**Hazardous Materials Activity**" means any past, current, proposed or threatened activity, event or occurrence involving any Hazardous Materials, including the use, manufacture, possession, storage, holding, presence, existence, location, Release, threatened Release, discharge, placement, generation, transportation, processing, construction, treatment, abatement, removal, remediation, disposal, disposition or handling of any Hazardous Materials, and any corrective action or response action with respect to any of the foregoing.

"**Health Care Laws**" means, collectively: (a) applicable federal, state or local laws, rules, regulations, orders, ordinances, statutes and requirements issued under or in connection with Medicare, Medicaid or any other Government Payor Program; (b) applicable federal and state laws and regulations governing the confidentiality of health information, including HIPAA; (c) accreditation standards and requirements of applicable state laws or regulatory bodies; (d) applicable federal, state and local fraud and abuse laws of any Governmental Authority, including the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7(b)), the civil False Claims Act (31 U.S.C. § 3729 et seq.), Sections 1320a-7 and 1320a-7a of Title 42 of the United States Code and the regulations promulgated pursuant to such statutes; (e) the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Pub. L. No. 108-173) and the regulations promulgated thereunder; (f) the Physician Payment Sunshine Act (42 U.S.C. § 1320a-7h); (g) all reporting and disclosure requirements under the Medicaid Drug Rebate Program (e.g., Monthly

and Quarterly Average Manufacturer Price, Baseline Average Manufacturer Price, and Rebate Per Unit, as applicable), Medicare Part B (Quarterly Average Sales Price), Section 602 of the Veteran's Health Care Act (Public Health Service 340B Quarterly Ceiling Price), Section 603 of the Veteran's Health Care Act (Quarterly and Annual Non-Federal Average Manufacturer Price and Federal Ceiling Price), Best Price, Federal Supply Schedule Contract Prices and Tricare Retail Pharmacy Refunds, and Medicare Part D; (h) applicable health care laws, rules, codes, statutes, regulations, manuals, orders, ordinances, policies, administrative guidance and requirements pertaining to Medicare or Medicaid; in each case, in any manner applicable to any Credit Party or any of its Subsidiaries; (i) applicable federal, state or local laws, rules, regulations, ordinances, statutes and requirements relating to (A) the regulation of managed care, third party payors and Persons bearing the financial risk for the provision or arrangement of health care services, (B) billings to insurance companies, health maintenance organizations and other Managed Care Plans or otherwise relating to insurance fraud, and (C) any insurance, health maintenance organization or managed care Requirements of Law; and (j) any other applicable health care laws, rules, codes, regulations, manuals, orders, ordinances, statutes, guidelines or requirements.

"**Hedging Agreement**" means any interest rate, currency, commodity or equity swap, collar, cap, floor or forward rate agreement, or other agreement or arrangement designed to protect a Person against fluctuations in interest rates, currency exchange rates or commodity or equity prices or values (including any option with respect to any of the foregoing and any combination of the foregoing agreements or arrangements), and any confirmation execution in connection with any such agreement or arrangement.

"**HIPAA**" means the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009, any and all rules or regulations promulgated from time to time thereunder, and any state or federal laws with regard to the security, privacy, or notification of breaches of the confidentiality of health information which are not preempted pursuant to 45 C.F.R. Part 160, Subpart B.

"**Indebtedness**" means, with respect to any Person, without duplication: (a) all indebtedness for advanced or borrowed money of, or credit extended to, such Person; (b) all obligations issued, undertaken or assumed by such Person as the deferred purchase price of assets, properties, services or rights (other than (i) accrued expenses and trade payables entered into in the ordinary course of business consistent with past practice which are not more than one hundred and eighty (180) days past due or subject to a bona fide dispute, (ii) obligations to pay for services provided by employees and individual independent contractors in the ordinary course of business consistent with past practice which are not more than one hundred twenty (120) days past due or subject to a bona fide dispute, (iii) liabilities associated with customer prepayments and deposits and (iv) prepaid or deferred revenue arising in the ordinary course of business consistent with past practice), including any obligation or liability to pay deferred or contingent purchase price or other consideration for such assets, properties, services or rights, but not including as "Indebtedness" any milestone or similar contingent payment(s) in an aggregate amount up to $10,000,000 at any time outstanding, under any licensing, collaboration, development, or similar arrangement; (c) the face amount of all letters of credit issued for the account of such Person and, without duplication, all drafts drawn thereunder and all reimbursement or payment obligations with respect to letters of credit, surety bonds, performance bonds and other similar instruments issued by such Person; (d) all obligations of such Person evidenced by notes, bonds, debentures or other debt securities or similar instruments (including debt securities convertible into Equity Interests), including obligations so evidenced incurred in connection with the acquisition of properties, assets or businesses; (e) all indebtedness of such Person created or arising under any conditional sale or other title retention agreement or incurred as financing, in either case with respect to property acquired by such Person (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property); (f) all capital lease obligations of such Person; (g) the principal balance outstanding under any synthetic lease, off-balance sheet loan or similar off balance sheet financing product by such Person; (h) all obligations of such Person, whether or not contingent, to purchase, redeem, retire, defease or otherwise acquire for value any of its own Equity Interests (or any Equity Interests in a direct or indirect parent entity thereof) prior to the date that is one hundred and eighty (180) days after the Term Loan Maturity Date, valued at, in the case of redeemable preferred Equity Interests, the greater of the voluntary liquidation preference and the involuntary liquidation preference of such Equity Interests plus accrued and unpaid dividends; (i) all indebtedness referred to in clauses (a) through (h) above of other Persons secured by (or for which the holder of such indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien upon or in assets or properties (including accounts and contracts rights) owned by such Person, even though such Person has not assumed or become liable for the payment of such indebtedness of such other Persons; and (j) all Contingent Obligations of such Person.

"**Indemnified Liabilities**" means, collectively, any and all liabilities, obligations, losses, damages (including natural resource damages), penalties, claims, actions, judgments, suits, costs, reasonable and documented out-of-pocket expenses and disbursements of any kind or nature whatsoever (including the reasonable and documented fees and disbursements of one counsel for Indemnified Persons plus, if required, one local legal counsel in each relevant material jurisdiction, and in the case of an actual or perceived conflict of interest, one additional counsel for such affected Indemnified Persons, in connection with any investigative, administrative or judicial proceeding or hearing commenced or threatened in writing by any Person, whether or not any such Indemnified Person shall have commenced such proceeding or hearing or be designated as a party or a potential party thereto, and any fees or expenses incurred by Indemnified Persons in enforcing the indemnity hereunder), whether direct, indirect or consequential and whether based on any federal, state or foreign laws, statutes, rules or regulations, on common law or equitable cause or on contract or otherwise, that may be imposed on, incurred by, or asserted against any such Indemnified Person, in any manner relating to or arising out of this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby (including any Lender's agreement to make Credit Extensions or the use or intended use of the proceeds thereof, or any enforcement of any of the Loan Documents (including any sale of, collection from, or other realization upon any of the Collateral or the enforcement of any guaranty of the Obligations)).

"**Indemnified Person**" is defined in Section 11.2(a).

"**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 Credit Party under any Loan Document and (b) to the extent not otherwise described in clause (a) above, Other Taxes.

"**Insolvency Proceeding**" means, with respect to any Person, any proceeding by or against such Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means all:

(a) Copyrights, Trademarks, and Patents;

(b) trade secrets and trade secret rights, including any rights to unpatented inventions, know-how, show-how and operating manuals;

(c) (i) all computer programs, including source code and object code versions, (ii) all data, databases and compilations of data, whether machine readable or otherwise, and (iii) all documentation, training materials and configurations related to any of the foregoing (collectively, "**Software**");

(d) all right, title and interest arising under any contract or Requirements of Law in or relating to Internet domain names;

(e) design rights;

(f) IP Ancillary Rights (including all IP Ancillary Rights related to any of the foregoing); and

(g) any similar or equivalent rights to any of the foregoing anywhere in the world.

"**Interest Date**" means the last day of each calendar quarter.

"**Interest Period**" means, with respect to the Term Loan, (a) the period commencing on (and including) the applicable borrowing date of the Term Loan and ending on (and including) the first Interest Date following such Borrowing, provided, that if such Interest Date is not a Business Day, the applicable Interest Period shall end on the first Business Day immediately preceding such Interest Date, and (b) thereafter, each period beginning on (and including) the first day following the end of the preceding Interest Period and ending on the earlier of (and including) (x) the next Interest Date, provided, that if any such last day is not a Business Day, the applicable Interest

Period shall end on the first Business Day immediately preceding such Interest Date, (y) the next Payment Date, provided, that if any such day is not a Business Day, the applicable Interest Period shall end on the first Business Day immediately preceding such Payment Date and (z) the Term Loan Maturity Date. For the avoidance of doubt, if an Interest Period ends on a Payment Date, the next Interest Period shall commence on (and include) the first day following such Payment Date and shall end on (and include) the earlier of the next Interest Date, the next Payment Date or the Term Loan Maturity Date, as described above.

"**Interest Rate Determination Date**" means (a) initially, the Closing Date and (b) thereafter, the first day of each Interest Period (or, if any such day is not a Business Day, the first Business Day immediately following such day).

"**Internet Domain Name**" means all right, title and interest (and all related IP Ancillary Rights) arising under any contract or Requirements of Law in or relating to Internet domain names.

"**Inventory**" means all "inventory" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including such inventory as is temporarily out of a Credit Party's or Subsidiary's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" means (a) any beneficial ownership interest in any Person (including Equity Interests), (b) any Acquisition or (c) the making of any advance, loan, extension of credit or capital contribution in or to, any Person.

"**IP Agreements**" means, collectively, (a) those certain Intellectual Property Security Agreements entered into by and between Borrower and the Collateral Agent, each dated as of the Tranche A Closing Date, and (b) any Intellectual Property Security Agreement entered into by and between Borrower and the Collateral Agent after the Tranche A Closing Date in accordance with the Loan Documents.

"**IP Ancillary Rights**" means, with respect to any Copyright, Trademark, Patent, Software, trade secrets or trade secret rights, including any rights to unpatented inventions, know-how, show-how and operating manuals, all income, royalties, proceeds and liabilities at any time due or payable or asserted under or with respect to any of the foregoing or otherwise with respect thereto, including all rights to sue or recover at law or in equity for any past, present or future infringement, misappropriation, dilution, violation or other impairment thereof, and, in each case, all rights to obtain any other intellectual property right ancillary to any Copyright, Trademark, Patent, Software, trade secrets or trade secret rights.

"**IRC**" means the Internal Revenue Code of 1986, as amended.

"**IRS**" is defined in Section 2.6(d)(ii)(1).

"**Knowledge**" of Borrower means the actual knowledge, after reasonable investigation, of the Responsible Officers of Borrower or such other Credit Party, as the context dictates.

"**Lender**" means each Person signatory hereto as a "Lender" and its successors and assigns.

"**Lender Expenses**" means (i) all reasonable and documented out-of-pocket fees and expenses of the Collateral Agent and each Lender and their respective Related Parties for developing, preparing, amending, modifying, negotiating, executing and delivering, and administering the Loan Documents or any other document prepared in connection therewith or the consummation and administration of any transaction contemplated therein or otherwise incurred with respect to the Credit Parties in connection with the Loan Documents, including any filing or recording fees and expenses (including the reasonable and documented out-of-pocket fees and expenses of legal counsel to the Collateral Agent and Lenders and their respective Related Parties, and (ii) all reasonable and documented out-of-pocket costs and expenses incurred by the Collateral Agent and each Lender and their respective Related Parties (including the reasonable and documented out-of-pocket fees and expenses of legal counsel therefor, in connection with (A) any refinancing or restructuring of the credit arrangements provided hereunder in the nature of a "work-out", (B) the enforcement or preservation of any right or remedy under any Loan Document, any

Obligation, with respect to the Collateral or any other related right or remedy, or (C) the commencement, defense, conduct of, intervention in, or the taking of any other action with respect to, any proceeding (including any Insolvency Proceeding) related to any Credit Party or any Subsidiary of any Credit Party in respect of any Loan Document or Obligation, or otherwise in respect of any Loan Document or Obligation (or the response to and preparation for any subpoena or request for document production relating thereto).

"**Lender Transfer**" is defined in Section 11.1(b).

"**LIBOR Rate**" means, as of any Interest Rate Determination Date and for any Interest Period, the rate per annum equal to (a) the rate of interest appearing via a Bloomberg Terminal on Page US003M Index of the Bloomberg Financial Markets Information System (or any successor page) for three-month Dollar deposits or (b) if no such rate is available via a Bloomberg Terminal, the rate of interest determined by the Collateral Agent to be the rate or the arithmetic mean of rates at which Dollar deposits in immediately available funds are offered to first-tier banks in the London interbank Eurodollar market, in each case under clause (a) or (b) above at approximately 11:00 a.m., London time, on such Interest Rate Determination Date for a period of three (3) months; provided, however, that, for purposes of calculating the Term Loan Rate, the LIBOR Rate shall at all times have a floor of two percent (2.00%).

"**Lien**" means a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind or assignment for security purposes, whether voluntarily incurred or arising by operation of law or otherwise against any property or assets.

"**Liquidity**" means the sum of Borrower's and its Subsidiaries' unrestricted cash and Cash Equivalents (including the proceeds of any Term Loans) maintained in Collateral Accounts with respect to which Control Agreements are in effect.

"**Loan Documents**" means, collectively, this Agreement, the Disclosure Letter, the Term Loan Notes, the Security Agreement, the IP Agreements, the Perfection Certificates, any Control Agreement, any other Collateral Document, any guaranties executed by a Guarantor in favor of the Collateral Agent for the benefit of Lenders and the other Secured Parties in connection with this Agreement, and any other present or future agreement between or among a Credit Party, the Collateral Agent and any Lender in connection with this Agreement, including in each case, for the avoidance of doubt, any annexes, exhibits or schedules thereto. For the avoidance of doubt, "Loan Documents" shall not include the Purchase Agreement or any ancillary documents entered into in connection therewith which are unrelated to any Credit Extensions.

"**Makewhole Amount**" means the Tranche A Makewhole Amount, the Tranche B Makewhole Amount or the Tranche C Makewhole Amount (as applicable) or any combination thereof, as the context dictates.

"**Managed Care Plans**" means all health maintenance organizations, preferred provider organizations, individual practice associations, competitive medical plans and similar arrangements.

"**Manufacturing Agreement**" means any manufacturing or supply agreement entered into by any Credit Party or any of its Subsidiaries with third parties for the commercial supply of Product for any indication in the United States or the active pharmaceutical ingredient incorporated therein.

"**Margin Stock**" means "margin stock" within the meaning of Regulations U and X of the Federal Reserve Board as now and from time to time hereafter in effect.

"**Material Adverse Change**" means any material adverse change in or effect on: (i) the business, financial condition, properties or assets (including all or any portion of Collateral), liabilities (actual or contingent), operations, or performance of the Credit Parties, taken as a whole, since December 31, 2018; (ii) the ability of the Credit Parties, taken as a whole, to fulfill the payment or performance obligations under this Agreement or any other Loan Document; or (iii) the binding nature or validity of, or the ability of the Collateral Agent or any Lender to enforce, the Loan Documents or any of its rights or remedies under the Loan Documents.

"**Material Contract**" means any Current Company IP Agreement, Manufacturing Agreement and any other contract or other arrangement to which any Credit Party or any of its Subsidiaries is a party (other than the Loan Documents) or by which any of its assets or properties are bound, in each case, relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory, for which the breach of, default or nonperformance under, cancellation or termination of or the failure to renew could reasonably be expected to result in a Material Adverse Change.

"**Medicaid**" means, collectively, the health care assistance program established by Title XIX of the SSA (42 U.S.C. 1396 et seq.) and all laws, rules, regulations, manuals, orders, or requirements pertaining to such program, including (a) all federal statutes affecting such program; (b) all state statutes and plans for medical assistance enacted in connection with such program and federal rules and regulations promulgated in connection with such program; and (c) all applicable provisions of all rules, regulations, manuals, orders and administrative, reimbursement, and requirements of all Government Authorities promulgated in connection with such program (whether or not having the force of law).

"**Medicare**" means, collectively, the health insurance program for the aged and disabled established by Title XVIII of the SSA (42 U.S.C. 1395 et seq.) and all laws, rules, regulations, manuals, or orders pertaining to such program including (a) all federal statutes (whether set forth in Title XVIII of the SSA or elsewhere) affecting such program; and (b) all applicable provisions of all rules, regulations, manuals, orders and administrative, reimbursement and requirements of all Governmental Authorities promulgated in connection with such program (whether or not having the force of law).

"**Mortgage**" means any deed of trust, leasehold deed of trust, mortgage, leasehold mortgage, deed to secure debt, leasehold deed to secure debt or other document creating a Lien on real estate or any interest in real estate.

"**Multiemployer Plan**" means a multiemployer plan within the meaning of Section 4001(a)(3) or Section 3(37) of ERISA (a) to which Borrower or its Subsidiaries or their respective ERISA Affiliates is then making or accruing an obligation to make contributions; (b) to which Borrower or its Subsidiaries or their respective ERISA Affiliates has within the preceding five (5) plan years made contributions; or (c) with respect to which Borrower or its Subsidiaries could incur material liability.

"**Obligations**" means, collectively, the Credit Parties' obligations to pay when due any and all debts, principal, interest, Lender Expenses, the Additional Consideration, the Makewhole Amount, the Prepayment Premium and any other fees, expenses, indemnities and amounts any Credit Party owes any Lender or the Collateral Agent now or later, under this Agreement or any other Loan Document, including interest accruing after Insolvency Proceedings begin (whether or not allowed), and to perform Borrower's duties under the Loan Documents.

"**OFAC**" is defined in Section 4.18(c).

"**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) 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 Documents**" means, collectively with respect to any Person such Person's formation documents as certified with the Secretary of State or other applicable Governmental Authority of such Person's jurisdiction of formation on a date that is no earlier than thirty (30) days prior to the date on which such documents are due to be delivered under this Agreement and, (a) if such Person is a corporation, its bylaws (or similar organizational regulations) in current form, (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), in each case, with all current amendments, restatements, supplements or modifications thereto.

"**ordinary course of business**" means, in respect of any transaction involving any Person, the ordinary course of such Person's business, undertaken by such Person in good faith and not for purposes of evading any covenant, prepayment obligation or restriction in any Loan Document.

"**Other Connection Taxes**" means, with respect to any Lender, Taxes imposed as a result of a present or former connection (including present or former connection of its agents) between such Lender and the jurisdiction imposing such Tax (other than connections arising solely from such Lender 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).

"**Other Taxes**" means all present or future stamp, court or documentary, intangible, recording, filing, mortgage or property Taxes, charges or similar levies or similar Taxes that arise from any payment made hereunder, 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.

"**Participant Register**" is defined in Section 11.1(d).

"**Patents**" means all patents and patent applications (including any improvements, continuations, continuations-in-part, divisions, provisionals or any substitute applications), any patent issued with respect to any of the foregoing patent applications, any reissue, reexamination, renewal or patent term extension or adjustment (including any supplementary protection certificate) of any such patent, and any confirmation patent or registration patent or patent of addition based on any such patent, and all foreign counterparts of any of the foregoing. For the avoidance of doubt, patents and patent applications under this definition include all those filed with the U.S. Patent and Trademark Office.

"**Patriot Act**" is defined in Section 3.1(i).

"**Payment/Advance Form**" means that certain form attached hereto as Exhibit A.

"**Payment Date**" means each of the date that is (a) the 39th-month anniversary of the Tranche A Closing Date, (b) the 42nd-month anniversary of the Tranche A Closing Date, (c) the 45th-month anniversary of the Tranche A Closing Date, (d) 48th-month anniversary of the Tranche A Closing Date, (e) the 51st-month anniversary of the Tranche A Closing Date, (f) the 54th-month anniversary of the Tranche A Closing Date, (g) the 57th-month anniversary of the Tranche A Closing Date, and (h) the Term Loan Maturity Date, as the context dictates.

"**Perfection Certificate**" is defined in Section 4.6.

"**Permitted Acquisition**" means any Acquisition, so long as:

(a) no Default or Event of Default shall have occurred and be continuing as of, or could reasonably be expected to result from, the consummation of such Acquisition;

(b) the properties or assets being acquired or licensed, or the Person whose Equity Interests are being acquired, are useful in or engaged in, as applicable, (i) the same or a related line of business as that then-conducted by Borrower or its Subsidiaries, or (ii) a line of business that is ancillary to and in furtherance of a line of business as that then-conducted by Borrower or its Subsidiaries;

(c) in the case of an Asset Acquisition, the subject assets are being acquired or licensed by a Credit Party, and such Credit Party shall have executed and delivered or authorized, as applicable, any and all security agreements, financing statements, fixture filings, and other documentation reasonably requested by the Collateral Agent (if any), in order to include the newly acquired or licensed assets within the Collateral, as applicable, to the extent required by Section 5.12;

(d) in the case of a Stock Acquisition, the subject Equity Interests are being acquired in such Acquisition directly by a Credit Party, and such Credit Party shall have complied with its obligations under Section 5.13; and

(e) any Indebtedness or Liens assumed in connection with such Acquisition are otherwise permitted under Section 6.4 or 6.5, respectively.

"**Permitted Distributions**" means, in each case subject to Section 6.8 if applicable:

(f) dividends, distributions or other payments by any Wholly-Owned Subsidiary on its Equity Interests to, or the redemption, retirement or purchase by any Wholly-Owned Subsidiary of its Equity Interests from, Borrower or any other Wholly-Owned Subsidiary;

(g) dividends, distributions or other payments by any non-Wholly-Owned Subsidiary on its Equity Interests to, or the redemption, retirement or purchase by any non-Wholly-Owned Subsidiary of its Equity Interests from, Borrower or any other Subsidiary or each other owner of such non-Wholly-Owned Subsidiary's Equity Interests based on their relative ownership interests of the relevant class of such Equity Interests;

(h) redemptions by Borrower in whole or in part any of its Equity Interests for another class of its Equity Interests or rights to acquire its Equity Interests or with proceeds from substantially concurrent equity contributions or issuances of new Equity Interests;

(i) any such payments arising from a Permitted Acquisition or other Permitted Investment by Borrower or any of its Subsidiaries;

(j) the payment of dividends by Borrower solely in non-cash pay and non-redeemable capital stock (including, for the avoidance of doubt, dividends and distributions payable solely in Equity Interests);

(k) cash payments in lieu of the issuance of fractional shares arising out of stock dividends, splits or combinations or in connection with the exercise of warrants, options or other securities convertible into or exchangeable for Equity Interests;

(l) in connection with any Acquisition or other Investment by Borrower or any of its Subsidiaries, (i) the receipt or acceptance of the return to Borrower or any of its Subsidiaries of Equity Interests in Borrower constituting a portion of the purchase price consideration in settlement of indemnification claims, or as a result of a purchase price adjustment (including earn-outs or similar obligations) and (ii) payments or distributions to equity holders pursuant to appraisal rights required under Requirements of Law;

(m) the distribution of rights pursuant to any shareholder rights plan or the redemption of such rights for nominal consideration in accordance with the terms of any shareholder rights plan;

(n) dividends, distributions or payments on its Equity Interests by any Subsidiary to any Credit Party;

(o) dividends, distributions or payments on its Equity Interests by any Subsidiary that is not a Credit Party to any other Subsidiary that is not a Credit Party;

(p) purchases of Equity Interests in Borrower or its Subsidiaries in connection with the exercise of stock options by way of cashless exercise, or in connection with the satisfaction of withholding tax obligations;

(q) issuance to directors, officers, employees or contractors of Borrower of common stock of Borrower upon the vesting of restricted stock, restricted stock units, or other rights to acquire common stock of Borrower pursuant to plans or agreements approved by Borrower's Board of Directors or stockholders;

(r) the repurchase, retirement or other acquisition or retirement for value of Equity Interests in Borrower or any of its Subsidiaries held by any future, present or former employee, consultant, officer or director (or spouse, ex-spouse or estate of any of the foregoing or trust for the benefit of any of the foregoing or any lineal descendants thereof) of Borrower or any of its Subsidiaries pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or agreement, or any stock subscription or shareholder agreement or employment agreement; provided, however, that the aggregate payments made under this clause (m) do not exceed in any calendar year the sum of (i) $3,000,000 plus (ii) the amount of any payments received in such calendar year under key-man life insurance policies; and

(s) dividends or distributions on its Equity Interests by Borrower payable solely in additional shares of its common stock within sixty (60) days after the date of declaration thereof.

"**Permitted Hedging Agreement**" means a Hedging Agreement entered into solely in connection with foreign exchange hedging transactions in the ordinary course of business relating directly to the purchase and sale of products, equipment and services from and to vendors or customers in the ordinary course of business and, in each case, not for speculative purposes. For the avoidance of doubt, Permitted Hedging Agreements shall be permitted hereunder solely to the extent such agreements comply with clause (t) of the definition of "Permitted Indebtedness".

"**Permitted Indebtedness**" means:

(a) Indebtedness of the Credit Parties to Secured Parties under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Effective Date and shown on Schedule 12.1 of the Disclosure Letter;

(c) Indebtedness described in clause (g) of the definition of "Indebtedness" which may arise under the Purchase Agreement;

(d) Indebtedness not to exceed $5,000,000 in the aggregate at any time outstanding, consisting of (i) Indebtedness incurred to finance the purchase, construction, repair, or improvement of fixed assets and (ii) capital lease obligations;

(e) unsecured Indebtedness in connection with corporate credit cards, purchasing cards or bank card products;

(f) guarantees of Permitted Indebtedness;

(g) Indebtedness assumed in connection with any Permitted Acquisition or Permitted Investment, so long as such Indebtedness (i) was not incurred in connection with, or in anticipation of, such Acquisition or Investment and (ii) is at all times Subordinated Debt;

(h) Indebtedness of Borrower or any of its Subsidiaries with respect to letters of credit outstanding and secured solely by cash or Cash Equivalents entered into in the ordinary course of business;

(i) Indebtedness owed (i) by a Credit Party to another Credit Party, (ii) by a Subsidiary of Borrower that is not a Credit Party to another Subsidiary of Borrower that is not a Credit Party, (iii) by a Credit Party to a Subsidiary of Borrower that is not a Credit Party or (iv) by a Subsidiary of Borrower that is not a Credit Party to a Credit Party, not to exceed $10,000,000 in the aggregate at any time outstanding;

(j) Indebtedness consisting of Contingent Obligations set forth in clause (a) of the definition of "Contingent Obligation" (i) of a Credit Party of Permitted Indebtedness (or obligations that are not Indebtedness) of another Credit Party, (ii) of a Subsidiary of Borrower which is not a Credit Party of Permitted Indebtedness (or obligations that are not Indebtedness) of another Subsidiary of Borrower which is not a Credit Party, (iii) of a Subsidiary of Borrower which is not a Credit Party of Permitted Indebtedness (or obligations that are not Indebtedness) of a Credit Party, (iv) of a Credit Party of lease obligations of a Subsidiary of Borrower which is not a Credit Party, or (v) of a Credit Party of Permitted Indebtedness (or obligations that are not Indebtedness) of a Subsidiary of Borrower which is not a Credit Party not to exceed $10,000,000 in the aggregate at any time outstanding;

(k) Indebtedness consisting of Contingent Obligations (i) set forth in clause (b) of the definition of "Contingent Obligation", and (ii) set forth in clause (c) of the definition of "Contingent Obligation" in connection with any Permitted Acquisition, not to exceed $10,000,000 in the aggregate at any time outstanding;

(l) Indebtedness of any Person that becomes a Subsidiary (or of any Person not previously a Subsidiary that is merged or consolidated with or into a Subsidiary in a transaction permitted hereunder) of Borrower after the Effective Date, or Indebtedness of any Person that is assumed after the Effective Date by any Subsidiary in connection with an acquisition of assets by such Subsidiary; provided that such Indebtedness is at all times Subordinated Debt;

(m) (i) Indebtedness with respect to workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations or (ii) Indebtedness related to employee benefit plans, including annual employee bonuses, accrued wage increases and 401(k) plan matching obligations; in each case, incurred in the ordinary course of business consistent with past practice;

(n) Indebtedness in respect of performance bonds, bid bonds, appeal bonds, surety bonds and completion guarantees and similar obligations arising in the ordinary course of business consistent with past practice;

(o) Indebtedness in respect of netting services, overdraft protection and other cash management services, in each case in the ordinary course of business consistent with past practice;

(p) Indebtedness consisting of the financing of insurance premiums in the ordinary course of business consistent with past practice;

(q) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by any Credit Party in the ordinary course of business consistent with past practice;

(r) unsecured Indebtedness incurred in connection with any items of Permitted Distributions in clause (m) of the definition of "Permitted Distributions";

(s) subject to the proviso immediately below, extensions, refinancings, modifications, amendments, restatements and, in the case of any items of Permitted Indebtedness in clause (b) of the definition of "Permitted Indebtedness" or Permitted Indebtedness constituting notes governed by an indenture, exchanges, of any items of Permitted Indebtedness in clauses (a) through (r) above, provided, that in the case of clauses (b) and (g) above, the principal amount thereof is not increased (other than by any reasonable amount of premium (if any), interest (including post-petition interest), fees, expenses, charges or additional or contingent interest reasonably incurred in connection with the same and the terms thereof); and

(t) Permitted Hedging Agreements; provided, however, that the aggregate amount of Indebtedness incurred pursuant to this clause (t) shall not exceed $10,000,000 at any time outstanding.

For the avoidance of doubt, "Permitted Indebtedness" shall not include any Hedging Agreements other than Permitted Hedging Agreements permitted under clause (t) above.

"**Permitted Investments**" means:

(a) Investments (including Investments in Subsidiaries) existing on the Effective Date and shown on Schedule 12.2 of the Disclosure Letter, and any extensions, renewals or reinvestments thereof;

(b) Investments consisting of cash and Cash Equivalents;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business consistent with past practice;

(d) subject to Section 5.5, Investments consisting of deposit accounts or securities accounts;

(e) Investments in connection with Permitted Transfers;

(f) Investments consisting of (i) travel advances and employee relocation loans and other employee advances in the ordinary course of business consistent with past practice, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(g) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business consistent with past practice;

(h) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business consistent with past practice; provided that this clause (h) shall not apply to Investments of any Credit Party in any of its Subsidiaries;

(i) joint ventures or strategic alliances consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support;

(j) Investments (i) required in connection with a Permitted Acquisition (including the formation of any Subsidiary for the purpose of effectuating such Permitted Acquisition, the capitalization of such Subsidiary whether by capital contribution or intercompany loans, in each case, to the extent otherwise permitted by the terms of this Agreement, related Investments in Subsidiaries necessary to consummate such Permitted Acquisition, and the receipt of any non-cash consideration in a Permitted Acquisition), and (ii) consisting of earnest money deposits required in connection with a Permitted Acquisition or other acquisition of properties or assets not otherwise prohibited hereunder;

(k) Investments constituting the formation of any Subsidiary for the purpose of consummating a merger or acquisition transaction permitted by Section 6.3(a)(i) through (iv) hereof, which such transaction is otherwise a Permitted Investment;

(l) Investments of any Person that (i) becomes a Subsidiary of Borrower (or of any Person not previously a Subsidiary of Borrower that is merged or consolidated with or into a Subsidiary of Borrower in a transaction permitted hereunder) after the Effective Date, or (ii) are assumed after the Effective Date by any Subsidiary of Borrower in connection with an acquisition of assets from such Person by such Subsidiary, in either case, in a Permitted Acquisition; provided, that in each case, any such Investment (x) exists at the time such Person becomes a Subsidiary of Borrower (or is merged or consolidated with or into a Subsidiary of Borrower) or such assets are acquired, (y) was not made in contemplation of or in connection with such Person becoming a Subsidiary of Borrower (or merging or consolidating with or into a Subsidiary of Borrower) or such acquisition of assets, and (z) could not reasonably be expected to result in a Default or Event of Default;

(m) Investments arising as a result of the licensing of Intellectual Property in the ordinary course of business consistent with past practice;

(n) Investments by (i) any Credit Party in any other Credit Party, (ii) any Subsidiary of Borrower which is not a Credit Party in another Subsidiary of Borrower which is not a Credit Party, (iii) any Subsidiary of Borrower which is not a Credit Party in any Credit Party and (iv) any Credit Party in a Subsidiary of Borrower which is not a Credit Party not to exceed $10,000,000 in the aggregate at any time;

(o) Repurchases of capital stock of Borrower or any of its Subsidiaries deemed to occur upon the exercise of options, warrants or other rights to acquire capital stock of Borrower or such Subsidiary solely to the extent that shares of such capital stock represent a portion of the exercise price of such options, warrants or such rights;

(p) Permitted Hedging Agreements permitted under clause (t) of the definition of "Permitted Indebtedness"; and

(q) Investments in Epizyme Securities Corporation consisting of cash proceeds received by Borrower in connection with the Closing (as such term is defined in the Purchase Agreement); provided, however, that such Investments occur and are made within three (3) Business Days following Borrower's receipt of such cash proceeds; provided, further, that after and taking into account such Investments, Borrower is in compliance with Section 6.15 hereof;

provided, however, that, none of the foregoing Investments shall be a "Permitted Investment" if any Indebtedness or Liens assumed in connection with such Investment are not otherwise permitted under Section 6.4 or 6.5, respectively.

For the avoidance of doubt, "Permitted Investments" shall not include any Hedging Agreements other than Permitted Hedging Agreements permitted under clause (t) of the definition of "Permitted Indebtedness".

"**Permitted Liens**" means:

(a) Liens securing the Obligations pursuant to any Loan Document;

(b) Liens existing on the Effective Date and set forth on Schedule 12.3 of the Disclosure Letter;

(c) Liens for Taxes, assessments or governmental charges (i) which are not yet delinquent or (ii) which are being contested in good faith and by appropriate proceedings promptly instituted and diligently conducted; provided that adequate reserves therefor have been set aside on the books of the applicable Person and maintained in conformity with Applicable Accounting Standards, if required; provided, further, that in the case of a Tax, assessment or charge that has or may become a Lien against any Collateral, such contest proceedings conclusively operate to stay the sale or forfeiture of any portion of any Collateral to satisfy such Tax, assessment or charge;

(d) pledges or deposits made in the ordinary course of business (other than Liens imposed by ERISA) in connection with workers' compensation, payroll taxes, unemployment insurance, old-age pensions, or other similar social security legislation, (ii) pledges or deposits made in the ordinary course of business consistent with past practice securing liability for reimbursement or indemnification obligations of (including obligations in respect of letters of credit or bank guarantees for the benefit of) insurance carriers providing property, casualty or liability insurance to Borrower or any of its Subsidiaries, (iii) subject to Section 6.2(b), statutory or common law Liens of landlords, and (iv) pledges or deposits to secure performance of tenders, bids, leases, statutory or regulatory obligations, surety and appeal bonds, government contracts, performance and return-of-money bonds and other obligations of like nature, in each case other than for borrowed money and entered into in the ordinary course of business consistent with past practice;

(e) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under either Section 7.4 or 7.7;

(f) Liens (including the right of set-off) in favor of banks or other financial institutions incurred on deposits made in accounts held at such institutions in the ordinary course of business; provided that such Liens (i) are not given in connection with the incurrence of any Indebtedness, (ii) relate solely to obligations for administrative and other banking fees and expenses incurred in the ordinary course of business in connection with the establishment or maintenance of such accounts and (iii) are within the general parameters customary in the banking industry;

(g) Liens that are contractual rights of set-off (i) relating to pooled deposit or sweep accounts of Borrower or any of its Subsidiaries to permit satisfaction of overdraft or similar obligations incurred in the ordinary course of business consistent with past practice or (ii) relating to purchase orders and other agreements entered into with customers of Borrower or any of its Subsidiaries in the ordinary course of business consistent with past practice;

(h) Liens solely on any cash earnest money deposits made by Borrower or any of its Subsidiaries in connection with any Permitted Acquisition, Permitted Investment or other acquisition of assets or properties not otherwise prohibited under this Agreement;

(i) Liens existing on assets or properties at the time of its acquisition or existing on the assets or properties of any Person at the time such Person becomes a Subsidiary of Borrower, in each case after the Effective Date; provided that (i) neither such Lien was created nor the Indebtedness secured thereby was incurred in contemplation of such acquisition or such Person becoming a Subsidiary of Borrower, (ii) such Lien does not extend to or cover any other assets or properties (other than the proceeds or products thereof and other than after-acquired

assets or properties subject to a Lien securing Indebtedness and other obligations incurred prior to such time and which Indebtedness and other obligations are permitted hereunder that requires, pursuant to its terms and conditions in effect at such time, a pledge of after-acquired assets or properties, it being understood that such requirement shall not be permitted to apply to any assets or properties to which such requirement would not have applied but for such acquisition), (iii) the Indebtedness and other obligations secured thereby is permitted under Section 6.4 hereof and (iv) such Liens are of the type otherwise permitted under Section 6.5 hereof;

(j) Liens securing Indebtedness permitted under clause (d) of the definition of "Permitted Indebtedness" (including any extensions, refinancings, modifications, amendments or restatements of such Indebtedness permitted under clause (s) of the definition of "Permitted Indebtedness"); provided, that such Lien does not extend to or cover any assets or properties other than those described in clause (d) of the definition of "Permitted Indebtedness";

(k) servitudes, easements, rights-of-way, restrictions and other similar encumbrances on real property imposed by Requirements of Law and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of property or minor defects or other irregularities in title which, in the aggregate, are not material, and which do not in any case materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of any Credit Party or any Subsidiary of any Credit Party;

(l) to the extent constituting a Lien, escrow arrangements securing indemnification obligations associated with any Permitted Acquisition or Permitted Investment;

(m) licenses, sublicenses, leases or subleases of personal property (other than relating to Intellectual Property) granted to third parties in the ordinary course of business consistent with past practice, in each case which do not interfere in any material respect with the operations of the business of any Credit Party or any of its Subsidiaries and do not prohibit granting the Collateral Agent a security interest therein for the benefit of Lenders and the other Secured Parties;

(n) Liens on cash or other current assets pledged to secure (i) Indebtedness in respect of corporate credit cards, purchasing cards or bank card products, or (ii) Indebtedness in the form of letters of credit or bank guarantees;

(o) Liens on properties or assets of Borrower or any of its Subsidiaries which do not constitute Collateral under the Loan Documents, other than (i) any Company IP that does not constitute Collateral under the Loan Documents but is related to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory and (ii) Equity Interests in any Subsidiary;

(p) Liens on properties or assets of Borrower or any of its Subsidiaries imposed by law or regulation which were incurred in the ordinary course of business, including landlords', carriers', warehousemen's, mechanics', materialmen's, contractors', suppliers of materials', architects' and repairmen's Liens, and other similar Liens arising in the ordinary course of business consistent with past practice; provided that such Liens (i) do not materially detract from the value of such properties or assets subject thereto or materially impair the use of such properties or assets subject thereto in the operations of the business of Borrower or such Subsidiary or (ii) are being contested in good faith by appropriate proceedings, which conclusively operate to stay the sale or forfeiture of any portion of such properties or assets subject thereto and for which adequate reserves have been set aside on the books of the applicable Person and maintained in conformity with Applicable Accounting Standards, if required;

(q) Liens in the form of a precautionary security interest granted by Borrower under the Purchase Agreement securing any Indebtedness described in clause (c) of the definition of "Permitted Indebtedness"; and

(r) subject to the provisos immediately below, the modification, replacement, extension or renewal of the Liens described in clauses (a) through (p) above; provided, however, that any such modification, replacement, extension or renewal must (i) be limited to the assets or properties encumbered by the existing Lien (and any additions, accessions, parts, improvements and attachments thereto and the proceeds thereof) and (ii) not increase the principal amount of any Indebtedness secured by the existing Lien (other than by any reasonable premium or other reasonable amount paid and fees and expenses reasonably incurred in connection therewith); provided, further, that to the extent any of the Liens described in clauses (a) through (p) above secure Indebtedness of a Credit Party, such Liens, and any such modification, replacement, extension or renewal thereof, shall constitute Permitted Liens if and only to the extent that such Indebtedness is permitted under Section 6.4 hereof.

"**Permitted Negative Pledges**" means:

(a) prohibitions or limitations with regard to specific properties or assets encumbered by Permitted Liens, if and only to the extent each such prohibition or limitation applies only to such properties or assets;

(b) prohibitions or limitations set forth in any lease, license or other similar agreement entered into in the ordinary course of business;

(c) prohibitions or limitations relating to Permitted Indebtedness, in the case of each such agreement if and only to the extent such prohibitions or limitations, taken as a whole, are not materially more restrictive than the prohibitions and limitations set forth in this Agreement and the other Loan Documents, taken as a whole (as reasonably determined by a Responsible Officer of Borrower in good faith);

(d) customary provisions restricting assignments, subletting, sublicensing or other transfer of properties or assets subject thereto set forth in leases, subleases, licenses and other similar agreements that are not otherwise prohibited under this Agreement or any other Loan Document, if and only to the extent each such restriction applies only to the properties or assets subject to such leases, subleases, licenses or agreements, and customary provisions restricting assignment, pledges or transfer of any agreement entered into in the ordinary course of business consistent with past practice;

(e) prohibitions or limitations imposed by Requirements of Law;

(f) prohibitions or limitations that exist as of the Effective Date under Indebtedness existing on the Effective Date;

(g) customary prohibitions or limitations arising in connection with any Permitted Transfer or contained in any agreement relating to any Permitted Transfer pending the consummation of such Permitted Transfer;

(h) customary provisions in shareholders' agreements, joint venture agreements, organizational documents or similar binding agreements relating to, or any agreement evidencing Indebtedness of, any joint venture entity or non-Wholly-Owned Subsidiary and applicable solely to such joint venture entity or non-Wholly-Owned Subsidiary and the Equity Interests issued thereby;

(i) customary net worth provisions set forth in real property leases entered into by Subsidiaries of Borrower, so long as such net worth provisions could not reasonably be expected to impair the ability of Borrower or its Subsidiaries to meet their ongoing obligations (as reasonably determined by a Responsible Officer of Borrower in good faith);

(j) customary net worth provisions set forth in customer agreements entered into in the ordinary course of business consistent with past practice that are not otherwise prohibited under this Agreement or any other Loan Document, so long as such net worth provisions could not reasonably be expected to impair the ability of Borrower or its Subsidiaries to meet their ongoing obligations (as reasonably determined by a Responsible Officer of Borrower in good faith);

(k) restrictions on cash or other deposits (including escrowed funds) imposed by agreements entered into in the ordinary course of business consistent with past practice that are not otherwise prohibited under this Agreement or any other Loan Document;

(l) prohibitions or limitations set forth in any agreement in effect at the time any Person becomes a Subsidiary (but not any amendment, modification, restatement, renewal, extension, supplement or replacement expanding the scope of any such restriction or condition); provided that such agreement was not entered into in contemplation of such Person becoming a Subsidiary and each such prohibition or limitation does not apply to Borrower or any other Subsidiary (other than such Person and any other Person that is a Subsidiary of such first Person at the time such first Person becomes a Subsidiary);

(m) prohibitions or limitations imposed by any Loan Document;

(n) customary provisions set forth in joint venture agreements or agreements governing minority investments that are not otherwise prohibited by this Agreement or any other Loan Document, if and only to the extent each such prohibition or limitation applies only to the joint venture entity or minority investment that is the subject of such agreement;

(o) limitations imposed with respect to any license acquired in a Permitted Acquisition;

(p) customary provisions restricting assignments or other transfer of properties or assets subject thereto set forth in any agreement entered into in the ordinary course of business consistent with past practice, if and only to the extent each such restriction applies only to the properties or assets subject to such agreement;

(q) prohibitions or limitations imposed by any agreement evidencing any Permitted Indebtedness of the type described in any of clause (d) of the definition of "Permitted Indebtedness"; and

(r) prohibitions or limitations imposed by any amendments, modifications, restatements, renewals, extensions, supplements or replacements of any of the agreements referred to in clauses (a) through (p) above, except to the extent that any such amendment, modification, restatement, renewal, extension, supplement or replacement expands the scope of any such prohibition or limitation.

"**Permitted Subsidiary Distribution Restrictions**" means, in each case notwithstanding Section 6.8:

(a) prohibitions or limitations with regard to specific properties or assets encumbered by Permitted Liens, if and only to the extent each such prohibition or limitation applies only to such properties or assets;

(b) prohibitions or limitations set forth in any lease, license or other similar agreement entered into in the ordinary course of business;

(c) prohibitions or limitations relating to Permitted Indebtedness, in the case of each such agreement if and only to the extent such prohibitions or limitations, taken as a whole, are not materially more restrictive than the prohibitions and limitations set forth in this Agreement and the other Loan Documents, taken as a whole (as reasonably determined by a Responsible Officer of Borrower in good faith);

(d) customary provisions restricting assignments, subletting, sublicensing or other transfer of properties or assets subject thereto set forth in leases, subleases, licenses and other similar agreements that are not otherwise prohibited under this Agreement or any other Loan Document, if and only to the extent each such restriction applies only to the properties or assets subject to such leases, subleases, licenses or agreements, and customary provisions restricting assignment, pledges or transfer of any agreement entered into in the ordinary course of business consistent with past practice;

(e) prohibitions or limitations on the transfer or assignment of any properties, assets or Equity Interests set forth in any agreement entered into in the ordinary course of business consistent with past practice that is not otherwise prohibited under this Agreement or any other Loan Document, if and only to the extent each such prohibition or limitation applies only to such properties, assets or Equity Interests;

(f) prohibitions or limitations imposed by Requirements of Law;

(g) prohibitions or limitations that exist as of the Effective Date under Indebtedness existing on the Effective Date;

(h) customary prohibitions or limitations arising in connection with any Permitted Transfer or contained in any agreement relating to any Permitted Transfer pending the consummation of such Permitted Transfer;

(i) customary provisions in shareholders' agreements, joint venture agreements, organizational documents or similar binding agreements relating to, or any agreement evidencing Indebtedness of, any joint venture entity or non-Wholly-Owned Subsidiary and applicable solely to such joint venture entity or non-Wholly-Owned Subsidiary and the Equity Interests issued thereby;

(j) customary net worth provisions set forth in real property leases entered into by Subsidiaries of Borrower, so long as such net worth provisions could not reasonably be expected to impair the ability of Borrower or its Subsidiaries to meet their ongoing obligations (as reasonably determined by a Responsible Officer of Borrower in good faith);

(k) customary net worth provisions set forth in customer agreements entered into in the ordinary course of business consistent with past practice that are not otherwise prohibited under this Agreement or any other Loan Document, so long as such net worth provisions could not reasonably be expected to impair the ability of Borrower or its Subsidiaries to meet their ongoing obligations (as reasonably determined by a Responsible Officer of Borrower in good faith);

(l) restrictions on cash or other deposits (including escrowed funds) imposed by agreements entered into in the ordinary course of business consistent with past practice that are not otherwise prohibited under this Agreement or any other Loan Document;

(m) prohibitions or limitations set forth in any agreement in effect at the time any Person becomes a Subsidiary (but not any amendment, modification, restatement, renewal, extension, supplement or replacement expanding the scope of any such restriction or condition); provided that such agreement was not entered into in contemplation of such Person becoming a Subsidiary and each such prohibition or limitation does not apply to Borrower or any other Subsidiary (other than such Person and any other Person that is a Subsidiary of such first Person at the time such first Person becomes a Subsidiary);

(n) prohibitions or limitations imposed by any Loan Document;

(o) customary provisions set forth in joint venture agreements or agreements governing minority investments that are not otherwise prohibited by this Agreement or any other Loan Document, if and only to the extent each such prohibition or limitation applies only to the joint venture entity or minority investment that is the subject of such agreement;

(p) customary provisions restricting assignments or other transfer of properties or assets subject thereto set forth in any agreement entered into in the ordinary course of business consistent with past practice, if and only to the extent each such restriction applies only to the properties or assets subject to such agreement;

(q) prohibitions or limitations imposed by any agreement evidencing any Permitted Indebtedness of the type described in any of clause (d) of the definition of "Permitted Indebtedness"; and

(r) prohibitions or limitations imposed by any amendments, modifications, restatements, renewals, extensions, supplements or replacements of any of the agreements referred to in clauses (a) through (p) above, except to the extent that any such amendment, modification, restatement, renewal, extension, supplement or replacement expands the scope of any such prohibition or limitation.

"**Permitted Transfers**" means:

(a) Transfers of any properties or assets which do not constitute Collateral under the Loan Documents, other than any Company IP that does not constitute Collateral under the Loan Documents but is related to any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory;

(b) Transfers of Inventory in the ordinary course of business consistent with past practice;

(c) Transfers of surplus, damaged, worn out or obsolete equipment that is, in the reasonable judgment of Borrower exercised in good faith, no longer economically practicable to maintain or useful in the ordinary course of business consistent with past practice, and Transfers of other properties or assets in lieu of any pending or threatened institution of any proceedings for the condemnation or seizure of such properties or assets or for the exercise of any right of eminent domain;

(d) Transfers made in connection with Permitted Indebtedness of the type described in clause (c) of the definition of "Permitted Indebtedness" (if any) or Permitted Liens;

(e) Transfers of cash and Cash Equivalents in the ordinary course of business for equivalent value and in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents;

(f) Transfers (i) between or among Credit Parties, provided that, with respect to any properties or assets constituting Collateral under the Loan Documents, any and all steps as may be required to be taken in order to create and maintain a first priority security interest in and Lien upon such properties and assets in favor of the Collateral Agent for the benefit of Lenders and the other Secured Parties are taken contemporaneously with the completion of any such Transfer, and (ii) between or among non-Credit Parties;

(g) the sale or issuance of Equity Interests in any Subsidiary of Borrower to any Credit Party or Subsidiary, provided, that any such sale or issuance by a Credit Party shall be to another Credit Party;

(h) the discount without recourse or sale or other disposition of unpaid and overdue accounts receivable arising in the ordinary course of business consistent with past practice in connection with the compromise, collection or settlement thereof and not part of a financing transaction;

(i) any abandonment, cancellation, non-renewal or discontinuance of use or maintenance of Company IP that Borrower reasonably determines in good faith (i) is no longer economically practicable to maintain or useful in the ordinary course of business consistent with past practice and that (ii) could not reasonably be expected to be adverse to the rights, remedies and benefits available to, or conferred upon, the Collateral Agent or any Lender under any Loan Document in any material respect;

(j) Transfers by Borrower or any of its Subsidiaries pursuant to: (i) a non-exclusive license of (or grant of a covenant not to sue with respect to) Intellectual Property or a non-exclusive grant of development, manufacturing, production, commercialization, marketing, co-promotion, distribution, sale or similar commercial rights to third parties in the ordinary course of business consistent with general market practice, provided, however, that in each case to the extent relating to any Product with respect to geography within the United States, Borrower consolidates revenues from the sale of such Product in the Territory in accordance with Applicable Accounting Standards and Borrower or any of its Subsidiaries controls the pricing for such Product in the Territory; (ii) an exclusive license of (or grant of a covenant not to sue with respect to) Intellectual Property or an exclusive grant of development, manufacturing, production, commercialization, marketing, co-promotion, distribution, sale or similar commercial rights, to third parties, in each case except to the extent relating to any Product with respect to geography within the Territory; (iii) a non-exclusive license of (or grant of a covenant not to sue with respect to) technology or Intellectual Property to third parties for developing technology or providing technical support in the ordinary course of business consistent with general market practice, provided, however, that in each case to the extent relating to any Product with respect to geography within the United States, Borrower consolidates revenues from the sale of such Product in the Territory in accordance with Applicable Accounting Standards and Borrower or any of its Subsidiaries controls the pricing for such Product in the Territory; and (iv) a non-exclusive or an exclusive manufacturing license to third parties in the ordinary course of business consistent with general market practice, provided, however, that in each case to the extent relating to any Product with respect to geography within the United States, Borrower consolidates revenues from the sale of such Product in the Territory in accordance with Applicable Accounting Standards and Borrower or any of its Subsidiaries controls the pricing for such Product in the Territory; provided, that a Transfer of Intellectual Property unrelated in any way to any Product with respect to geography within or outside the Territory that is not otherwise prohibited under this Agreement or any other Loan Document shall constitute a Permitted Transfer;

(k) intercompany licenses or grants of rights of distribution, co-promotion or similar commercial rights between or among the Credit Parties, or (ii) between or among the Credit Parties and Subsidiaries that are not Credit Parties entered into prior to the Effective Date, and renewals, replacements and extensions thereof (including additional licenses or grants in relation to new territories) on comparable terms in the ordinary course of business consistent with past practice; and

(l) Transfers of cash to Epizyme Securities Corporation made in connection with Permitted Investments described in clause (q) of the definition of "Permitted Investments".

"**Person**" means any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Plan**" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the IRC or Section 302 of ERISA which is maintained or contributed to by Borrower or its Subsidiaries or their respective ERISA Affiliates or with respect to which Borrower or its Subsidiaries are subject to liability (including under Section 4069 of ERISA).

"**Prepayment Premium**" means the Tranche A Prepayment Premium, the Tranche B Prepayment Premium or the Tranche C Prepayment Premium (as applicable) or any combination thereof, as the context dictates.

"**Private Third Party Payor Programs**" means all U.S. third party payor programs in which any Credit Party or its Subsidiaries participates, including Managed Care Plans, or any other private insurance programs, but excluding all Governmental Payor Programs.

"**Product**" means, collectively, (a) Tazemetostat, (b) any successor to Tazemetostat and (c) any other product for use in the treatment of cancer utilizing the EZH2 histone methyltransferase.

"**Purchase Agreement**" means the Purchase Agreement, dated as of November 4, 2019, by and between the Company and RPI Finance Trust.

"**Register**" is defined in Section 2.8(a).

"**Registered Organization**" means any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"**Regulatory Agency**" means a U.S. Governmental Authority with responsibility for the approval of the marketing and sale of pharmaceuticals or other regulation of pharmaceuticals, including the FDA and DEA.

"**Regulatory Approval**" means all approvals, product or establishment licenses, registrations or authorizations of any Regulatory Agency necessary for the manufacture, use, storage, import, export, transport, offer for sale, or sale of the Product.

"**Related Parties**" means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

"**Release**" means any release, spill, emission, leaking, pumping, pouring, injection, escaping, deposit, disposal, discharge, dispersal, dumping, leaching or migration of any Hazardous Material into the indoor or outdoor environment (including the abandonment or disposal of any barrels, containers or other closed receptacles containing any Hazardous Material), including the movement of any Hazardous Material through the air, soil, surface water or groundwater, in each case, in the United States.

"**Required Lenders**" means, prior to the Tranche A Closing Date, Lenders obligated with respect to greater than fifty percent (50%) of the Tranche A Commitments and, thereafter, Lenders representing greater than fifty percent (50%) of the outstanding principal amount of the Term Loans.

"**Requirements of Law**" means, as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, order, policy, rule or regulation or determination of an arbitrator or a court or other Governmental Authority (including Health Care Laws, Data Protection Laws, FDA Laws, DEA Laws, and all applicable statutes, rules, regulations, standards, guidelines, policies and orders administered or issued by any foreign Governmental Authority), in each case, applicable to and binding upon such Person or any of its assets or properties or to which such Person or any of its assets or properties are subject.

"**Responsible Officers**" means, with respect to Borrower, collectively, the Chief Executive Officer, President, Chief Commercial Officer, Chief Medical Officer, Chief Compliance Officer, General Counsel and Chief Financial Officer of Borrower.

"**Restricted License**" means any material license or other agreement of the kind or nature subject or purported to be subject from time to time to a Lien under any Collateral Document, with respect to which a Credit Party is the licensee, (a) that prohibits or otherwise restricts such Credit Party from granting a security interest in such Credit Party's interest in such license or agreement in a manner enforceable under Requirements of Law, or (b) for which a breach of or default under could interfere with the Collateral Agent's or any Lender's right to sell any Collateral.

"**SEC**" shall mean the Securities and Exchange Commission and any analogous Governmental Authority.

"**Secured Parties**" means each Lender, each other Indemnified Person and each other holder of any Obligation of a Credit Party.

"**Securities Account**" means any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"**Securities Act**" means the Securities Act of 1933.

"**Security Agreement**" means the Guaranty and Security Agreement, dated as of the Closing Date, by and among the Credit Parties and the Collateral Agent, in form and substance substantially similar to Exhibit C attached hereto or in such form or substance as the Credit Parties and the Collateral Agent may otherwise agree.

"**Solvent**" means, with respect to any Person as of any date of determination, that, as of such date, (a) the value of the assets (including goodwill minus disposition costs) of such Person (both at fair value and present fair saleable value), on a going concern basis, is greater than the total amount of liabilities (including contingent and unliquidated liabilities) of such Person, (b) such Person is able to generally pay all liabilities (including trade debt) of such Person as such liabilities become absolute and mature in the ordinary course of business consistent with past practice and (c) such Person does not have unreasonably small capital after giving due consideration to the prevailing practice in the industry in which it is engaged or will be engaged. In computing the amount of contingent or unliquidated liabilities at any time, such liabilities shall be computed at the amount that, in light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

"**Specified Disputes**" is defined in Section 4.6(j).

"**SSA**" means the Social Security Act of 1935, codified at Title 42, Chapter 7, of the United States Code.

"**Stock Acquisition**" means the purchase or other acquisition by Borrower or any of its Subsidiaries of all of the Equity Interests (by merger, stock purchase or otherwise) in any other Person.

"**Subordinated Debt**" means any Indebtedness in the form of or otherwise constituting term debt incurred by any Credit Party or any Subsidiary thereof (including any Indebtedness incurred in connection with any Acquisition or other Investment) that: (a) is subordinated in right of payment to the Obligations at all times until all of the Obligations have been paid, performed or discharged in full and Borrower has no further right to obtain any Credit Extension hereunder pursuant to a subordination, intercreditor or other similar agreement that is in form and substance reasonably satisfactory to the Collateral Agent (which agreement shall include turnover provisions that are reasonably satisfactory to the Collateral Agent); (b) except as permitted by clause (d) below, is not subject to

scheduled amortization, redemption (mandatory), sinking fund or similar payment and does not have a final maturity, in each case, before a date that is at least one hundred and twenty (120) days following the Term Loan Maturity Date; (c) does not include affirmative and negative covenants or agreements (including financial covenants but excluding agreements with respect to maturity, amortization, pricing and other economic terms) that, taken as a whole, are more restrictive or onerous on the Credit Parties in any material respect than the comparable covenants and agreements in the Loan Documents, taken as a whole (as reasonably determined by a Responsible Officer of Borrower in good faith); (d) is not subject to repayment or prepayment, including pursuant to a put option exercisable by the holder of any such Indebtedness, prior to a date that is at least one hundred and twenty (120) days following the final maturity thereof except in the case of an event of default or change in control (or the equivalent thereof, however described); and (e) does not provide or otherwise include provisions having the effect of providing that a default or event of default (or the equivalent thereof, however described) under or in respect of such Indebtedness shall exist, or such Indebtedness shall otherwise become due prior to its scheduled maturity or the holder or holders thereof or any trustee or agent on its or their behalf shall be permitted (with or without the giving of notice, the lapse of time or both) to cause any such Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity, in any such case upon the occurrence of a Default or Event of Default hereunder unless and until the Obligations have been declared, or have otherwise automatically become, immediately due and payable pursuant to Section 8.1(a).

"**Subsidiary**" means, with respect to any Person, a corporation, partnership, limited liability company or other entity of which more than fifty percent (50.0%) of whose shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the Board of Directors (or similar body) of such corporation, partnership or other entity are at the time owned, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of a Credit Party.

"**Tax**" means any 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 Loan**" means each of the Tranche A Loan, the Tranche B Loan and the Tranche C Loan, as applicable, and "**Term Loans**" means, collectively, the Tranche A Loan, the Tranche B Loan (to the extent funded) and the Tranche C Loan (to the extent funded).

"**Term Loan Maturity Date**" means the 60th-month anniversary of the Tranche A Closing Date.

"**Term Loan Note**" is defined in Section 2.8(b).

"**Term Loan Rate**" is defined in Section 2.3(a)(i).

"**Territory**" means, with respect to the Product, the United States, the European Union, the United Kingdom and Japan.

"**Third Party IP**" is defined in Section 4.6(l).

"**Trademark License**" means any agreement, whether written or oral, providing for the grant by or to a Person of any right to use any Trademark.

"**Trademarks**" means (a) all trademarks, trade names, corporate names, company names, business names, fictitious business names, service marks, elements of package or trade dress of goods or services, logos and other source or business identifiers, together with the goodwill associated therewith, all registrations and recordings thereof, and all applications in connection therewith, in the United States Patent and Trademark Office or in any similar office or agency of the United States or any state thereof or in any similar office or agency anywhere in the world in which foreign counterparts are registered or issued, and (b) all renewals thereof.

"**Tranche A Closing Date**" means the date on which the Tranche A Loan is advanced by Lenders, which, subject to the satisfaction of the conditions precedent to the Tranche A Loan set forth in Section 3.1, Section 3.4 and Section 3.6, shall be ten (10) days following the Effective Date.

"**Tranche A Commitment**" means, with respect to any Lender, the commitment of such Lender to make the Credit Extensions relating to the Tranche A Loan on the Tranche A Closing Date in the aggregate principal amount set forth opposite such Lender's name on Exhibit E attached hereto.

"**Tranche A Loan**" is defined in Section 2.2(a)(i).

"**Tranche A Loan Amount**" means an original principal amount equal to Twenty-five Million Dollars ($25,000,000.00).

"**Tranche A Makewhole Amount**" means, as of any date of determination occurring prior to the 36th-month anniversary of the Tranche A Closing Date, an amount equal to the sum of all interest accruing from such date through the 36th-month anniversary of the Tranche A Closing Date on the amount of principal prepaid.

"**Tranche A Note**" means a promissory note in substantially the form attached hereto as Exhibit B-1, as it may be amended, restated, supplemented or otherwise modified from time to time.

"**Tranche A Prepayment Premium**" means, with respect to any prepayment of the Tranche A Loan by Borrower pursuant to Section 2.2(c), an amount equal to the product of the amount of such prepayment, multiplied by:

(a) if such prepayment occurs prior to the 36th-month anniversary of the Tranche A Closing Date, 0.03;

(b) if such prepayment occurs after the 36th-month anniversary of the Tranche A Closing Date and prior to the 48th-month anniversary of the Tranche A Closing Date, 0.02; and

(c) if such prepayment occurs after the 48th-month anniversary of the Tranche A Closing Date and prior to the 60th-month anniversary of the Tranche A Closing Date, 0.01.

"**Tranche B Closing Date**" means the date on which the Tranche B Loan is advanced by Lenders, which, as indicated in the Payment/Advance Form for the Tranche B Loan and subject to the satisfaction of the conditions precedent to the Tranche B Loan set forth in Section 3.2, Section 3.4 and Section 3.6, shall be fifteen (15) days (or such shorter period as may be agreed to by Lender) following the delivery by Borrower to the Collateral Agent of a completed Payment/Advance Form in the form of Exhibit A hereto for the Tranche B Loan and, in no event, later than March 31, 2020.

"**Tranche B Commitment**" means, with respect to any Lender, the commitment of such Lender to make the Credit Extensions relating to the Tranche B Loan on the Tranche B Closing Date in the aggregate principal amount set forth opposite such Lender's name on Exhibit E attached hereto; provided, however, that the parties hereto agree that such commitment, and any obligations of such Lender hereunder with respect thereto, shall terminate automatically without any further action by any party hereto and be of no further force and effect if any prepayment of the Tranche A Loan is made, in whole or in part, on or before the Tranche B Closing Date (in which case, for purposes of this Agreement, such Lender's Tranche B Commitment would equal zero).

"**Tranche B Loan**" is defined in Section 2.2(a)(ii).

"**Tranche B Loan Amount**" means an original principal amount equal to Twenty-five Million Dollars ($25,000,000.00).

"**Tranche B Makewhole Amount**" means, as of any date of determination occurring prior to the 36th-month anniversary of the Tranche B Closing Date, an amount equal to the sum of all interest accruing from such date through the 36th-month anniversary of the Tranche B Closing Date on the amount of principal prepaid.

"**Tranche B Note**" means a promissory note in substantially the form attached hereto as Exhibit B-2, as it may be amended, restated, supplemented or otherwise modified from time to time.

"**Tranche B Prepayment Premium**" means, with respect to any prepayment of the Tranche B Loan by Borrower pursuant to Section 2.2(c), an amount equal to the product of the amount of such prepayment, multiplied by:

(a) if such prepayment occurs prior to the 36th-month anniversary of the Tranche A Closing Date, 0.03;

(b) if such prepayment occurs after the 36th-month anniversary of the Tranche A Closing Date and prior to the 48th-month anniversary of the Tranche A Closing Date, 0.02; and

(c) if such prepayment occurs after the 48th-month anniversary of the Tranche A Closing Date and prior to the 60th-month anniversary of the Tranche A Closing Date, 0.01.

"**Tranche C Closing Date**" means the date on which the Tranche C Loan is advanced by Lenders, which, as indicated in the Payment/Advance Form for the Tranche C Loan and subject to the satisfaction of the conditions precedent to the Tranche C Loan set forth in Section 3.3, Section 3.4 and Section 3.6, shall be fifteen (15) days (or such shorter period as may be agreed to by Lender) following the delivery by Borrower to the Collateral Agent of a completed Payment/Advance Form in the form of Exhibit A hereto for the Tranche C Loan and, in no event, later than December 31, 2020.

"**Tranche C Commitment**" means, with respect to any Lender, the commitment of such Lender to make the Credit Extensions relating to the Tranche C Loan on the Tranche C Closing Date in the aggregate principal amount set forth opposite such Lender's name on Exhibit E attached hereto; provided, however, that the parties hereto agree that such commitment, and any obligations of such Lender hereunder with respect thereto, shall terminate automatically without any further action by any party hereto and be of no further force and effect if any prepayment of the Tranche A Loan or the Tranche B Loan is made, in whole or in part, on or before the Tranche C Closing Date (in which case, for purposes of this Agreement, such Lender's Tranche C Commitment would equal zero).

"**Tranche C Loan**" is defined in Section 2.2(a)(iii).

"**Tranche C Loan Amount**" means an original principal amount equal to Twenty Million Dollars ($20,000,000.00).

"**Tranche C Makewhole Amount**" means, as of any date of determination occurring prior to the 36th-month anniversary of the Tranche C Closing Date, an amount equal to the sum of all interest accruing from such date through the 36th-month anniversary of the Tranche C Closing Date on the amount of principal prepaid.

"**Tranche C Note**" means a promissory note in substantially the form attached hereto as Exhibit B-3, as it may be amended, restated, supplemented or otherwise modified from time to time.

"**Tranche C Prepayment Premium**" means, with respect to any prepayment of the Tranche C Loan by Borrower pursuant to Section 2.2(c), an amount equal to the product of the amount of such prepayment, multiplied by:

(a) if such prepayment occurs prior to the 36th-month anniversary of the Tranche A Closing Date, 0.03;

(b) if such prepayment occurs after the 36th-month anniversary of the Tranche A Closing Date and prior to the 48th-month anniversary of the Tranche A Closing Date, 0.02; and

(c) if such prepayment occurs after the 48th-month anniversary of the Tranche A Closing Date and prior to the 60th-month anniversary of the Tranche A Closing Date, 0.01.

"**Transfer**" is defined in Section 6.1.

"**TRICARE**" means, collectively, a program of medical benefits covering former and active members of the uniformed services and certain of their dependents, financed and administered by the United States Departments of Defense, Health and Human Services and Transportation, and all laws applicable to such programs.

"**United States**" or "**U.S.**" means the United States of America, its fifty (50) states, the District of Columbia and Puerto Rico.

"**voting Equity Interests**" means, with respect to any issuer, the issued and outstanding shares of each class of Equity Interests in such issuer entitled to vote.

"**Wholly-Owned Subsidiary**" means, with respect to any Person, a Subsidiary of such Person, all of the Equity Interests in which (other than directors' qualifying shares or nominee or other similar shares required pursuant to Requirements of Law) are owned by such Person or another Wholly-Owned Subsidiary of such Person. Unless the context otherwise requires, each reference to a Wholly-Owned Subsidiary herein shall be a reference to a Wholly-Owned Subsidiary of a Credit Party.

"**Withdrawal Liability**" means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

EPIZYME, INC.,
as Borrower

By /s/ Robert B. Bazemore
Name: Robert B. Bazemore
Title: President and Chief Executive Officer

BIOPHARMA CREDIT PLC,
as Collateral Agent and Lender

By: Pharmakon Advisors, LP,
its Investment Manager

By: Pharmakon Management I, LLC,
its General Partner

By /s/ Pedro Gonazlez de Cosio
Name: Pedro Gonzalez de Cosio
Title: CEO and Managing Member

BIOPHARMA CREDIT INVESTMENTS V (MASTER) LP,
as Lender

By: Pharmakon Advisors, LP,
its Investment Manager

By: Pharmakon Management I, LLC,
its General Partner

By /s/ Pedro Gonzalez de Cosio
Name: Pedro Gonzalez de Cosio
Title: CEO and Managing Member

Exhibit 10.44

Execution Version

GUARANTY AND SECURITY AGREEMENT

Dated as of November 18, 2019

by

EPIZYME, INC.

(as *Borrower*),

and

EACH OTHER GRANTOR
FROM TIME TO TIME PARTY HERETO
in favor of

BIOPHARMA CREDIT PLC

(as *Collateral Agent* on behalf of Lenders and the other Secured Parties)

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GUARANTY AND SECURITY AGREEMENT, dated as of November 18, 2019, by EPIZYME, INC., a Delaware corporation ("Borrower") and each other Person that becomes a party hereto pursuant to Section 8.6 (together with Borrower and such Guarantors, "Grantors"), in favor of BIOPHARMA CREDIT PLC, a public limited company incorporated under the laws of England and Wales (as the "Collateral Agent") on behalf of Lenders and each other Secured Party.

W I T N E S S E T H:

WHEREAS, pursuant to the Loan Agreement dated as of November 4, 2019 (as the same may be amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Loan Agreement") by and among Borrower, the Collateral Agent and the other parties thereto, Lenders agrees to make extensions of credit to Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, each Grantor other than Borrower agrees to guaranty, jointly and severally, the Obligations (as defined in the Loan Agreement) of Borrower;

WHEREAS, each Grantor will derive substantial direct and indirect benefits from the making of the extensions of credit under the Loan Agreement; and

WHEREAS, it is a condition precedent to the obligation of Lenders to extend credit to Borrower under the Loan Agreement that the Grantors shall have executed and delivered this Agreement to the Collateral Agent and each Lender for the benefit of Lenders and the other Secured Parties.

NOW, THEREFORE, in consideration of the mutual premises herein contained and for valuable consideration the receipt and sufficiency of which is hereby acknowledged and to induce the Collateral Agent, Lenders and the Credit Parties to enter into the Loan Agreement and to induce each Lender to make extensions of credit to Borrower thereunder, each Grantor hereby agrees with the Collateral Agent, each intending to be legally bound, as follows:

ARTICLE I

DEFINED TERMS

Section 1.1. Definitions. Capitalized terms used herein without definition are used as defined in the Loan Agreement.

(a) The following terms have the meanings given to them in the Code and terms used herein without definition that are defined in the Code have the meanings given to them in the Code (such meanings to be equally applicable to both the singular and plural forms of the terms defined): "account", "account debtor", "as-extracted collateral", "certificated security", "chattel paper", "check", "commercial tort claim", "commodity account", "commodity contract", "documents", "deposit account", "electronic chattel paper", "encumbrance", "entitlement holder", "equipment", "farm products", "financial asset", "fixture", "general intangible", "goods", "health-care-insurance receivable", "instruments", "inventory", "investment property", "letter of credit", "letter-of-credit right", "money", "proceeds", "promissory note", "record", "securities account", "security", "security entitlement", "supporting obligation", "tangible chattel paper" and "uncertificated security".

(b) The following terms shall have the following meanings:

"Agreement" means this Guaranty and Security Agreement, as it may be amended, restated, supplemented or otherwise modified from time to time.

"Applicable IP Office" means the United States Patent and Trademark Office or the United States Copyright Office.

"Collateral" has the meaning specified in Section 3.1.

"Excluded Property" means, collectively:

(i) any "intent to use" United States Trademark applications for which a statement of use or an amendment to allege use has not been filed (but only until such statement is filed) solely to the extent, if any, that, and only during the period, if any, in which, the grant of a security interest therein would impair the validity or enforceability of such intent to use Trademark applications under applicable federal law;

(ii) any permit, lease, license, contract, instrument or other agreement held by any Grantor with respect to which, the grant to the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, of a security interest therein and Lien thereupon, and the pledge to the Collateral Agent thereof, in favor of and for the benefit of Lenders and the other Secured Parties, to secure the Obligations (and any guaranty thereof) are validly prohibited by the terms thereof, but only, in each case, to the extent, and for so long as, such prohibition is not terminated or rendered unenforceable or otherwise deemed ineffective by the Code (including Sections 9-406(d), 9-407(a), 9-408(a) and 9-409 of the Code) or by any applicable Requirements of Law;

(iii) any other permit, lease, license, contract, instrument or other agreement held by any Grantor with respect to which, the grant to the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, of a security interest in and Lien thereupon, and the pledge to the Collateral Agent thereof, in favor of and for the benefit of Lenders and the other Secured Parties, to secure the Obligations (and any guaranty thereof) require the consent, approval or waiver of any Governmental Authority or other third party (other than Borrower or an Affiliate of Borrower) and such consent, approval or waiver has not been obtained by such Grantor or Borrower following their respective commercially reasonable efforts to obtain the same;

(iv) any other asset or property subject or purported to be subject to a Lien under any Collateral Document held by any Grantor with respect to which, the grant to the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, of a security interest in and Lien thereupon, and the pledge to the Collateral Agent thereof, in favor of and for the benefit of Lenders and the other Secured Parties, to secure the Obligations (and any guaranty thereof) require the consent, approval or waiver of any Governmental Authority or other third party (other than Borrower or an Affiliate of Borrower) and such consent, approval or waiver has not been obtained by such Grantor or Borrower following their respective commercially reasonable efforts to obtain the same;

(v) any property or asset subject or purported to be subject to a Lien under any Collateral Document held by any Grantor that is a non-Wholly-Owned Subsidiary with respect to which, the grant to the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, of a security interest therein and Lien thereupon, and the pledge to the Collateral Agent thereof, in favor of and for the benefit of Lenders and the other Secured Parties, to secure the Obligations (and any guaranty thereof) are validly prohibited by, or would give any third party (other than Borrower or an Affiliate of Borrower) the right to terminate its obligations under, the Operating Documents of, the joint venture agreement or shareholder agreement with respect to, or any other contract with such third party relating to such non-Wholly-Owned Subsidiary (other than customary non-assignment provisions which are ineffective under Article 9 of the Code or other Requirements of Law), but only, in each case, to the extent, and for so long as such Operating Documents, joint venture agreement, shareholder agreement or other contract is in effect;

(vi) any asset or property subject or purported to be subject to a Lien under any Collateral Document held by any Grantor with respect to which, the cost, difficulty, burden or consequences (including adverse Tax consequences) of granting the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, a security interest therein and Lien thereupon, and pledging to the Collateral Agent thereof, in favor of and for the benefit of Lenders and the other Secured Parties, to secure the Obligations (and any guaranty thereof) are excessive relative to the value to be afforded to Lenders thereby;

(vii) any rights under any Federal or state governmental license, permit, franchise or authorization to the extent that the granting of a security interest therein is specifically prohibited or restricted by any Requirements of Law;

(viii) any asset or property subject to a Permitted Lien to the extent the documents governing such Permitted Lien or the Permitted Indebtedness secured thereby validly prohibit other Liens on such assets or property, but only, in each case, to the extent, and for so long as, such prohibition is not terminated or rendered unenforceable or otherwise deemed ineffective by the Code (including Sections 9-406(d), 9-407(a), 9-408(a) and 9-409 of the Code) or by any applicable Requirements of Law;

(ix) leasehold interests in real property;

(x) fee interests in real property with a fair market value (reasonably determined in good faith by a Responsible Officer of Borrower) less than $5,000,000;

(xi) Vehicles;

(xii) any letter of credit with an amount less than $500,000 and all letter-of-credit rights with respect thereto;

(xiii) any other property or assets (other than Intellectual Property) as to which the creation or attachment of a lien is not governed by Article 9 of the Code;

(xiv) Excluded Equity Interests; and

(xv) Excluded Accounts;

provided, however, that "Excluded Property" shall not include any proceeds, products, substitutions or replacements of Excluded Property (unless such proceeds, products, substitutions or replacements would otherwise constitute Excluded Property).

"Fraudulent Transfer Laws" has the meaning set forth in Section 2.2.

"Guaranteed Obligations" has the meaning set forth in Section 2.1.

"Guarantor" means each Grantor other than Borrower.

"Guaranty" means the guaranty of the Guaranteed Obligations made by Guarantors as set forth in this Agreement.

"IP License" means all express and implied grants or rights to make, have made, use, sell, reproduce, distribute, modify, or otherwise exploit any Intellectual Property, as well as all covenants not to sue and co-existence agreements (and all related IP Ancillary Rights), whether written or oral, relating to any Intellectual Property.

"Maximum Guaranteed Amount" has the meaning set forth in Section 2.2.

"NDA" means a new drug application filed with the FDA pursuant to Section 505(b) of the U.S. Federal Food, Drug, and Cosmetic Act, along with all supplements and amendments thereto.

"Pledged Certificated Stock" means all of the Equity Interests (other than Excluded Equity Interests) of any Subsidiary evidenced by a certificate, instrument or other similar document (as defined in the Code), in each case owned by any Grantor, including a Grantor's right, title and interest resulting from its ownership of any such Equity Interests as a limited or general partner in any partnership that has issued Pledged Certificated Stock or as a member of any limited liability company that has issued Pledged Certificated Stock, and a Grantor's right, title and interest resulting from its ownership of any such Equity Interests in, to and under any Operating Document or shareholder agreement of any corporation, partnership or limited liability company to which it is a party, and any distribution of property made on, in respect of or in exchange for the foregoing from time to time, including all certificated Equity Interests listed on Schedule 1 of the Security Disclosure Letter. "Pledged Certificated Stock" includes, for the avoidance of doubt, any Pledged Uncertificated Stock that subsequently becomes certificated.

"Pledged Collateral" means, collectively, the Pledged Stock and the Pledged Debt Instruments.

"Pledged Debt Instruments" means all right, title and interest of any Grantor in instruments evidencing any Indebtedness owed to such Grantor or other obligations owed to such Grantor, and any distribution of property made on, in respect of or in exchange for the foregoing from time to time, including all Indebtedness described on Schedule 3 of the Security Disclosure Letter, issued by the obligors named therein. "Pledged Debt Instruments" excludes any Excluded Property.

"Pledged Investment Property" means any investment property of any Grantor, and any distribution of property made on, in respect of or in exchange for the foregoing from time to time, other than any Pledged Stock or Pledged Debt Instruments. "Pledged Investment Property" excludes any Excluded Property.

"Pledged Stock" means all Pledged Certificated Stock and all Pledged Uncertificated Stock.

"Pledged Uncertificated Stock" means all of the Equity Interests (other than Excluded Equity Interests) of any Subsidiary that is not Pledged Certificated Stock, in each case owned by any Grantor, including Grantor's right, title and interest resulting from its ownership of any such Equity Interests as a limited or general partner in any partnership not constituting Pledged Certificated Stock or as a member of any limited liability company not constituting Pledged Certificated Stock, a Grantor's right, title and interest resulting from its ownership of any such Equity Interests in, to and under any Operating Document or shareholder agreement of any partnership or limited liability company to which it is a party, and any distribution of property made on, in respect of or in exchange for the foregoing from time to time, including in each case those interests set forth on Schedule 1 of the Security Disclosure Letter, to the extent such interests are not certificated.

"Secured Obligations" has the meaning set forth in Section 3.2.

"Security Disclosure Letter" means the security agreement disclosure letter, dated as of the date hereof, delivered by the Grantors to the Collateral Agent and each Lender.

"Vehicles" means rolling stock, motor vehicles, vessels, aircraft and other assets subject to certificates of title.

Section 1.2. Certain Other Terms

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(a) For the purposes of and as used in this Agreement: (i) references to any Person include its successors and assigns and, in the case of any Governmental Authority, any Person succeeding to its functions and capacities; (ii) each authorization herein shall be deemed irrevocable and coupled with an interest; and (iii) where the context requires, provisions relating to any Collateral when used in relation to a Grantor shall refer to such Grantor's Collateral or any relevant part thereof.

(b) Other Interpretive Provisions.

(i) Defined Terms. Unless otherwise specified herein or therein, all terms defined in this Agreement shall have the defined meanings when used in any certificate or other document made or delivered pursuant hereto.

(ii) This Agreement. The words "hereof", "herein", "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(iii) Certain Common Terms. The words "include", "included" and "including" are not limiting and mean "including without limitation." The word "or" has the inclusive meaning represented by the phrase "and/or". The word "shall" is mandatory. The word "may" is permissive. The singular includes the plural and the plural includes the singular.

(iv) Performance; Time. Whenever any performance obligation hereunder (other than a payment obligation) shall be stated to be due or required to be satisfied on a day other than a Business Day, such performance shall be made or satisfied on the next succeeding Business Day. In the computation of periods of time from a specified date to a later specified date, the word "from" means "from and including"; the words "to" and "until" each mean "to but excluding", and the word "through" means "to and including." If any provision of this Agreement refers to any action taken or to be taken by any Person, or which such Person is prohibited from taking, such provision shall be interpreted to encompass any and all means, direct or indirect, of taking, or not taking, such action.

(v) Contracts. Except as the context otherwise requires (including to the extent otherwise expressly provided herein), references to any contract, agreement, instrument or other document, including this Agreement and the other Loan Documents, shall be deemed to include any and all amendments, supplements or modifications thereto or restatements or substitutions thereof, in each case which are in effect from time to time, but only to the extent such amendments, supplements, modifications, restatements or substitutions are not prohibited by the terms of any Loan Document.

(vi) Laws. Except as the context otherwise requires (including to the extent otherwise expressly provided herein), references to any law, statute, treaty, order, policy, rule or regulation include any amendments, supplements and successors thereto, and references to any law, statute, treaty, order, policy, rule or regulation are to be construed as including all statutory and regulatory provisions related thereto or consolidating, amending, replacing, supplementing or interpreting such law, statute, treaty, order, policy, rule or regulation.

(vii) Excluded Property. Notwithstanding anything to the contrary herein, the representations, warranties and covenants set forth herein in relation to the assets of the Grantors shall not apply to any Excluded Property.

ARTICLE II

GUARANTY

Section 2.1. Guaranty. To induce Lenders to make the Term Loans to Borrower in accordance with the terms and conditions of the Loan Agreement, each Guarantor, jointly and severally with each other Guarantor, absolutely, unconditionally and irrevocably guarantees, as primary obligor and not merely as surety, the full and punctual payment when due, whether at stated maturity or earlier, by reason of acceleration, mandatory prepayment or otherwise in accordance with any Loan Document, of all the Obligations of Borrower existing on the date hereof or hereinafter incurred or created (the "Guaranteed Obligations"). This Guaranty by each Guarantor hereunder constitutes a guaranty of payment and not of collection. Each Guarantor hereby acknowledges and agrees that the Guaranteed Obligations, at any time and from time to time, may exceed the Maximum Guaranteed Amount of such Guarantor and may exceed the aggregate of the Maximum Guaranteed Amounts of all Guarantors, in each case without discharging, limiting or otherwise affecting the obligations of any Guarantor hereunder or the rights, powers and remedies of any Secured Party hereunder or under any other Loan Document.

Section 2.2. Limitation of Guaranty. Any term or provision of this Guaranty or any other Loan Document to the contrary notwithstanding, the maximum aggregate amount for which any Guarantor shall be liable hereunder (the "Maximum Guaranteed Amount") shall not exceed the maximum amount for which such Guarantor can be liable without rendering this Guaranty or any other Loan Document, as it relates to such Guarantor, subject to avoidance under applicable Requirements of Law relating to fraudulent conveyance or fraudulent transfer (including the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act and Section 548 of title 11 of the United States Code or any applicable provisions of comparable Requirements of Law) (collectively, "Fraudulent Transfer Laws"). Any analysis of the provisions of this Guaranty for purposes of Fraudulent Transfer Laws shall take into account the right of contribution established in Section 2.7 below and, for purposes of such analysis, give effect to any discharge of intercompany debt as a result of any payment made under the Guaranty.

Section 2.3. Authorization; Other Agreements. The Collateral Agent, on behalf of Lenders and the other Secured Parties is hereby authorized, without notice, to or demand upon any Guarantor and without discharging or otherwise affecting the obligations of any Guarantor hereunder and without incurring any liability hereunder, from time to time, to do each of the following but subject in all cases to the terms and conditions of the other Loan Documents, including, for the avoidance of doubt in the case of clause (d) below, subject to being permitted to do so in accordance with such terms and conditions:

(a) subject to compliance with Section 11.5 of the Loan Agreement and Section 8.5 hereof (as applicable), (i) modify, amend, supplement or otherwise change, (ii) accelerate or otherwise change the time of payment or (iii) waive or otherwise consent to noncompliance with, any Guaranteed Obligation or any Loan Document;

(b) apply to the Guaranteed Obligations any sums by whomever paid or however realized to any Guaranteed Obligation in such order as provided in the Loan Documents;

(c) refund at any time any payment received by any Secured Party in respect of any Guaranteed Obligation;

(d) (i) sell, exchange, enforce, waive, substitute, liquidate, terminate, release, abandon, fail to perfect, subordinate, accept, substitute, surrender, exchange, affect, impair or otherwise alter or release any Collateral for any Guaranteed Obligation or any other guaranty therefor in any manner, (ii) receive, take and hold additional Collateral to secure any Guaranteed Obligation, (iii) add, release or substitute any one or more other Guarantors, makers or endorsers of any Guaranteed Obligation or any part thereof and (iv) otherwise deal in any manner with Borrower or any other Guarantor, maker or endorser of any Guaranteed Obligation or any part thereof; and

(e) settle, release, compromise, collect or otherwise liquidate the Guaranteed Obligations.

Section 2.4. Guaranty Absolute and Unconditional. Each Guarantor hereby waives and agrees not to assert any defense (other than the indefeasible payment in full of the Guaranteed Obligations (other than inchoate indemnity obligations)), whether arising in connection with or in respect of any of the following clauses (a) through (f) or otherwise, and hereby agrees that its obligations under this Guaranty are irrevocable, absolute and unconditional and shall not be discharged as a result of or otherwise affected by any of the following clauses (a) through (f) (which may not be pleaded and evidence of which may not be introduced in any proceeding with respect to this Guaranty, in each case except as otherwise agreed in writing by Lender):

(a) the invalidity or unenforceability of any obligation of Borrower or any other Guarantor under any Loan Document or any other agreement or instrument relating thereto (including any amendment, consent or waiver thereto), or any security for, or other guaranty of, any Guaranteed Obligation or any part thereof, or the lack of perfection or continuing perfection or failure of priority of any security for the Guaranteed Obligations or any part thereof;

(b) the absence of (i) any attempt to collect any Guaranteed Obligation or any part thereof from Borrower or any other Guarantor or other action to enforce the same or (ii) any action to enforce any Loan Document or any Lien thereunder;

(c) the failure by any Person to take any steps to perfect and maintain any Lien on, or to preserve any rights with respect to, any Collateral;

(d) any workout, insolvency, bankruptcy proceeding, reorganization, arrangement, liquidation or dissolution by or against Borrower, any other Guarantor or any of Borrower's other Subsidiaries or any procedure, agreement, order, stipulation, election, action or omission thereunder, including any discharge or disallowance of, or bar or stay against collecting, any Guaranteed Obligation (or any interest thereon) in or as a result of any such proceeding;

(e) any foreclosure, whether or not through judicial sale, and any other sale or other disposition of any Collateral or any election following the occurrence of an Event of Default and during the continuance thereof by the Collateral Agent, on behalf of Lenders and any other Secured Party, to proceed separately against any Collateral in accordance with the Collateral Agent's rights and the rights of any Lender or other Secured Party under any applicable Requirements of Law; or

(f) any other defense, setoff, counterclaim or any other circumstance that might otherwise constitute a legal or equitable discharge of Borrower, any other Guarantor or any other Subsidiary of Borrower, in each case other than the indefeasible payment in full of the Guaranteed Obligations (other than inchoate indemnity obligations).

Section 2.5. Waivers. To the fullest extent permitted by Requirements of Law, each Guarantor hereby unconditionally and irrevocably waives and agrees not to assert any claim, defense, setoff or counterclaim based on diligence, promptness, presentment, requirements for any demand or notice hereunder, including any of the following: (a) any demand for payment or performance and protest and notice of protest; (b) any notice of acceptance; (c) any presentment, demand, protest or further notice or other requirements of any kind with respect to any Guaranteed Obligation (including any accrued but unpaid interest thereon) becoming immediately due and payable; and (d) any other notice in respect of any Guaranteed Obligation or any part thereof, and any defense arising by reason of any disability or other defense of Borrower or any other Guarantor. Until the indefeasible payment in full of the Guaranteed Obligations (other than inchoate indemnity obligations), each Guarantor further unconditionally and irrevocably agrees not to (x) enforce or otherwise exercise any right of subrogation or any right of reimbursement or contribution or similar right against Borrower or any other Guarantor by reason of any Loan Document or any payment made thereunder or (y) assert any claim, defense, setoff or counterclaim it may have against any other Credit Party or set off any of its obligations to such other Credit Party against obligations of such Credit Party to such Guarantor. No obligation of any Guarantor hereunder shall be discharged other than by complete performance.

Section 2.6. Reliance. Each Guarantor hereby assumes responsibility for keeping itself informed of the financial condition of Borrower, each other Guarantor and any other guarantor, maker or endorser of any Guaranteed Obligation or any part thereof, and of all other circumstances bearing upon the risk of nonpayment of any Guaranteed Obligation or any part thereof that reasonable and diligent inquiry would reveal, and each Guarantor hereby agrees that neither the Collateral Agent nor any Lender or other Secured Party shall have any duty to advise any Guarantor of information known to it regarding such condition or any such circumstances. In the event the Collateral Agent, in its sole discretion, undertakes at any time or from time to time to provide any such information to any Guarantor, such Person shall be under no obligation to (a) undertake any investigation not a part of its regular business routine, (b) disclose any information that any Lender or other Secured Party, pursuant to accepted or reasonable commercial finance or banking practices, wishes to maintain confidential or (c) make any future disclosures of such information or any other information to any Guarantor.

Section 2.7. Contribution. To the extent that any Guarantor shall be required hereunder to pay any portion of any Guaranteed Obligation exceeding the greater of (a) the amount of the value actually received by such Guarantor and its Subsidiaries from the Term Loans and other Obligations and (b) the amount such Guarantor would otherwise have paid if such Guarantor had paid the aggregate amount of the Guaranteed Obligations (excluding the amount thereof repaid by Borrower) in the same proportion as such Guarantor's net worth on the date enforcement is sought hereunder bears to the aggregate net worth of all Guarantors on such date, then such Guarantor shall be reimbursed by such other Guarantors for the amount of such excess, *pro rata*, based on the respective net worth of such other Guarantors on such date.

ARTICLE III

GRANT OF SECURITY INTEREST

Section 3.1. Collateral. For the purposes of this Agreement, the following tangible and intangible assets and property now owned or at any time hereafter acquired, developed or created by a Grantor or in which a Grantor now has or at any time in the future may acquire any right, title or interest, in each case, wherever located, is collectively referred to as the "Collateral":

(a) all accounts;

(b) all as-extracted collateral;

(c) all chattel paper, including electronic chattel paper or tangible chattel paper;

(d) all checks;

(e) all deposit accounts;

(f) all documents;

(g) all encumbrances;

(h) all equipment;

(i) all fixtures;

(j) all general intangibles (including all agreements of any kind);

(k) all goods;

(l) all Intellectual Property and IP Licenses (including Current Company IP Agreements to which a Grantor is a party and the rights of such Grantor thereunder, and all of a Grantor's right, title and interest in, to and under any NDA, Internet Domain Names and Software);

(m) all instruments (including all promissory notes);

(n) all inventory;

(o) all investment property (including Pledged Collateral, Pledged Investment Property, Equity Interests, securities, securities accounts and security entitlements with respect thereto and financial assets carried therein, and all commodity accounts and commodity contracts);

(p) all money;

(q) all letters of credit, letter-of-credit rights and supporting obligations;

(r) the commercial tort claims with a predicted value of $500,000 or more (as reasonably determined by a Responsible Officer of Borrower in good faith and based upon reasonable assumptions) described on Schedule 4 of the Security Disclosure Letter;

(s) all books, records, ledger cards, files, correspondence, customer lists, blueprints, technical specifications, manuals, computer software, computer printouts, tapes, disks and other electronic storage media and related data processing software and similar items that at any time pertain to or evidence or contain information relating to any of the other property described in this Section 3.1;

(t) all property of such Grantor held by the Collateral Agent for the benefit of Lenders and any other Secured Party, including all property of every description, in the custody of or in transit to the Collateral Agent for the benefit of Lenders and any other Secured Party for any purpose, including safekeeping, collection or pledge, for the account of such Grantor or as to which such Grantor may have any right or power, including cash;

(u) all proceeds, products, accessions, rents and profits of or in respect of any of the foregoing;

(v) to the extent not otherwise included, all personal property of such Grantor, whether tangible or intangible and wherever located, and all proceeds, products, accessions, rents, issues and profits of any and all of the foregoing and all collateral security, supporting obligations and guarantees given by any Person with respect to any of the foregoing; and

(w) to the extent not otherwise included, all other properties or assets of whatever kind and nature subject or purported to be subject from time to time to a Lien under any Collateral Document;

excluding, however, all Excluded Property.

Section 3.2. Grant of Security Interest in Collateral. Without limiting any other security interest granted to the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Obligations of such Grantor (the "Secured Obligations"), hereby pledges, hypothecates and

grants to the Collateral Agent, in favor and for the benefit of Lenders and the other Secured Parties, to secure the payment and performance in full of all of the Obligations for the benefit of Lenders and the other Secured Parties, a first priority Lien (subject only to Permitted Liens) on and continuing security interest in, all of its right, title and interest in, to and under the Collateral of such Grantor, wherever located, whether now owned or hereafter acquired or arising; provided, however, notwithstanding the foregoing, no Lien or security interest is hereby granted on, and "Collateral" shall not include, any Excluded Property; provided, further, that if and when any property or asset shall cease to be Excluded Property, a first priority Lien (subject only to Permitted Liens) on and security interest in such property or asset shall be deemed granted therein and, therefore, "Collateral" shall then include any such property or asset.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES

To induce the Collateral Agent and Lenders to enter into the Loan Documents, each Grantor, jointly and severally with each other Grantor, represents and warrants each of the following to the Collateral Agent, each Lender and the other Secured Parties:

Section 4.1. Title; No Other Liens. Except for the Lien granted to the Collateral Agent for the benefit of Lenders and the other Secured Parties pursuant to this Agreement and any other Permitted Liens under any Loan Document (including Section 4.2 hereof), such Grantor owns or otherwise has the rights it purports to have in each item of the Collateral, free and clear of any and all Liens or claims of others. Such Grantor (a) is the record and beneficial owner of the Collateral pledged by it hereunder constituting instruments or certificates and (b) except for Permitted Subsidiary Distribution Restrictions, has rights in or the power to transfer each other item of Collateral in which a Lien is granted by it hereunder, free and clear of any other Lien other than any Permitted Liens.

Section 4.2. Perfection and Priority. Other than in respect of money and other Collateral subject to Section 9-311(a)(1) of the Code, the security interest granted to the Collateral Agent pursuant to this Agreement constitutes a valid and continuing first priority perfected security interest (subject, in the case of priority only, to Permitted Liens that are expressly permitted (if at all) by the terms of the Loan Agreement or this Agreement to have superior priority to the Lien and security interest granted to the Collateral Agent for the benefit of Lenders and the other Secured Parties) in favor of and for the benefit of Lenders and the other Secured Parties in all Collateral, subject, for the following Collateral, to the occurrence of the following: (a) in the case of all Collateral in which a security interest may be perfected by filing a financing statement under the Code, the completion of the filings and other actions specified on Schedule 2 of the Security Disclosure Letter (which, in the case of all filings and other documents referred to on such schedule, have been duly authorized by the applicable Guarantor); (b) with respect to any deposit account over which a Control Agreement is required pursuant to Section 5.5 of the Loan Agreement, the execution of Control Agreements; (c) in the case of all United States Trademarks, Patents and Copyrights for which Code filings are insufficient to effectuate perfection, all appropriate filings having been made with the Applicable IP Office, as applicable; (d) in the case of all Pledged Certificated Stock, the delivery thereof to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, of such Pledged Certificated Stock consisting of instruments and certificates, in each case, properly endorsed for transfer to the Collateral Agent or in blank; (e) in the case of all Pledged Uncertificated Stock, the delivery

to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, of an executed uncertificated stock control agreement among the issuer, the registered owner and the Collateral Agent in the form attached as Annex 4 hereto; and (f) in the case of all other instruments that are not Pledged Stock, if any, the delivery thereof to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, of such instruments. Such Lien on and security interest in Pledged Stock shall be prior to all other Liens on such Collateral, subject to Permitted Liens having priority over the Collateral Agent's Lien by operation of law or as and to the extent expressly permitted (if at all) by any Loan Document. Except to the extent expressly not required pursuant to the terms of the Loan Agreement or this Agreement, all actions by each Grantor necessary or desirable to protect and perfect the first priority Lien on and security interest in the Collateral granted hereunder have been duly taken.

Section 4.3. Pledged Stock.

(a) The Pledged Stock issued by any Subsidiary of any Grantor pledged by such Grantor hereunder (i) consist of the number and types of Equity Interests listed on Schedule 1 of the Security Disclosure Letter and constitutes that percentage of the issued and outstanding equity of all classes of each issuer thereof as set forth on Schedule 1 of the Security Disclosure Letter, (ii) has been duly authorized, validly issued and is fully paid and nonassessable (other than Pledged Stock in limited liability companies and partnerships), and (ii) constitutes the legal, valid and binding obligation of the obligor with respect thereto, enforceable in accordance with its terms. As of the date any Joinder Agreement or Pledge Amendment is delivered pursuant to Section 8.6, the Pledged Stock pledged by each applicable Grantor thereunder (x) is listed on the applicable schedule attached to such Joinder Agreement or Pledge Amendment, as applicable, and constitutes that percentage of the issued and outstanding equity of all classes of each issuer thereof as set forth on such schedule, (y) has been duly authorized, validly issued and is fully paid and non-assessable (other than Pledged Stock in limited liability companies and partnerships) and (z) constitutes the legal, valid and binding obligation of the obligor with respect thereto, enforceable in accordance with its terms.

(b) (i) All Pledged Certificated Stock has been delivered to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, in accordance with Section 5.2(a), and (ii) with respect to Pledged Uncertificated Stock, uncertificated stock control agreements in the form attached as Annex 4 hereto have been delivered to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, in accordance with Section 5.2(a).

(c) Upon the occurrence and during the continuance of an Event of Default, the Collateral Agent for the benefit of Lenders and the other Secured Parties shall be entitled to exercise all of the rights of the Grantor granting the security interest in any Pledged Stock, and a transferee or assignee of such Pledged Stock shall become a holder of such Pledged Stock to the same extent as such Grantor and, upon the transfer of the entire interest of such Grantor, such Grantor shall, by operation of law, cease to be a holder of such Pledged Stock.

ARTICLE V

COVENANTS

Each Grantor agrees with the Collateral Agent to the following, until the indefeasible payment in full of the Obligations (other than inchoate indemnity obligations) and unless the Collateral Agent, on behalf of Lenders and the other Secured Parties, otherwise consents in writing:

Section 5.1. Maintenance of Perfected Security Interest; Further Documentation and Consents.

(a) Subject to the occurrence of the actions described in Section 4.2, which each Grantor shall promptly undertake, and except to the extent perfection is either (i) mutually agreed between Borrower and the Collateral Agent not to be required under this Agreement or the other Loan Documents or (ii) mutually agreed between Borrower and the Collateral Agent to be effected by filings of financing statements or amendments thereto to be made by the Collateral Agent or any Lender or its Related Party pursuant to Section 7.2, such Grantor shall maintain the security interest created by this Agreement as a perfected security interest having at least the priority described in Section 4.2 and shall warrant and defend the Collateral covered by such security interest and such priority against the claims and demands of all Persons (other than Secured Parties).

(b) Such Grantor shall furnish to the Collateral Agent at any time and from time to time statements and schedules further identifying and describing the Collateral and such other documents in connection with the Collateral as the Collateral Agent may reasonably request in writing, all in reasonable detail and in form and substance reasonably satisfactory to the Collateral Agent.

(c) At any time and from time to time, upon the written request of the Collateral Agent, such Grantor shall, for the purpose of obtaining or preserving the full benefits of this Agreement and the other Collateral Documents and of the rights and powers herein and therein granted, (i) promptly and duly execute and deliver, and have recorded, such further documents, including an authorization to file (or, as applicable, the filing) of any financing statement or amendment under the Code (or other filings under similar Requirements of Law) in effect in any jurisdiction with respect to the security interest created hereby and (ii) take such further action as the Collateral Agent may reasonably request in writing that is consistent with the requirements hereof and of the other Loan Documents, including executing and delivering any Control Agreements required by Section 5.5 of the Loan Agreement with respect to the Collateral Accounts.

Section 5.2. Pledged Collateral.

(a) Delivery of Pledged Collateral. Such Grantor shall, promptly after acquiring any Pledged Collateral not owned on the Tranche A Closing Date, (i) deliver to the Collateral Agent, in suitable form for transfer and in form and substance reasonably satisfactory to the Collateral Agent, (A) all such Pledged Stock that is Pledged Certificated Stock, (B) all Pledged Debt Instruments and (C) all certificates and instruments evidencing Pledged Investment Property, (ii) subject all Collateral Accounts required to be subject to a Control Agreement pursuant to the Loan Agreement to a Control Agreement, and (iii) cause the issuer of any such Pledged Stock that is Pledged Uncertificated Stock to execute an uncertificated stock control agreement in the form attached hereto as Annex 4, pursuant to which, *inter alia*, such issuer agrees to comply with the Collateral Agent's instructions with respect to such Pledged Uncertificated Stock without further consent by such Grantor, and, for the avoidance of doubt, if any such Pledged Uncertificated Stock becomes certificated, promptly (but in any event within thirty (30) days thereof) deliver to the Collateral Agent, in suitable form for transfer and in form and substance reasonably satisfactory to the Collateral Agent, all such certificates, instruments or other similar documents (as defined in the Code).

(b) Event of Default. During the continuance of any Event of Default and in connection with the exercise of rights or remedies hereunder or under any other Loan Document, the Collateral Agent shall have the right, at any time in its discretion and without prior notice to Grantor, to (i) transfer to or to register in its name or in the name of its nominees any Pledged Stock and (ii) exchange any certificate or instrument representing or evidencing any Pledged Stock for certificates or instruments of smaller or larger denominations.

(c) Cash Distributions with respect to Pledged Collateral and Pledged Investment Property. Except as provided in Article VI and subject to any limitations set forth in the Loan Agreement, such Grantor shall be entitled to receive all cash distributions paid in respect of the Pledged Collateral and the Pledged Investment Property.

(d) Voting Rights. Except as provided in Article VI, such Grantor shall be entitled to exercise all voting, consent and corporate, partnership, limited liability company and similar rights with respect to the Pledged Collateral and Pledged Investment Property; provided, however, that no vote shall be cast, consent, waiver or ratification given or right exercised (or failed to be exercised) or other action taken (or failed to be taken) by such Grantor in any manner that would reasonably be expected to (i) violate or be inconsistent with any of the terms of this Agreement or any other Loan Document or (ii) have the effect of materially impairing such Collateral or the position or interests of the Secured Parties.

Section 5.3. Intellectual Property. Such Grantor shall, promptly (and in no event later than fifteen (15) days) after delivery of financial statements pursuant to Section 5.2(a) of the Loan Agreement), execute and deliver to Lender in form and substance reasonably acceptable to Lender and suitable for filing in the Applicable IP Office the short-form intellectual property security agreements in the form attached hereto as Annex 3 for all Collateral consisting of any newly-acquired Copyrights, Trademarks or Patents (as applicable) of such Grantor registered in the Applicable IP Office during the applicable reporting period.

ARTICLE VI

REMEDIAL PROVISIONS

Section 6.1. Code and Other Remedies.

(a) Code Remedies. During the continuance of an Event of Default, the Collateral Agent, on behalf of Lenders and the other Secured Parties, may exercise, in addition to all other rights and remedies granted to it in this Agreement, any IP Agreement, any other Loan Document or in any other instrument or agreement securing, evidencing or relating to any Secured Obligation, all rights, powers and remedies of a secured party under the Code or any other Requirements of Law or in equity.

(b) Disposition of Collateral. During the continuance of an Event of Default, without limiting the generality of the foregoing, the Collateral Agent may (personally or through its agents or attorneys), without demand of performance or other demand, presentment, protest, advertisement or notice of any kind (except any notice required by Requirements of Law referred to below) to or upon any Grantor or any other Person (all and each of which demands, defenses, advertisements and notices are hereby waived): (i) enter upon the premises where any Collateral is located, without any obligation to pay rent, through self-help, without judicial process, without first obtaining a final judgment or giving Grantor or any other Person notice or opportunity for a hearing on the Collateral Agent's or any Lender's claim or action; (ii) collect, receive, appropriate and realize upon any Collateral; (iii) store, process, repair or recondition the Collateral or otherwise prepare any Collateral for disposition in any manner to the extent the Collateral Agent deems appropriate; and (iv) sell, assign, license out, convey, transfer, grant option or options to purchase or license and deliver any Collateral (or enter into contractual obligations to do any of the foregoing), in one or more parcels at public or private sale or sales, at any exchange, broker's board or office of the Collateral Agent or any Lender or other Secured Party or elsewhere upon such terms and conditions as it may deem advisable and at such prices as it may deem best, for cash or on credit or for future delivery without assumption of any credit risk. The Collateral Agent, on behalf of Lenders and the other Secured Parties, shall have the right, upon any such public sale or sales and, to the extent permitted by the Code and other Requirements of Law, upon any such private sale or sales, to purchase or license the whole or any part of the Collateral so sold or licensed, free of any right or equity of redemption of any Grantor, which right or equity is hereby waived and released. The Collateral Agent, as representative of all Lenders and other Secured Parties, shall be entitled, for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Collateral sold at any such sale made in accordance with the Code, to use and apply any of the Secured Obligations as a credit on account of the purchase price for any Collateral payable by the Collateral Agent on behalf of Lenders and the other Secured Parties, at such sale. If the Collateral Agent on behalf of any Lender sells any of the Collateral upon credit, Grantor will be credited only with payments actually made by purchaser and received by such Lender and applied to indebtedness of the purchaser. In the event the purchaser fails to pay for the Collateral, the Collateral Agent may resell the Collateral and Grantor shall be credited with proceeds of the sale. Neither the Collateral Agent nor any Lender shall have an obligation to marshal any of the Collateral.

(c) Management of the Collateral. Each Grantor further agrees, that, during the continuance of any Event of Default, (i) at the Collateral Agent's request, it shall assemble the Collateral and make it available to the Collateral Agent at places that the Collateral Agent shall reasonably select, whether at such Grantor's premises or elsewhere, (ii) without limiting the foregoing, the Collateral Agent also has the right to require that such Grantor store and keep any Collateral pending further action by the Collateral Agent and, while any such Collateral is so stored or kept, provide such guards and maintenance services as shall be necessary to protect the same and to preserve and maintain such Collateral in good condition, normal wear and tear excepted, (iii) until the Collateral Agent is able to sell, assign, license out, convey or transfer any Collateral, the Collateral Agent shall have the right to hold or use such Collateral to the extent that it deems appropriate for the purpose of preserving the Collateral or its value or for any other purpose deemed appropriate by the Collateral Agent and (iv) the Collateral Agent may, if it so elects, seek the appointment of a receiver or keeper to take possession of any Collateral and to enforce any of the Collateral Agent's or any Lender's remedies, with respect to such appointment without prior notice or hearing as to such appointment. The Collateral Agent shall not have any obligation to any Grantor to maintain or preserve the rights of any Grantor as against other Persons with respect to any Collateral while such Collateral is in the possession of the Collateral Agent.

(d) Application of Proceeds. The Collateral Agent shall apply the cash proceeds received by it in respect of any sale of, any collection from, or other realization upon all or any part of the Collateral, after deducting all reasonable costs and expenses of every kind incurred in connection therewith or incidental to the care or safekeeping of any Collateral or in any way relating to the Collateral or the rights of Lenders and the other Secured Parties, including reasonable and documented out-of-pocket attorneys' fees and disbursements, to the payment in whole or in part of the Secured Obligations, as set forth in the Loan Agreement, and only after such application and after the payment by the Collateral Agent or Lenders of any other amount required by any Requirements of Law, need the Collateral Agent or any Lender account for the surplus, if any, to any Grantor.

(e) Direct Obligation. Neither the Collateral Agent nor any Lender or other Secured Party shall be required to make any demand upon, or pursue or exhaust any right or remedy against, any Grantor or any other Person with respect to the payment of the Obligations or to pursue or exhaust any right or remedy with respect to any Collateral therefor or any direct or indirect guaranty thereof. All of the rights and remedies of the Collateral Agent and Lenders and any other Secured Party shall be cumulative, may be exercised individually or concurrently and not exclusive of any other rights or remedies provided by any Requirements of Law. To the extent it may lawfully do so, each Grantor absolutely and irrevocably waives and relinquishes the benefit and advantage of, and covenants not to assert against the Collateral Agent, Lenders or any other Secured Party, any valuation, stay, appraisement, extension, redemption or similar laws and any and all rights or defenses it may have as a surety, now or hereafter existing, arising out of the exercise by any of them of any rights or remedies hereunder. If any notice of a proposed sale or other disposition of any Collateral shall be required by Requirements of Law, such notice shall be deemed reasonable and proper if given at least ten (10) days before such sale or other disposition.

(f) Commercially Reasonable. To the extent that applicable Requirements of Law impose duties on the Collateral Agent or any Lender or other Secured Party to exercise remedies in a commercially reasonable manner, each Grantor acknowledges and agrees that it is not commercially unreasonable for the Collateral Agent or any Lender to do any of the following:

(i) fail to incur significant costs, expenses or other liabilities reasonably deemed as such by the Collateral Agent or such Lender to prepare any Collateral for disposition or otherwise to complete raw material or work in process into finished goods or other finished products for disposition;

(ii) fail to obtain permits, licenses or other consents for access to any Collateral to sell or license or for the collection or sale or licensing of any Collateral, or, if not required by other Requirements of Law, fail to obtain permits, licenses or other consents for the collection or disposition of any Collateral;

(iii) fail to exercise remedies against account debtors or other Persons obligated on any Collateral or to remove Liens on any Collateral or to remove any adverse claims against any Collateral;

(iv) advertise dispositions of any Collateral through publications or media of general circulation, whether or not such Collateral is of a specialized nature, or to contact other Persons, whether or not in the same business as any Grantor, for expressions of interest in acquiring any such Collateral;

(v) exercise collection remedies against account debtors and other Persons obligated on any Collateral, directly or through the use of collection agencies or other collection specialists, hire one or more professional auctioneers to assist in the disposition of any Collateral, whether or not such Collateral is of a specialized nature, or, to the extent deemed appropriate by the Collateral Agent or such Lender, obtain the services of other brokers, investment bankers, consultants and other professionals to assist the Collateral Agent or such Lender in the collection or disposition of any Collateral, or utilize Internet sites that provide for the auction of assets of the types included in the Collateral or that have the reasonable capacity of doing so, or that match buyers and sellers of assets to dispose of any Collateral;

(vi) dispose of assets in wholesale rather than retail markets;

(vii) disclaim warranties, such as title, merchantability, possession, non-infringement or quiet enjoyment; or

(viii) purchase insurance or credit enhancements to insure the Collateral Agent or any Lender or other Secured Party against risks of loss, collection or disposition of any Collateral or to provide to the Collateral Agent and Lenders a guaranteed return from the collection or disposition of any Collateral.

Each Grantor acknowledges that the purpose of this Section 6.1 is to provide a non-exhaustive list of actions or omissions that are commercially reasonable when exercising remedies against any Collateral and that other actions or omissions by the Collateral Agent, Lenders or any other Secured Party shall not be deemed commercially unreasonable solely on account of not being indicated in this Section 6.1. Without limitation upon the foregoing, nothing contained in this Section 6.1 shall be construed to grant any rights to any Grantor or to impose any duties on the Collateral Agent or any Lender or other Secured Party that would not have been granted or imposed by this Agreement or by applicable Requirements of Law in the absence of this Section 6.1.

(g) IP Licenses. To the extent permitted, and only for the purpose of enabling the Collateral Agent to exercise rights and remedies under this Section 6.1 during the continuance of an Event of Default (including in order to take possession of, collect, receive, assemble, process, appropriate, remove, realize upon, sell, assign, license out, convey, transfer or grant options to purchase any Collateral) at such time as the Collateral Agent on behalf of Lenders and the other Secured Parties shall be lawfully entitled to exercise such rights and remedies, each Grantor hereby grants to the Collateral Agent (i) an irrevocable, nonexclusive, assignable, worldwide license (exercisable without payment of royalty or other compensation to such Grantor), including the right to sublicense, use and practice any and all Intellectual Property now owned or held or hereafter acquired or held by such Grantor and access to all media in which any of the licensed items may be recorded or stored and to all Software and programs used for the compilation or printout thereof and (ii) an irrevocable license (without payment of rent or other compensation to such Grantor) to use, operate and occupy all real property owned, operated, leased, subleased or otherwise occupied by such Grantor.

Section 6.2. Accounts and Payments in Respect of General Intangibles.

(a) In addition to, and not in substitution for, any similar requirement in the Loan Agreement, if required by the Collateral Agent at any time during the continuance of an Event of Default, any payment of accounts or payment in respect of general intangibles relating to the Collateral, when collected by any Grantor, shall be promptly (and, in any event, within two (2) Business Days of such collection) deposited by such Grantor in the exact form received, duly indorsed by such Grantor to the Collateral Agent for the benefit of Lenders and the other Secured Parties, in a Collateral Account, subject to withdrawal by the Collateral Agent as provided in Section 6.4. Until so turned over, such payment shall be held by such Grantor in trust for the Collateral Agent for the benefit of Lenders and the other Secured Parties, segregated from other funds of such Grantor. Each such deposit of proceeds of accounts and payments in respect of general intangibles relating to the Collateral shall, upon the Collateral Agent's request, be accompanied by a report identifying in reasonable detail the nature and source of the payments included in the deposit.

(b) At any time during the continuance of an Event of Default:

(i) each Grantor shall, upon the Collateral Agent's request, assemble and hold for the benefit of Lenders and the other Secured Parties all original and other documents evidencing, and relating to, the contractual obligations and transactions that gave rise to any account or any payment in respect of general intangibles, including all IP Licenses, original orders, invoices and shipping receipts and notify account debtors that the accounts or general intangibles have been collaterally assigned to the Collateral Agent for the benefit of Lenders and the other Secured Parties and that payments in respect thereof shall be made directly to the Collateral Agent for the benefit of Lenders and the other Secured Parties or to any Lender on behalf of itself and the other Secured Parties, as the Collateral Agent shall direct; and

(ii) each Grantor shall take all actions, deliver all documents and provide all information necessary or reasonably requested by the Collateral Agent to ensure any Internet Domain Name is registered.

(c) Anything herein to the contrary notwithstanding, each Grantor shall remain liable under each account and each payment in respect of general intangibles included in the Collateral to observe and perform all the conditions and obligations to be observed and performed by it thereunder, all in accordance with the terms of any agreement giving rise thereto. Neither the Collateral Agent nor any Lender or other Secured Party shall have any obligation or liability under any agreement giving rise to an account or a payment in respect of a general intangible included in the Collateral by reason of or arising out of any Loan Document or the receipt by the Collateral Agent or any Lender or other Secured Party of any payment relating thereto, nor shall the Collateral Agent nor any Lender or other Secured Party be obligated in any manner to perform any obligation of any Grantor under or pursuant to any agreement giving rise to an account or a payment in respect of a general intangible included in the Collateral, to make any payment, to make any inquiry as to the nature or the sufficiency of any payment received by it or as to the sufficiency of any performance by any party thereunder, to present or file any claim, to take any action to enforce any performance or to collect the payment of any amounts that may have been assigned to it or to which it may be entitled at any time or times.

Section 6.3. Pledged Collateral.

(a) Voting Rights. During the continuance of an Event of Default, all rights of each Grantor to exercise or refrain from exercising the voting and other consensual rights which it would otherwise be entitled to exercise pursuant hereto shall cease and all such rights shall thereupon become vested in the Collateral Agent or a nominee on behalf of Lenders or the other Secured Parties, who shall thereupon have the sole right to exercise such voting and other consensual rights, including the right to exercise (i) any voting, consent, corporate and other right pertaining to the Pledged Collateral at any meeting of shareholders, partners or members, as the case may be, of the relevant issuer or issuers of Pledged Collateral or otherwise, and (ii) any right of conversion, exchange and subscription and any other right, privilege or option pertaining to the Pledged Collateral as if it were the absolute owner thereof (including the right to exchange at its discretion any Pledged Collateral upon the merger, amalgamation, consolidation, reorganization, recapitalization or other fundamental change in the corporate or equivalent structure of any issuer of Pledged Collateral, the right to deposit and deliver any Pledged Collateral with any committee, depositary, transfer agent, registrar or other designated agency upon such terms and conditions as the Collateral Agent (or such nominee) on behalf of Lenders or the other Secured Parties may determine), all without liability except to account for property actually received by it; provided, however, that the Collateral Agent (or such nominee) shall have no duty to any Grantor to exercise any such right, privilege or option and shall not be responsible for any failure to do so or delay in so doing.

(b) Proxies. During the continuance of an Event of Default, in order to permit the Collateral Agent on behalf of Lenders and the other Secured Parties to exercise the voting and other consensual rights that it may be entitled to exercise pursuant hereto and to receive all dividends and other distributions that it may be entitled to receive hereunder, (i) each Grantor shall promptly execute and deliver (or cause to be executed and delivered) to the Collateral Agent all such proxies, dividend payment orders and other instruments as the Collateral Agent may from time to time reasonably request and (ii) without limiting the effect of clause (i) above, such Grantor hereby grants to the Collateral Agent for the benefit of Lenders and the other Secured Parties an irrevocable proxy to vote all or any part of the Pledged Collateral and to exercise all other rights, powers, privileges and remedies to which a holder of the Pledged Collateral would be entitled (including giving or withholding written consents of shareholders, partners or members, as the case may be, calling special meetings of shareholders, partners or members, as the case may be, and voting at such meetings), which proxy shall be effective, automatically and without the necessity of any action (including any transfer of any Pledged Collateral on the record books of the issuer thereof) by any other Person (including the issuer of such Pledged Collateral or any officer or agent thereof) during the continuance of an Event of Default and which proxy shall only terminate upon (A) the cure of any and all Events of Default or (B) the indefeasible payment in full of the Secured Obligations (other than contingent indemnification obligations to the extent no claim giving rise thereto has been asserted).

(c) Authorization of Issuers. Each Grantor hereby expressly and irrevocably authorizes and instructs, without any further instructions from such Grantor, each issuer of any Pledged Collateral pledged hereunder by such Grantor to, and each Grantor that is an issuer of Pledged Collateral so pledged hereunder hereby agrees to (i) comply with any instruction received by it from the Collateral Agent in writing that states that an Event of Default is continuing in accordance with the terms of this Agreement and each Grantor agrees that such issuer shall be fully protected from liabilities to such Grantor in so complying, and (ii) during the continuance of such Event of Default, unless otherwise permitted hereby or by the Loan Agreement, pay any dividend or make any other payment with respect to the Pledged Collateral directly to the Collateral Agent for the benefit of Lenders and the other Secured Parties or to any Lender on behalf of itself and the other Secured Parties, as the Collateral Agent shall direct.

Section 6.4. Proceeds to be Turned over to and Held by Collateral Agent. Unless otherwise expressly provided in the Loan Agreement or this Agreement, during the continuance of an Event of Default and, upon written notice by the Collateral Agent to the relevant Grantor or Grantors, all proceeds of any Collateral received by any Grantor hereunder in cash or Cash Equivalents shall be held by such Grantor in trust for Lenders and the other Secured Parties, segregated from other funds of such Grantor, and shall, promptly upon receipt by any Grantor, be turned over to the Collateral Agent for the benefit of Lenders and the other Secured Parties in the exact form received (with any necessary endorsement). All such proceeds of Collateral and any other proceeds of any Collateral received by the Collateral Agent in cash or Cash Equivalents shall be held by the Collateral Agent for the benefit of itself and the other Secured Parties in a Collateral Account. All proceeds being held by the Collateral Agent in a Collateral Account (or by such Grantor in trust for Lenders and the other Secured Parties) shall continue to be held as collateral security for the Secured Obligations and shall not constitute payment thereof until applied as provided in the Loan Agreement.

Section 6.5. Sale of Pledged Collateral.

(a) Each Grantor recognizes that the Collateral Agent may be unable to effect a public sale of any Pledged Collateral by reason of certain prohibitions contained in the Securities Act and applicable state or foreign securities laws or otherwise or may determine that a public sale is impracticable, not desirable or not commercially reasonable and, accordingly, may resort to one or more private sales thereof to a restricted group of purchasers that shall be obliged to agree, among other things, to acquire such securities for their own account for investment and not with a view to the distribution or resale thereof. Each Grantor acknowledges and agrees that any such private sale may result in prices and other terms less favorable than if such sale were a public sale and, notwithstanding such circumstances, agrees that any such private sale shall be deemed to have been made in a commercially reasonable manner. The Collateral Agent shall be under no obligation to delay a sale of any Pledged Collateral for the period of time necessary to permit the issuer thereof to register such securities for public sale under the Securities Act or under applicable state securities laws even if such issuer would agree to do so.

(b) Each Grantor agrees to use commercially reasonable efforts to do or cause to be done all such other acts as may be reasonably necessary to make such sale or sales of any portion of the Pledged Collateral pursuant to Section 6.1 and this Section 6.5 valid and binding and in compliance with all applicable Requirements of Law. Each Grantor further agrees that a breach of any covenant contained herein will cause irreparable injury to the Collateral Agent, Lenders and the other Secured Parties, that the Collateral Agent, Lenders and the other Secured Parties have no adequate remedy at law in respect of such breach and, as a consequence, that each and every covenant contained herein shall be specifically enforceable against such Grantor, and such Grantor hereby waives and agrees not to assert any defense against an action for specific performance of such covenants except for a defense that no Event of Default has occurred and is continuing under the Loan Agreement or a defense of indefeasible payment in full of the Guaranteed Obligations (other than inchoate indemnity obligations). Each Grantor waives any and all rights of contribution or subrogation upon the sale or disposition of all or any portion of the Pledged Collateral by the Collateral Agent on behalf of Lenders and the other Secured Parties.

Section 6.6. Deficiency. Each Grantor shall remain liable for any deficiency if the proceeds of any sale or other disposition of any Collateral are insufficient to pay the Secured Obligations and the reasonable and documented fees and disbursements of any attorney employed by the Collateral Agent or any Lender to collect such deficiency.

Section 6.7. Collateral Accounts. If any Event of Default shall have occurred and be continuing, the Collateral Agent may apply the balance from any Collateral Account of a Grantor or instruct the bank at which any Collateral Account is maintained to pay the balance of any Collateral Account to the Collateral Agent for the benefit of Lenders and the other Secured Parties or to any Lender on behalf of itself and the other Secured Parties, as the Collateral Agent shall direct, to be applied to the Secured Obligations in accordance with the terms hereof.

Section 6.8. Directions, Notices or Instructions. Neither the Collateral Agent nor any Lender or any Related Party thereof or any other Secured Party shall take any action under or issue any directions, notice or instructions pursuant to any Control Agreement or similar agreement unless an Event of Default has occurred and is continuing.

ARTICLE VII

ADDITIONAL RIGHTS OF COLLATERAL AGENT

Section 7.1. Collateral Agent's Appointment as Attorney-in-Fact.

(a) Each Grantor hereby irrevocably constitutes and appoints the Collateral Agent and any Related Party thereof, with full power of substitution, as its true and lawful attorney-in-fact with full irrevocable power and authority in the place and stead of such Grantor and in the name of such Grantor or in its own name, for the purpose of carrying out the terms of the Loan Documents, to take any appropriate action and to execute any document or instrument that may be necessary or desirable to accomplish the purposes of the Loan Documents, in each case during the continuance of an Event of Default, and, without limiting the generality of the foregoing, each Grantor hereby gives the Collateral Agent and its Related Party the power and right, on behalf of such Grantor, without notice to or assent by such Grantor, to do any of the following when an Event of Default shall be continuing:

(i) in the name of such Grantor, in its own name or otherwise, take possession of and indorse and collect any check, draft, note, acceptance or other instrument for the payment of moneys due under any account or general intangible or with respect to any other Collateral and file any claim or take any other action or proceeding in any court of law or equity or otherwise deemed appropriate by the Collateral Agent for the purpose of collecting any such moneys due under any account or general intangible or with respect to any other Collateral whenever payable;

(ii) in the case of any Intellectual Property (including any IP Ancillary Rights) or any IP Licenses included in the Collateral, execute, deliver and have recorded any document that the Collateral Agent may request to evidence, effect, publicize or record the Collateral Agent's security interest, in favor of and for the benefit of Lenders and the other Secured Parties, in such Intellectual Property or IP Licenses and the goodwill and general intangibles of such Grantor relating thereto or represented thereby and the Collateral Agent's (on behalf of Lenders and the other Secured Parties) rights and remedies with respect thereto;

(iii) pay or discharge taxes and Liens levied or placed on or threatened against any Collateral, effect any repair or obtain or pay any insurance called for by the terms of the Loan Agreement (including all or any part of the premiums therefor and the costs thereof);

(iv) execute, in connection with any sale provided for in Section 6.1 or 6.5, any document to effect or otherwise necessary or appropriate in relation to evidence the sale of any Collateral; or

(v) (A) direct any party liable for any payment under any Collateral to make payment of any moneys due or to become due thereunder directly to the Collateral Agent or as the Collateral Agent shall direct, (B) ask or demand for, and collect and receive payment of and receipt for, any moneys, claims and other amounts due or to become due at any time in respect of or arising out of any Collateral, (C) commence and prosecute any suit, action or proceeding at law or in equity in any court of competent jurisdiction to collect any Collateral and to enforce any other right in respect of any Collateral, (D) defend any actions, suits, proceedings, audits, claims, demands, orders or disputes brought against such Grantor with respect to any

Collateral, (E) settle, compromise or adjust any such actions, suits, proceedings, audits, claims, demands, orders or disputes and, in connection therewith, give such discharges or releases as the Collateral Agent may deem appropriate, (F) assign or license any Intellectual Property included in the Collateral on such terms and conditions and in such manner as the Collateral Agent shall in its sole discretion determine, including the execution and filing of any document necessary to effectuate or record such assignment or license and (G) generally, sell, assign, license, convey, transfer or grant a Lien on, make any contractual obligation with respect to and otherwise deal with, any Collateral as fully and completely as though the Collateral Agent on behalf of Lenders and the other Secured Parties were the absolute owner thereof for all purposes and do, at the Collateral Agent's option, at any time or from time to time, all acts and things that the Collateral Agent deems necessary to protect, preserve or realize upon any Collateral and the Collateral Agent's, in favor of and for the benefit of Lenders and the other Secured Parties, security interests therein and to effect the intent of the Loan Documents, all as fully and effectively as such Grantor might do.

(vi) If any Grantor fails to perform or comply with any contractual obligation contained herein, the Collateral Agent, at its option, but without any obligation so to do, may perform or comply, or otherwise cause performance or compliance, with such contractual obligation.

(b) The reasonable and documented out-of-pocket expenses of the Collateral Agent and any Lender and other Secured Party incurred in connection with actions undertaken as provided in this Section 7.1, together with interest thereon at the Default Rate, from the date of payment by such Person to the date reimbursed by the relevant Grantor, shall be payable by such Grantor to such Person on demand.

(c) Each Grantor hereby ratifies all that said attorneys shall lawfully do or cause to be done by virtue of this Section 7.1. All powers, authorizations and agencies contained in this Agreement are coupled with an interest and are irrevocable until the indefeasible payment in full of the Secured Obligations (other than inchoate indemnity obligations), this Agreement is terminated and the security interests created hereby are released.

Section 7.2. Authorization to File Financing Statements

. Each Grantor authorizes the Collateral Agent and its Related Party, at any time and from time to time, without notice to any Grantor, to file or record financing statements, amendments thereto, and other filing or recording documents or instruments with respect to any Collateral in such form, in such jurisdictions and in such offices as the Collateral Agent reasonably determines appropriate to perfect or protect the security interests of the Collateral Agent, in favor of and for the benefit of Lenders and the other Secured Parties, under this Agreement or any other Loan Document (and the Collateral Agent's and each Lender's and each other Secured Party's rights in respect thereof), and such financing statements and amendments may describe the Collateral covered thereby as "all assets of the debtor" or words of similar effect and may include a notice that any disposition of the Collateral, by any Grantor or other Person, shall be deemed to violate the rights of the Collateral Agent and Lenders and other Secured Parties under the Code to the extent not permitted under this Agreement or any other Loan Document. A photographic or other reproduction of this Agreement shall be sufficient as a financing statement or other filing or recording document or instrument for filing or recording in any jurisdiction. Such Grantor also hereby ratifies its authorization for the Collateral Agent to have filed any initial financing statement or amendment thereto under the Code (or other similar laws) in effect in any jurisdiction if filed prior to the date hereof.

Section 7.3. Authority of Collateral Agent. Each Grantor acknowledges that, as between the Collateral Agent and the Grantors, the Collateral Agent shall be conclusively presumed to be acting as agent for each Lender and all of the other Secured Parties with full and valid authority so to act or refrain from acting, and no Grantor shall be under any obligation or entitlement to make any inquiry respecting such authority.

Section 7.4. Duty; Obligations and Liabilities.

(a) Duty of Collateral Agent. The Collateral Agent's sole duty with respect to the custody, safekeeping and physical preservation of the Collateral in its possession shall be to deal with it in the same manner as it deals with similar property for its own account. The powers conferred on the Collateral Agent hereunder are solely to protect each Lender's and the other Secured Parties' interest in the Collateral and shall not impose any duty upon the Collateral Agent to exercise any such powers. The Collateral Agent shall be accountable only for amounts that it receives as a result of the exercise of such powers, and neither it nor any of its Related Parties shall be responsible to any Grantor for any act or failure to act hereunder, except for its or their own gross negligence, bad faith or willful misconduct as finally determined by a court of competent jurisdiction. In addition, the Collateral Agent shall not be liable or responsible for any loss or damage to any Collateral, or for any diminution in the value thereof, by reason of the act or omission of any warehousemen, carrier, forwarding agency, consignee or other bailee if such Person has been selected by the Collateral Agent in good faith.

(b) Obligations and Liabilities with respect to Collateral. Neither the Collateral Agent nor Lenders or any other Secured Parties nor any of their respective Related Parties shall be liable for failure to demand, collect or realize upon any Collateral or for any delay in doing so or shall be under any obligation to sell or otherwise dispose of any Collateral upon the request of any Grantor or any other Person or to take any other action whatsoever with regard to any Collateral.

ARTICLE VIII

MISCELLANEOUS

Section 8.1. Reinstatement. Each Grantor agrees that, if any payment made by any Credit Party or other Person and applied to the Secured Obligations is at any time annulled, avoided, set aside, rescinded, invalidated, declared to be fraudulent or preferential or otherwise required to be refunded or repaid, or the proceeds of any Collateral are required to be returned by any Secured Party to such Credit Party, its estate, trustee, receiver or any other party, including any Grantor, under any bankruptcy law, state or federal law, common law or equitable cause, then, to the extent of such payment or repayment, any Lien or other Collateral securing such liability shall be and remain in full force and effect, as fully as if such payment had never been made. If, prior to any of the foregoing, (a) any Lien or other Collateral securing such Grantor's liability hereunder shall have been released or terminated by virtue of the foregoing or (b) any provision of the Guaranty hereunder shall have been terminated, cancelled or surrendered, such Lien, other Collateral or provision shall be reinstated in full force and effect and such prior release, termination, cancellation or surrender shall not diminish, release, discharge, impair or otherwise affect the obligations of such Grantor in respect of any Lien or other Collateral securing such obligation or the amount of such payment.

Section 8.2. Release of Collateral and Guarantee Obligations.

(a) When all Obligations (other than inchoate indemnity obligations) have indefeasibly been paid in full, the Collateral shall be released from the Lien created hereby and this Agreement and all obligations (other than those expressly stated to survive such termination) of each Lender and any other Secured Party and each Guarantor and Grantor hereunder shall terminate, all without delivery of any instrument or performance of any act by any party (except as required hereunder), and all rights of the Collateral Agent, Lenders and any other Secured Parties to the Collateral shall revert to the Grantors.

(b) In connection with any termination or release pursuant to this Section 8.2, the Collateral Agent shall, and to the extent required, each Secured Party hereby authorizes the Collateral Agent to, promptly execute and deliver to any Grantor all instruments, documents and agreements which such Grantor shall reasonably request in writing to evidence and confirm such termination or release (including termination statements under the Code), and will duly assign, transfer and deliver to such Grantor (or its designee), such of the Collateral that may be in the possession of the Collateral Agent, all without further consent or joinder of the Collateral Agent or any Lender or other Secured Party.

(c) Any termination or release pursuant to this Section 8.2 is subject to reinstatement as provided in Section 8.1.

(d) Upon the release of the Liens on any Collateral or of a Grantor from all of its obligations as a Credit Party under the Loan Agreement and as a Grantor hereunder, any representation, warranty or covenant contained in any Loan Document relating to any such Collateral or such Grantor, as applicable, shall no longer be deemed to be made.

(e) Without limiting the generality of Section 2.4 of the Loan Agreement, Borrower agrees to pay all reasonable and documented out-of-pocket expenses incurred by the Collateral Agent and each Lender and other Secured Party in connection with the taking of any actions pursuant to or as otherwise contemplated by this Section 8.2.

Section 8.3. Independent Obligations. The obligations of each Grantor hereunder are independent of and separate from the Secured Obligations and the Guaranteed Obligations. Upon any Event of Default and during the continuance thereof, the Collateral Agent for the benefit of Lenders and the other Secured Parties may, at its sole election, proceed directly and at once, without notice, against any Grantor and any Collateral to collect and recover the full amount of any Secured Obligation or Guaranteed Obligation then due, without first proceeding against any other Grantor, any other Credit Party or any other Collateral and without first joining any other Grantor or any other Credit Party in any proceeding.

Section 8.4. No Waiver by Course of Conduct. Neither the Collateral Agent nor any Secured Party shall by any act (except by a written instrument pursuant to Section 8.5), delay, indulgence, omission or otherwise be deemed to have waived any right or remedy hereunder or to have acquiesced in any Default or Event of Default. No failure to exercise, nor any delay in exercising, on the part of the Collateral Agent or any Secured Party, any right, power or privilege hereunder shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege. A waiver by the Collateral Agent or any Secured Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy that the Collateral Agent or any Secured Party would otherwise have on any future occasion.

Section 8.5. Amendments in Writing. None of the terms or provisions of this Agreement may be waived, amended, supplemented or otherwise modified except in accordance with Section 11.5 of the Loan Agreement; provided, however, that annexes to this Agreement may be supplemented (but no existing provisions may be modified and no Collateral may be released) through Pledge Amendments and Joinder Agreements, in substantially the form of Annex 1 and Annex 2 attached hereto, respectively, in each case, duly executed by the Collateral Agent and each Grantor directly affected thereby.

Section 8.6. Additional Grantors and Guarantors; Additional Pledged Collateral.

(a) Joinder Agreements. If, at the option of Borrower or as required pursuant to Section 5.12 or Section 5.13 of the Loan Agreement, Borrower shall cause any Subsidiary (other than an Excluded Subsidiary) that is not a Grantor or Guarantor to become a Grantor and Guarantor hereunder, such Subsidiary shall execute and deliver to the Collateral Agent a Joinder Agreement substantially in the form of Annex 2 attached hereto and shall thereafter for all purposes be a party hereto and have the same rights, benefits and obligations as a Grantor party hereto on the Closing Date.

(b) Pledge Amendments. To the extent any Pledged Collateral has not been delivered as of the Tranche A Closing Date, such Grantor shall, promptly after such Pledged Collateral is acquired, deliver a pledge amendment duly executed by the Grantor in substantially the form of Annex 1 attached hereto (each, a "Pledge Amendment"). Such Grantor authorizes the Collateral Agent to attach each Pledge Amendment to this Agreement.

Section 8.7. Notices

. All notices, requests and demands to or upon the Collateral Agent or any Grantor hereunder shall be effected in the manner provided for in Section 9 of the Loan Agreement; provided, however, that any such notice, request or demand to or upon any Grantor shall be addressed to Borrower's notice address set forth in Section 9 of the Loan Agreement.

Section 8.8. Successors and Assigns

. This Agreement shall be binding upon the successors and assigns of each Grantor and shall inure to the benefit of the Collateral Agent and each Secured Party and their respective successors and assigns; provided, however, that no Grantor may assign, transfer or delegate any of its rights or obligations under this Agreement without the prior written consent of the Collateral Agent.

Section 8.9. Counterparts

. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission or by electronic transmission shall be as effective as delivery of a manually executed counterpart hereof.

Section 8.10. Severability

. Any provision of this Agreement being held illegal, invalid or unenforceable in any jurisdiction shall not affect any part of such provision not held illegal, invalid or unenforceable, any other provision of this Agreement or any part of such provision in any other jurisdiction.

Section 8.11. Governing Law

. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York without regard to any principle of conflicts of law that could require the application of the law of any other jurisdiction.

Section 8.12. Waiver of Jury Trial

. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO, OR DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH, THIS AGREEMENT, ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREIN AND THEREIN OR RELATED HERETO OR THERETO (WHETHER FOUNDED IN CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO OTHER PARTY AND NO RELATED PARTY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 8.12 AND (C) HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

EACH GRANTOR AGREES TO BE BOUND BY THE PROVISIONS OF SECTION 10 OF THE LOAN AGREEMENT.

[Signature Pages Follow]

IN WITNESS WHEREOF, each of the undersigned has caused this Guaranty and Security Agreement to be duly executed and delivered as of the date first above written.

EPIZYME, INC.,
as Borrower and Grantor

By: /s/ Robert B. Bazemore
Name: Robert B. Bazemore
Title: Chief Executive Officer

ACCEPTED AND AGREED
as of the date first above written:

BIOPHARMA CREDIT PLC,
as Collateral Agent

By: Pharmakon Advisors, LP,
its Investment Manager

By: Pharmakon Management I, LLC,
its General Partner

By: /s/ Pedro Gonzalez de Cosio
Name: Pedro Gonzalez de Cosio
Title: Managing Member

Certain identified information has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm to the Company, if publicly disclosed. Double asterisks denote omissions.

PURCHASE AGREEMENT

BY AND BETWEEN

EPIZYME, INC.

AND

RPI FINANCE TRUST

Dated as of November 4, 2019

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EPIZYME, INC.

PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (the "Agreement") is made as of November 4, 2019, by and between Epizyme, Inc., a Delaware corporation (the "Company"), and RPI Finance Trust, a Delaware statutory trust (the "Investor").

RECITALS

WHEREAS, pursuant to the License Agreement, the Company granted to Licensee an exclusive, royalty-bearing license under the Licensed Epizyme IP to, among other things, sell Licensed Products in the Eisai Territory, and Licensee, in consideration thereof, agreed to pay the Japan Royalty to the Company;

WHEREAS, pursuant to that certain Royalty Purchase Agreement, dated as of October 29, 2019, between the Investor and Licensee (the "Eisai Royalty Purchase Agreement"), Investor has agreed to purchase up to all of the royalty or like payments payable to Licensee by the Company under the License Agreement (collectively, the "WW Royalty");

WHEREAS, pursuant to and in accordance with the Eisai Royalty Purchase Agreement and the Instruction Letters delivered pursuant thereto by Licensee to the Company from time to time, the Company shall pay to the Investor the portion of the WW Royalty set forth in the Instruction Letter then in effect; and

WHEREAS, pursuant to terms set forth in this Agreement, the Company desires to sell to the Investor, and the Investor desires to purchase from the Company, (a) certain shares of the Company's common stock, $0.0001 per share (the "Common Stock"), (b) a warrant to purchase shares of the Common Stock and (c) the Japan Royalty.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1

Defined Terms and Rules of Construction

1.1 ***Definitions***. As used in this Agreement, the following terms shall have the following meanings:

"Affiliate" means, with respect to any particular Person, any other Person directly or indirectly controlling, controlled by or under common control with such particular Person.

"Aggregate Purchase Price" means the Closing Purchase Price plus the aggregate Applicable Reduction Payments, if any, actually paid or credited.

"Agreement" is defined in the Preamble.

"Applicable Reduction Payment" means, during the term of the WW Royalty on a calendar year-by-calendar year basis, with respect to each calendar quarter, an amount equal to the sum of (a) [**]% of the amount of Net Sales in such calendar quarter in the Epizyme Territory that, together with prior Net Sales in such calendar year in the Epizyme Territory, are greater than $[**] but less than or equal to $[**] plus (b) [**]% of the amount of Net Sales in such calendar quarter in the Epizyme Territory that, together with prior Net Sales in such calendar year in the Epizyme Territory, are greater than $[**].

"Bankruptcy Laws" means, collectively, bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, fraudulent transfer or other similar laws affecting the enforcement of creditors' rights generally.

"Bill of Sale" is defined in Section 3.4.

"Board of Directors" means the board of directors of the Company.

"Business Day" means any day other than (i) a Saturday or Sunday or (ii) a day on which banking institutions located in New York are permitted or required by applicable law or regulation to remain closed.

"Closing" is defined in Section 3.1.

"Closing Date" is defined in Section 3.1.

"Closing Purchase Price" is defined in Section 3.1.

"Commercialize" means any and all activities directed to the manufacture, distribution, marketing, detailing, promotion, selling and securing of reimbursement of Licensed Products (including the making, using, importing, selling and offering for sale of the Licensed Products), and shall include post-marketing approval studies, post-launch marketing, promoting, detailing, marketing research, distributing, customer service, selling the Licensed Products, importing, exporting or transporting the Licensed Products for sale, and regulatory compliance with respect to the foregoing.

"Commission" means the U.S. Securities and Exchange Commission.

"Commission Documents" is defined in Section 4.7(a).

"Common Stock" is defined in the Preamble.

"Company" is defined in the Preamble.

"Company Closing Certificate" is defined in Section 3.3(a).

"Confidential Information" is defined in Section 7.1.

"Covered Persons" is defined in Section 6.5(f).

"Credit Event" means any insolvency, bankruptcy, receivership, assignment for the benefit of creditors, or similar proceeding, following or as a result of which the Licensee fails to pay amounts owing to the Company in respect of the Japan Royalty as a result of Licensee's financial distress, creditworthiness, or insolvency.

"DGCL" means the Delaware General Corporation Law.

"Disclosing Party" is defined in Section 7.1.

"Disclosure Schedule" means the Disclosure Schedule, attached hereto as Exhibit A and dated as of the date hereof and delivered by the Company to the Investor.

"Eisai Royalty Purchase Agreement" is defined in the Preamble.

"Eisai Royalty Reports" means the quarterly reports deliverable by Licensee to the Company pursuant to Section 6.7 of the License Agreement.

"Eisai Territory" shall have the meaning ascribed thereto in Section 1.34 of the License Agreement.

"Epizyme Royalty Reports" means the quarterly reports deliverable by the Company to Licensee pursuant to Section 6.7 of the License Agreement.

"Epizyme Territory" shall have the meaning ascribed thereto in Section 1.42 of the License Agreement.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"GAAP" is defined in Section 4.7(b).

"Governmental Entity" means any: (i) nation, principality, republic, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (ii) federal, state, local, municipal, foreign or other government; (iii) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body or other entity and any court, arbitrator or other tribunal); (iv) multi-national organization or body; or (v) individual, body or other entity exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military or taxing authority or power of any nature.

"HSR Act" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.

"Indemnified Party" is defined in Section 11.1.

"Indemnifying Party" is defined in Section 11.1.

"Instruction Letters" means the payment instruction letters, duly executed by the Licensee and the Investor, delivered to the Company by the Licensee and the Investor from time to time in accordance with the Eisai Royalty Purchase Agreement, instructing the Company to pay the portion of the WW Royalty specified therein to the Investor.

"Investor" is defined in the Preamble.

"Investor Closing Certificate" is defined in Section 3.3(b).

"Investor Designee" means the individual elected to the Board of Directors in accordance with Section 6.5.

"Investor Incumbency Certificate" is defined in Section 3.3(c).

"Investor Indemnitors" is defined in Section 6.7.

"Investor WW Royalty Payment" means such portion of the WW Royalty payable by the Company to the Investor pursuant to the Instruction Letter then in effect.

"Japan Royalty" means all of the Company's right, title and interest in and to (a) all payments payable to the Company by Licensee under Article 6 of the License Agreement with respect to all Net Sales of any Licensed Product in the Eisai Territory, (b) any payments to the Company under the License Agreement in lieu of the payments of clause (a), (c) any royalty payments to the Company based on amounts treated as Net Sales of Licensee in the Eisai Territory under the final sentence of Section 8.4 of the License Agreement, (d) any payments to the Company under Section 8.5.6 of the License Agreement to the extent related to the Licensed Product in the Eisai Territory, and (e) any payments payable to the Company by any licensee under any New Arrangement.

"Joint Patents" shall have the meaning ascribed thereto in Section 1.59 of the License Agreement.

"Knowledge of the Company" means the actual knowledge of Robert Bazemore, Paolo Tombesi, Matthew Ros, Shefali Agarwal and John Weidenbruch.

"License Agreement" means that certain Amended and Restated Collaboration and License Agreement, dated as of March 12, 2015, between the Company and the Licensee.

"Licensed Eisai IP" means the Eisai IP, the Eisai Collaboration IP and Licensee's interest in the Joint IP, as each such capitalized term is defined in the License Agreement.

"Licensed Eisai Patents" means the Eisai Patents and the Eisai Collaboration Patents, as each such capitalized term is defined in the License Agreement.

"Licensed Epizyme IP" means the Epizyme IP, the Epizyme Collaboration IP and the Company's interest in the Joint IP, as each such capitalized term is defined in the License Agreement.

"Licensed Epizyme Patents" means the Epizyme Patents and the Epizyme Collaboration Patents, as each such capitalized term is defined in the License Agreement.

"Licensed IP" means, collectively, the Licensed Epizyme IP and the Licensed Eisai IP.

"Licensed Patents" is defined in Section 4.19(a).

"Licensed Product" shall have the meaning ascribed thereto in Section 1.63 of the License Agreement.

"Licensee" means Eisai Co., Ltd. and any successor thereof, as permitted pursuant to the terms of this Agreement and the License Agreement.

"Licensee Consent" is defined in Section 8.7.

"Lien" means any mortgage, lien, pledge, charge, adverse claim, security interest, encumbrance or restriction of any kind, including any restriction on use, transfer or exercise of any other attribute of ownership of any kind.

"Losses" is defined in Section 11.1.

"Material Adverse Change" means (i) a material adverse effect on the business, operations, properties or financial condition of the Company and its consolidated Subsidiaries, taken as a whole, provided, that none of the following shall constitute a "material adverse effect": (1) the effects of conditions or events that are generally applicable to the capital, financial, banking or currency markets and the biotechnology industry, (2) changes in the market price of Common Stock, (3) matters related to the approval of tazemetostat in any subpopulation for which a New Drug Application has been filed with the U.S. Food & Drug Administration, (4) a delay in the approval of tazemetostat as a treatment for epithelioid sarcoma or follicular lymphoma as a result of clinical efficacy or (5) the termination of collaboration or licensing arrangement(s) between the Company and any Third Party unrelated to tazemetostat, (ii) a material adverse effect on the legality, validity or enforceability of the Transaction Documents, (iii) a material adverse effect on the ability of the Company to perform any of its obligations thereunder, including the issuance and sale of any of the Securities, (iv) a material adverse effect on the rights of the Company under the License Agreement with respect to the Japan Royalty, other than as a result of a Credit Event, (v) a material adverse effect on the validity or enforceability of any of the Licensed Epizyme Patents or Joint Patents in the Eisai Territory, or (vi) an adverse effect in any respect on the timing, amount or duration of the payments to be made to the Investor in respect of the Japan Royalty or the right of the Investor to receive such payments, other than as a result of a Credit Event.

"Nasdaq" means The Nasdaq Stock Market, LLC.

"Net Sales" shall have the meaning ascribed thereto in Section 1.70 of the License Agreement.

"New Arrangement" is defined in Section 6.17(b).

"Permitted Liens" means any (i) mechanic's, materialmen's, and similar liens for amounts not yet due and payable, (ii) statutory liens for taxes not yet due and payable or for taxes that the taxpayer is contesting in good faith, (iii) liens under or permitted by that certain Loan Agreement, dated as of November 4, 2019 by and among the Company, Biopharma Credit PLC and Biopharma Credit Investments V (Master) LP, and (iv) other liens and encumbrances not incurred in connection with the borrowing of money that do not materially and adversely affect the use or value of the affected assets provided that, in each case, such liens are automatically released upon the sale or other transfer of the affected assets (it being understood that any obligations secured by such "Permitted Liens" shall remain the obligations of the Company).

"Permitted Reduction" means a Royalty Reduction pursuant to Sections 6.4.2(b), 6.4.3, 6.4.4 of the License Agreement or 8.4 of the License Agreement with respect to the Licensed Product in the Eisai Territory.

"Person" means any individual, firm, corporation, company, partnership, limited liability company, trust, joint venture, association, estate, trust, Governmental Entity or other entity, enterprise, association or organization.

"Preferred Stock" is defined in Section 4.6.

"Prime Rate" means the prime rate published by the Wall Street Journal, from time to time, as the prime rate.

"Proceeds" means any amounts actually recovered by the Company as a result of any settlement or resolution of any actions, suits, proceedings, claims or disputes related to the Japan Royalty.

"Product Rights" is defined in Section 6.17(b).

"Put Closing" is defined in Section 2.1(b)(iii).

"Put Closing Date" is defined in Section 2.1(b)(iii).

"Put Exercise Notice" is defined in Section 2.1(b)(ii).

"Put Option" is defined in Section 2.1(b)(i).

"Put Option Period" is defined in Section 2.1(b)(i).

"Put Option Purchase Price" is defined in Section 2.1(b)(i).

"Put Price" means the lesser of (i) the ten-day volume-weighted average trading price of the Common Stock for the ten full consecutive Trading Days immediately preceding the date and time that the Put Exercise Notice is delivered to the Investor and (ii) Twenty Dollars ($20.00).

"Put Price VWAP Threshold" means the three-day volume-weighted average trading price of the Common Stock for the three full consecutive Trading Days immediately following the last Trading Day included in the determination of the Put Price pursuant to clause (i) of the definition thereof. For

example, if the Put Exercise Notice is dated and delivered to the Investor (i) prior to the commencement of the trading of shares of the Common Stock on a Monday, then the Put Price VWAP Threshold would be determined based upon the three-day volume-weighted average trading price of the Common Stock for Monday, Tuesday and Wednesday (assuming such Monday, Tuesday and Wednesday are each Trading Days) or (ii) after the close of trading (or during the trading) of shares of the Common Stock on a Monday, then the Put Price VWAP Threshold would be determined based upon the three-day volume-weighted average trading price of the Common Stock for the next Tuesday, Wednesday and Thursday (assuming such Tuesday, Wednesday and Thursday are each Trading Days).

"Put Shares" is defined in Section 2.1(b)(i).

"Receiving Party" is defined in Section 7.1.

"Reference Date" is defined in Section 4.6.

"Regulation D" means Regulation D promulgated under the Securities Act.

"Representative" means, with respect to any Person, (i) any member or partner of such Person and (ii) any manager, director, officer, employee, agent, advisor or other representative (including attorneys, accountants, consultants, bankers, financial advisors and actual and potential lenders and investors) of such Person.

"Royalty Reduction" is defined in Section 4.17(m).

"Securities" means, collectively, (i) the Shares, (ii) the Warrant, (iii) when and if issued upon conversion or exercise of the Warrant, the Warrant Shares and (iv) when and if issued in accordance with Section 2.1(b) hereof, the Put Shares.

"Securities Act" means the Securities Act of 1933, as amended.

"Shares" is defined in Section 2.1(a).

"Subsidiary" is defined in Section 4.1.

"Trading Day" means a day on which trading in the Common Stock occurs on the Nasdaq Global Select Market.

"Transaction Documents" means this Agreement and the Warrant.

"UCC" means the New York Uniform Commercial Code as in effect from time to time.

"UNC Agreement" means that certain License Agreement, dated as of January 7, 2008, by and between The University of North Carolina at Chapel Hill and the Company, as terminated pursuant to that certain Notice of Termination of License Agreement, effective as of March 7, 2016.

"UNC Patents" means any and all issued patents and pending patent applications that were licensed to the Company pursuant to the UNC Agreement.

"Warrant" is defined in Section 2.2.

"Warrant Shares" is defined in Section 2.2.

"WW Royalty" is defined in the Preamble.

1.2 ***Certain Interpretations***. Except where expressly stated otherwise in this Agreement, the following rules of interpretation apply to this Agreement:

(a) "either" and "or" are not exclusive and "include," "includes" and "including" are not limiting and shall be deemed to be followed by the words "without limitation;"

(b) "extent" in the phrase "to the extent" means the degree to which a subject or other thing extends, and such phrase does not mean simply "if;"

(c) "hereof," "hereto," "herein" and "hereunder" and words of similar import when used in this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement;

(d) references to a Person are also to its permitted successors and assigns;

(e) definitions are applicable to the singular as well as the plural forms of such terms;

(f) unless otherwise indicated, references to an "Article", "Section" or "Exhibit" refer to an Article or Section of, or an Exhibit to, this Agreement, and references to a "Schedule" refer to the corresponding part of the Disclosure Schedule;

(g) references to "$" or otherwise to dollar amounts refer to the lawful currency of the United States; and

(h) references to a law include any amendment or modification to such law and any rules and regulations issued thereunder, whether such amendment or modification is made, or issuance of such rules and regulations occurs, before or after the date of this Agreement.

1.3 ***Headings***. The table of contents and the descriptive headings of the several Articles and Sections of this Agreement and the Exhibits and Schedules are for convenience only, do not constitute a part of this Agreement and shall not control or affect, in any way, the meaning or interpretation of this Agreement.

SECTION 2

Purchase and Sale of Shares, Warrants and Japan Royalty; Applicable Reduction Payment

2.1 ***Sale of Shares***.

(a) Subject to the terms and conditions hereof, at the Closing, the Company will issue and sell to the Investor, and the Investor will purchase from the Company, 6,666,667 shares of Common Stock (the "Shares").

(b) Put Option.

(i) For a period of eighteen (18) months from the date hereof (the "Put Option Period"), the Company shall have the option (the "Put Option") to issue and sell to the Investor, and, subject to Section 2.3(b)(v), the Investor shall purchase from the Company, a number of shares equal to the quotient obtained by dividing (a) Fifty Million Dollars ($50,000,000.00) (the "Put Option Purchase Price") by (b) the Put Price (the "Put Shares").

(ii) The Company may exercise the Put Option only once and solely during the Put Option Period by delivering to the Investor written notice of such exercise (the "Put Exercise Notice"), which shall include (a) the Put Price and its calculation and (b) a certification from the chief executive officer or chief financial officer of the Company that, as of the date and time of the delivery of the Put Exercise Notice to the Investor, no event or circumstance has occurred or exists with respect to the Company, its Subsidiaries, or their respective businesses, properties, operations or financial condition, which has not been publicly announced or disclosed (other than such delivery of the Put Exercise Notice) and which, individually or in the aggregate, would constitute a Material Adverse Change or would reasonably be expected to have a material adverse effect on the trading price of the Common Stock. The delivery of the Put Exercise Notice shall be the Confidential Information of the Company. Any purported exercise of the Put Option by the Company following the date that is eighteen (18) months from the date hereof shall be void.

(iii) The purchase and sale of the Put Shares shall take place remotely via the exchange of documents and signatures (the "Put Closing") on the Business Day that is immediately following the third (3rd) Trading Day following which the Investor received the Put Exercise Notice, subject to the satisfaction of the conditions set forth in Sections 8.1 (other than clause (iii) thereof), 8.2 (provided that the Company shall be allowed to deliver an updated Disclosure Schedule dated as of the Put Closing Date in a form reasonably acceptable to the Investor with respect to the representations and warranties of the Company in Section 4), 8.3, 8.4, 8.5, 8.9, 8.10 (other than clause (ii) thereof), 8.12, 9.1 (other than clause (iii) thereof), 9.2, 9.3, 9.6 and 9.10 (other than clause (ii) thereof), in each case as if references therein to the "Closing", the "Closing Date" and "Shares" were instead references to the "Put Closing", the "Put Closing Date" and "Put Shares", respectively, *mutatis mutandis*, have been satisfied or waived in writing by the Investor (except to the extent not permitted by law), or at such other time as agreed by both parties (the "Put Closing Date"). At the Put Closing, the Investor shall pay the Put Option Purchase Price by wire transfer of immediately available funds to one or more accounts specified by the Company on Exhibit C or such other account(s) as may be specified by the Company.

(iv) At the Put Closing, upon confirmation of receipt of the Put Option Purchase Price by the Company, the Company shall issue the Put Shares in book-entry form to the Investor.

(v) Notwithstanding any other provision in this Section 2.1(b) to the contrary, if (A) the Put Price is equal to less than Eight Dollars ($8.00) or (B) the Put Price VWAP Threshold is equal to less than ninety percent (90%) of the Put Price, the Investor shall have the right to decline to purchase the Put Shares at the Put Closing, whereupon the Put Option shall be void, which right must be exercised prior to 11:59 PM (Eastern Time) on the third (3rd) Trading Day following which the Investor received the Put Exercise Notice.

2.2 ***Sale of Warrant***. Subject to the terms and conditions hereof, at the Closing, the Company will issue and sell to the Investor, and the Investor will purchase from the Company, a warrant (the "Warrant"), in substantially the form attached hereto as Exhibit B, to acquire up to two million five hundred thousand (2,500,000) shares of Common Stock at an exercise price of Twenty Dollars ($20.00) per share (such shares of Common Stock issuable upon exercise of or otherwise pursuant to the Warrant, the "Warrant Shares").

2.3 ***Sale of Japan Royalty***. Subject to the terms and conditions hereof, at the Closing, the Company shall sell, transfer, assign and convey to the Investor, and the Investor shall purchase, acquire and accept from the Company, free and clear of all Liens, all of the Company's right, title and interest in and to all of the Japan Royalty.

2.4 ***Purchase Price***. The purchase price to be paid to the Company for (a) the issuance and sale of the Shares and the Warrant and (b) the sale, transfer, assignment and conveyance of the Company's right, title and interest in and to the Japan Royalty to the Investor, is the Aggregate Purchase Price.

2.5 ***No Assumed Obligations***. Notwithstanding any provision in this Agreement to the contrary, the Investor is purchasing, acquiring and accepting only the Shares, the Warrant and the Japan Royalty, and is not assuming any liability or obligation of the Company of whatever nature, whether presently in existence or arising or asserted hereafter, under the License Agreement or otherwise. Except as specifically set forth herein in respect of the Japan Royalty purchased, acquired and accepted hereunder, the Investor does not, by such purchase, acquisition and acceptance, acquire any other contract rights of the Company under the License Agreement or any other assets of the Company.

2.6 ***True Sale of Japan Royalty***. It is the intention of the parties hereto that the sale, transfer, assignment and conveyance contemplated by this Agreement constitute a sale of the Japan Royalty from the Company to the Investor and not a financing transaction, borrowing or loan. Following the Closing, the Investor will be the owner of the Japan Royalty, the Investor will have no right to return the Japan Royalty to the Company, and the Company will have no right to repurchase the Japan Royalty from the Company. The sole recourse of the Investor against the Company in respect of the Japan Royalty will be (a) for Royalty Reductions other than Permitted Reductions, only to the extent permitted under Section 6.10 hereof, and (b) indemnification for Losses, only to the extent permitted under Section 11 hereof; provided, however, that nothing herein shall otherwise limit the Company's obligations under its covenants in Section 6 and elsewhere in this Agreement or the

Company's liability for failure to perform such obligations. Accordingly, the Company shall treat the sale, transfer, assignment and conveyance of the Japan Royalty as a sale of an "account" or a "payment intangible" (as appropriate) in accordance with the UCC, and the Company hereby authorizes the Investor to file financing statements (and continuation statements with respect to such financing statements when applicable) naming the Company as the debtor and the Investor as the secured party in respect of the Japan Royalty. Not in derogation of the foregoing statement of the intent of the parties hereto in this regard, and for the purposes of providing additional assurance to the Investor in the event that, despite the intent of the parties hereto, the sale, transfer, assignment and conveyance contemplated hereby is hereafter held not to be a sale, the Company does hereby grant to the Investor, as security for the obligations of the Company hereunder, a first priority security interest in and to all right, title and interest of the Company, in, to and under the Japan Royalty and any "proceeds" (as such term is defined in the UCC) thereof, and the Company does hereby authorize the Investor, from and after the Closing, to file such financing statements (and continuation statements with respect to such financing statements when applicable) as are necessary to perfect such security interest.

SECTION 3

Closing; Payment of Purchase Price

3.1 ***Closing***. The purchase and sale of the Shares, the Warrant and the Japan Royalty shall take place remotely via the exchange of documents and signatures (the "Closing") on the second Business Day after the date on which the conditions set forth in Section 8 and Section 9 have been satisfied, or at such other time as agreed by both parties (the "Closing Date"). At the Closing, the Investor shall pay One Hundred Million Dollars ($100,000,000.00) (the "Closing Purchase Price") by wire transfer of immediately available funds to one or more accounts specified by the Company on Exhibit C.

3.2 ***Royalty Reduction***.

(a) Following the Closing, within forty-five (45) calendar days of receipt by the Investor of the Epizyme Royalty Report for any calendar quarter, the Investor shall pay the Applicable Reduction Payment, if any, for such calendar quarter to the Company by wire transfer of immediately available funds to one or more accounts specified by the Company on Exhibit C or such other account as may be specified in writing by the Company from time to time.

(b) In lieu of the Investor making such payment to the Company under Section 3.2(a), and subject to the terms and conditions hereof and of the Instruction Letter then in effect, for so long as and for any calendar quarter during which the Investor WW Royalty Payment is payable to the Investor by the Company, the Company may elect, by written notice delivered to the Investor, to instead receive the Applicable Reduction Payment, if any for such calendar quarter, by reducing the Investor WW Royalty Payment payable for such calendar quarter by an amount equal to the Applicable Reduction Payment for such calendar quarter.

3.3 ***Closing Certificates***.

(a) *Company's Closing Certificate*. At the Closing, the Company shall deliver to the Investor a certificate of the Secretary of the Company, dated as of the Closing Date, certifying (i) as to the incumbency of the officer of the Company executing this Agreement, (ii) as to the attached copies of Company's certificate of incorporation, bylaws and resolutions adopted by the Board of Directors authorizing the execution and delivery by the Company of this Agreement and the consummation by the Company of the transactions contemplated hereby and (iii) that the conditions set forth in Section 8.2, Section 8.3 and Section 8.4 have been satisfied (the "Company Closing Certificate").

(b) *Investor's Closing Certificate*. At the Closing, RP Management LLC, as administrator of the Investor, shall deliver to the Company a certificate of an authorized person thereof, certifying that the conditions set forth in Section 9.2, 9.3 and 9.4 have been satisfied (the "Investor Closing Certificate").

(c) *Investor's Incumbency Certificate*. At the Closing, the Investor shall deliver to the Company a certificate of an authorized person of the owner trustee of the Investor certifying as to the incumbency of the officers executing this Agreement on behalf of Investor (the "Investor Incumbency Certificate").

3.4 ***Bill of Sale***. At the Closing, upon confirmation of the receipt of the Closing Purchase Price by the Company, the Company shall deliver to the Investor a duly executed bill of sale evidencing the sale, transfer, assignment and conveyance of the Japan Royalty, substantially in the form attached hereto as Exhibit D (the "Bill of Sale").

3.5 ***Share Issuance***. At the Closing, upon confirmation of the receipt of the Closing Purchase Price by the Company, the Company shall issue the Shares in book-entry form to the Investor.

3.6 ***Warrant***. At the Closing, upon confirmation of the receipt of the Closing Purchase Price by the Company, the Company shall deliver to the Investor the duly executed Warrant.

SECTION 4

Representations and Warranties of the Company

Except as set forth on the Disclosure Schedule, the Company hereby represents and warrants the following as of the date hereof:

4.1 ***Organization and Good Standing and Qualifications***. The Company and each of its Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization (as applicable), and has all requisite corporate power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as now being conducted. Neither the Company nor any Subsidiary is in violation or default of any of the provisions of its respective certificate of incorporation, bylaws, or other organizational documents. The Company owns all of the outstanding shares of capital stock

or equivalent equity security of each of the entities listed in Section 4.1 of the Disclosure Schedule (each such entity, a "Subsidiary"). The Company and each of its Subsidiaries is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which the nature of the business conducted or property owned or leased by it makes such qualification necessary, other than those in which the failure so to qualify or be in good standing would not have a material adverse effect on the business, operations, properties, or financial condition of the Company and its consolidated Subsidiaries, taken as a whole.

4.2 ***Authorization***.

(a) The Company has the requisite corporate power and authority to enter into and perform its obligations under the Transaction Documents.

(b) The execution, delivery and performance of the Transaction Documents by the Company, the consummation by the Company of the transactions contemplated thereby and the issuance, sale and delivery of the Securities have been duly authorized by all necessary corporate action and no further consent or authorization of the Company, its Board of Directors and its stockholders is required.

(c) The Agreement and, when executed and delivered in accordance with the terms hereof, the Warrant have been duly executed and delivered and constitute a valid and binding obligation of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by applicable Bankruptcy Laws, or indemnification or by other equitable principles of general application.

(d) Pursuant to resolutions previously provided to the Investor, the Board of Directors or a committee thereof composed solely of two or more "non-employee directors" as defined in Rule 16b-3 of the Exchange Act has approved, or will approve in advance of the Closing, for the express purpose of exempting the Investor's and/or the Investor Designee's interests (in each case, to the extent such person may be deemed to be a director or "director by deputization") in each such transaction from Section 16(b) of the Exchange Act, pursuant to Rule 16b-3 thereunder to the extent applicable, the transactions contemplated by the Transaction Documents, including any disposition of the Warrant to the Company upon the conversion thereof and any acquisition of Warrant Shares from the Company upon the exercise or conversion of the Warrant, any deemed acquisition or disposition in connection therewith, and all transactions with the Company related thereto.

4.3 ***Reservation and Valid Issuance of Shares***.

(a) The Company has authorized and reserved, free of preemptive rights and other similar contractual rights of stockholders, a sufficient number of shares of Common Stock for issuance to the Investor in accordance with the Company's obligations under this Agreement and the Warrant.

(b) The issuance of the Securities has been duly authorized by all requisite corporate action. When the Shares, the Put Shares and the Warrant Shares are issued, sold and delivered in accordance with the terms of this Agreement and the Warrant for the consideration expressed herein and therein, the Shares, the Put Shares and the Warrant Shares will be duly and validly issued and outstanding, fully paid, and nonassessable, and will be free of all liens and restrictions on transfer other than restrictions on transfer under this Agreement and under applicable state and federal securities laws and the Investor shall be entitled to all rights accorded to a holder of

shares of Common Stock. When the Warrant is issued and sold for the consideration expressed herein, the Warrant will be the valid and legally binding obligation of the Company, enforceable in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) Bankruptcy Laws.

4.4 ***No Conflicts***.

(a) The execution, delivery and performance of this Agreement, and any other document or instrument contemplated hereby, including the Warrant, by the Company and the consummation by the Company of the transactions contemplated hereby, do not and will not:

(i) violate any provision of the certificate of incorporation or by-laws of the Company;

(ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Company is a party where such default or conflict would constitute a Material Adverse Change;

(iii) create or impose a Lien, charge or encumbrance on any property or assets of the Company under any agreement or any commitment to which the Company is a party or by which the Company is bound, which would constitute a Material Adverse Change;

(iv) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, writ, judgment or decree (including federal and state securities laws and regulations) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company are bound or affected where such violation would constitute a Material Adverse Change; or

(v) require any consent of any third-party that has not been obtained pursuant to any material contract to which the Company is subject or to which any of its assets, operations or management may be subject where the failure to obtain any such consent would constitute a Material Adverse Change.

(b) Assuming the accuracy of the relevant representations and agreements of the Investor set forth herein, the Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental agency or other Person in connection with the execution, delivery or performance of any of its obligations under the Transaction Documents (including the issuance, sale and delivery of the Securities), other than:

(i) any required filings or approvals under the HSR Act or any foreign antitrust or competition laws, requirements or regulations;

(ii) the filing of the applicable listing of additional shares notification with Nasdaq; and

(iii) any required filings pursuant to the Exchange Act or the rules of the Commission.

4.5 ***Compliance***. The Company is not, and the execution and delivery of each of the Transaction Documents and the consummation of the transactions contemplated thereby will not cause the Company (in each case, other than as would not, individually or in the aggregate, constitute a Material Adverse Change) to be:

(a) in violation or default of any provision of any instrument, mortgage, deed of trust, loan, contract, commitment filed with the Commission Documents (as defined below);

(b) in violation of any provision of any judgment, decree, order or obligation to which it is a party or by which it or any of its properties or assets are bound; or

(c) to its Knowledge, in violation of any federal, state or local statute, rule or governmental regulation.

4.6 ***Capitalization***. The authorized share capital consists of 125,000,000 shares of Common Stock and 5,000,000 shares of preferred stock, par value $0.0001 per share ("Preferred Stock"). As of October 31, 2019 (the "Reference Date"), there were 91,074,671 shares of Common Stock issued and outstanding and 350,000 shares of Preferred Stock issued and outstanding. Since the Reference Date, the Company has not issued any capital stock since the Reference Date other than pursuant to (i) employee benefit plans disclosed in the Commission Documents and (ii) outstanding warrants, options issued under the Company's stock incentive plans, or other securities disclosed in the Commission Documents. Except as set forth in the Commission Documents or for options to acquire shares of Common Stock granted under the Company's stock incentive plans disclosed in the Commission Documents, there are no outstanding rights (including, without limitation, preemptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any unissued shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind to which the Company is a party and relating to the issuance or sale of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options. Without limiting the foregoing, no preemptive right, co-sale right, right of first refusal, registration right, or other similar right exists with respect to the Shares, the Put Shares or the Warrant Shares or the issuance and sale thereof. There are no shareholder agreements, voting agreements or other similar agreements with respect to the voting of Common Stock to which the Company is a party or, to the Knowledge of the Company, between or among any of the Company's shareholders.

4.7 ***Commission Documents, Financial Statements***.

(a) The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and, during the past twelve (12) months, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the Commission pursuant to the reporting requirements of the Exchange Act, including material filed pursuant to Section 13(a) or 15(d) of the Exchange Act (all of the foregoing, including filings incorporated by reference therein, being referred to herein as the "Commission Documents").

(b) As of its date, each Commission Document filed within the past twelve (12) months complied in all material respects with the requirements of the Exchange Act and the rules and regulations of the Commission promulgated thereunder applicable to such document, and, as of its date, after giving effect to the information disclosed and incorporated by reference therein, no such Commission Document contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the Commission Documents filed with the Commission during the past twelve (12) months complied as to form and substance in all material respects with applicable accounting requirements and the published rules and regulations of the Commission or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles ("GAAP") applied on a consistent basis during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements), and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

(c) The Common Stock is currently listed or quoted on the Nasdaq Global Select Market. The Company is not in violation of the listing requirements of Nasdaq and has no Knowledge of any facts that would reasonably lead to delisting or suspension of its Common Stock from the Nasdaq Global Select Market in the foreseeable future.

4.8 ***Internal Controls and Procedures.*** The Company maintains disclosure controls and procedures as such terms are defined in, and required by, Rule 13a-15 and Rule 15d-15 under the Exchange Act. Such disclosure controls and procedures are effective as of the latest date of management's evaluation of such disclosure controls and procedures as set forth in the Commission Documents to provide reasonable assurance that all material information required to be disclosed by the Company in the reports that it files or furnishes under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Commission. The Company maintains a system of internal controls over financial reporting sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations and (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP.

4.9 ***Material Adverse Change***. Except as disclosed in the Commission Documents, since September 30, 2019, no event or series of events has or have occurred that would, individually or in the aggregate, constitute a Material Adverse Change.

4.10 ***No Undisclosed Liabilities***. To the Company's Knowledge, neither the Company nor any of its Subsidiaries has any liabilities, obligations, claims or losses (whether liquidated or unliquidated, secured or unsecured, absolute, accrued, contingent or otherwise) that would be required to be disclosed on a balance sheet of the Company or any of its Subsidiaries (including the notes thereto) in conformity with GAAP and are not disclosed in the Commission Documents, other than those incurred in the ordinary course of the Company's or its Subsidiaries' respective businesses since September 30, 2019.

4.11 ***No Undisclosed Events or Circumstances***. Except for the transactions contemplated by the Transaction Documents, no event or circumstance has occurred or exists with respect to the Company, its Subsidiaries, or their respective businesses, properties, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed and which, individually or in the aggregate, would constitute a Material Adverse Change.

4.12 ***Actions Pending***. There is no action, suit, claim, investigation or proceeding pending or, to the Knowledge of the Company, threatened against the Company or any Subsidiary which questions the validity of this Agreement or the transactions contemplated hereby or any action taken or to be taken pursuant hereto. Except as set forth in the Commission Documents, there is no action, suit, claim, investigation or proceeding pending or, to the Knowledge of the Company, threatened, against or involving the Company, any Subsidiary, or any of their respective properties or assets that would be reasonably expected to result in a Material Adverse Change. Except as set forth in the Commission Documents, no judgment, order, writ, injunction or decree or award has been issued by or, to the Knowledge of the Company, requested of any court, arbitrator or governmental agency which would be reasonably expected to result in a Material Adverse Change.

4.13 ***Compliance with Law***. The businesses of the Company and its Subsidiaries have been and are presently being conducted in accordance with all applicable federal, state and local governmental laws, rules, regulations and ordinances, except as would not reasonably be expected to cause a Material Adverse Change. The Company and each of its Subsidiaries have all franchises, permits, licenses, consents and other governmental or regulatory authorizations and approvals necessary for the conduct of its business as now being conducted by it, except for such franchises, permits, licenses, consents and other governmental or regulatory authorizations and approvals, the failure to possess which, individually or in the aggregate, would not reasonably be expected to constitute a Material Adverse Change.

4.14 ***Exemption from Registration, Valid Issuance***. Subject to, and in reliance on, the representations, warranties and covenants made herein by the Investor, the issuance and sale of the Securities in accordance with the terms and on the bases of the representations and warranties set forth in this Agreement, may and shall be properly issued pursuant to Section 4(a)(2) of the Securities Act, Regulation D and/or any other applicable federal and state securities laws. The sale and issuance of the Securities pursuant to, and the Company's performance of its obligations under, this Agreement will not (i) result in the creation or imposition of any liens, charges, claims or other encumbrances upon any of the Securities or any of the assets of the Company, or (ii) entitle the holders of any outstanding shares of capital stock of the Company to preemptive or other rights to subscribe to or acquire any of the Securities or other securities of the Company.

4.15 ***Transfer Taxes***. All stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Shares and the Warrant to be sold to Investor hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been fully complied with.

4.16 ***Investment Company***. The Company is not and, after giving effect to the offering, sale and issuance of the Securities will not be an "investment company" as defined in the Investment Company Act of 1940, as amended.

4.17 ***License Agreement***.

(a) *Agreements*. Attached hereto as Exhibit E is a true, correct and complete copy of the License Agreement. The Company has made available to the Investor, in the data room, true, correct and complete copies of the following communications between the Company and Licensee under the License Agreement since March 12, 2015: (x) all written minutes of, and written documents delivered to participants at meetings of the JSC (as defined in the License Agreement) and meetings of any Subcommittees (as defined in the License Agreement) thereof and senior management meetings conducted pursuant to Section 4.3 of the License Agreement, and (y) all other material written communications delivered to the Company related to the License Agreement or the Licensed Product.

(b) *No Other Agreements*. Apart from the Licensee Consent when executed, and except as set forth on Schedule 4.17(b) of the Disclosure Schedule, the License Agreement is the only agreement, instrument, arrangement, waiver or understanding between the Company (or any predecessor or Affiliate thereof), on the one hand, and Licensee (or any predecessor or Affiliate thereof), on the other hand, relating to the Licensed Products and the Japan Royalty, and there are no other agreements, instruments, arrangements, waivers or understandings between the Company (or any predecessor or any Affiliate thereof), on the one hand, and Licensee (or any predecessor or Affiliate thereof), on the other hand, that relate to the License Agreement, the Licensed IP, the Licensed Products (including the development or commercialization thereof), or the Japan Royalty. The Company has not proposed or received any proposal, to amend or waive any provision of the License Agreement since July 1, 2018.

(c) *Licenses/Sublicenses*. Except as set forth on Schedule 4.17(c) of the Disclosure Schedule, to the Knowledge of the Company, there are no licenses or sublicenses entered into by Licensee or any other Person (or any predecessor or Affiliate thereof) in respect of Licensee's rights and obligations under the License Agreement (including any Licensed IP) in the Eisai Territory.

(d) *Validity and Enforceability of License Agreement*. The License Agreement is a valid and binding obligation of the Company and the Licensee in accordance with its terms. The License Agreement is enforceable against the Company and the Licensee in accordance with its terms, except as may be limited by applicable Bankruptcy Laws or by general principles of equity (whether considered in a proceeding in equity or at law) or by any Credit Event. The Company has not received any notice in connection with the License Agreement challenging the validity, enforceability or interpretation of any provision of the License Agreement, including Licensee's obligation to pay any portion of the Japan Royalty without set-off of any kind.

(e) *Licensed Product*. Tazemetostat is a Licensed Product under the License Agreement. Licensee is obligated to pay royalties under Article 6 thereof on all sales of any Licensed Product in the Eisai Territory.

(f) *No Liens or Assignments by the Company*. The Company has not, except as contemplated hereby, conveyed, assigned or in any other way transferred or granted any liens upon or security interests with respect to all or any portion of its right, title and interest in and to the Japan Royalty, the Licensed Epizyme IP or the License Agreement.

(g) *No Waivers or Releases*. The Company has not granted any material waiver under the License Agreement and has not released Licensee, in whole or in part, from any of its material obligations under the License Agreement.

(h) *No Termination*. The Company has not (i) given Licensee any notice of termination of the License Agreement (whether in whole or in part) or any notice expressing any intention or desire to terminate the License Agreement or (ii) received any notice of termination of the License Agreement (whether in whole or in part) or any notice expressing any intention or desire to terminate the License Agreement. To the Knowledge of the Company, no event has occurred that would give rise to the expiration or termination of the License Agreement.

(i) *No Breaches or Defaults*. There is and has been no material breach or default under any provision of the License Agreement either by the Company (or any predecessor thereof) or, to the Knowledge of the Company, by Licensee (or any predecessor thereof), and there is no event that upon notice or the passage of time, or both, would reasonably be expected to give rise to any breach or default either by the Company or, to the Knowledge of the Company, by Licensee.

(j) *Payments Made*. The Company has received from Licensee the full amount of the payments due and payable under the License Agreement by Licensee to the Company. The Company (or any predecessor thereof) has received no other payments from Licensee under or related to the License Agreement since March 12, 2015.

(k) *No Assignments by Licensee*. The Company has not consented to any assignment or other transfer by Licensee or any of its predecessors of any of their rights or obligations under the License Agreement, and, to the Company's Knowledge, Licensee has not assigned or otherwise transferred or granted any liens upon or security interest with respect to any of its rights or obligations under the License Agreement or any portion of its right, title and interest in and to the Licensed Eisai IP, in each case, to any Person.

(l) *No Indemnification Claims*. The Company has not notified Licensee or any other Person of any claims for indemnification under the License Agreement nor has the Company received any claims for indemnification under the License Agreement, whether pursuant to Article 11 thereof or otherwise.

(m) *No Royalty Reductions*. As of the date hereof, there is no Japan Royalty due and payable under Section 6.4.1(a) of the License Agreement. To the Knowledge of the Company, no event or condition exists that, upon notice or passage of time or both, would reasonably be expected to permit Licensee to make, or have the right to make, any claim against the Company pursuant to (i) any right of set-off, counterclaim, credit, reduction or deduction by contract or otherwise (a "Royalty Reduction") or (ii) a Permitted Reduction set forth in Sections 6.4.3, 6.4.4 or 8.4 of the License Agreement in respect of the Japan Royalty.

(n) *No Notice of Infringement*. The Company has not received any written notice from, or given any written notice to, Licensee pursuant to Section 8.4 or Section 8.5.1 of the License Agreement.

(o) *Audits*. The Company has not initiated, pursuant to Section 6.8.2 of the License Agreement or otherwise, any inspection or audit of books of accounts or other records pertaining to Net Sales of Licensed Products in the Eisai Territory, or to the calculation of royalties or other amounts payable by Licensee to the Company under the License Agreement.

4.18 ***Title to Royalty***. The Company has good and marketable title to the Japan Royalty free and clear of all Liens (other than Permitted Liens). Upon payment of the Closing Purchase Price to the Company by the Investor at the Closing, the Investor will acquire, subject to the terms and conditions set forth in this Agreement and the License Agreement, good and marketable title to the Japan Royalty, free and clear of all Liens (other than Liens created by the Investor).

4.19 ***Intellectual Property***.

(a) Schedule 4.19(a) of the Disclosure Schedule lists all Licensed Eisai Patents, Licensed Epizyme Patents and Joint Patents (collectively, the "Licensed Patents"). The Company is the sole owner of, and has the sole interest in, all of the Licensed Epizyme Patents. To the Knowledge of Company, Licensee is the sole owner of, and has the sole interest in, all of the Licensed Eisai Patents. The Company and Licensee collectively are the sole owners of, and collectively have the sole interest in, the Joint Patents, and the Company is the sole owner of, and has the sole interest in, its undivided half interest in each of the Joint Patents. Schedule 4.19(a) of the Disclosure Schedule specifies as to each of the Licensed Patents, as applicable, the jurisdictions by or in which each such patent has issued as a patent or such patent application has been filed, including the respective patent numbers and application numbers and issue and filing dates, and the record owner of each such patent or patent application.

(b) Except as set forth in Schedule 4.19(b) of the Disclosure Schedule, there are no pending or, to the Knowledge of the Company, threatened litigations, interferences, reexamination, oppositions or like procedures involving any Licensed Epizyme Patent or Joint Patent. To the Knowledge of the Company, there are no pending or threatened litigations, interferences, reexamination, oppositions or the like procedures involving any Licensed Eisai Patents.

(c) All of the issued Licensed Epizyme Patents and issued Joint Patents are in full force and effect and have not lapsed, expired or otherwise terminated, and, to the Knowledge of the Company, are valid and enforceable. The Company has not received any written notice relating to the lapse, expiration or other termination of any of the issued Licensed Epizyme Patents or issued Joint Patents, or any written legal opinion that alleges that any of the issued Licensed Epizyme Patents or issued Joint Patents is invalid or unenforceable. To the Knowledge of the Company, all of the issued Licensed Eisai Patents are in full force and effect and have not lapsed, expired or otherwise terminated, and are valid and enforceable.

(d) There is no Person who is or claims to be an inventor under any of the owned Licensed Epizyme Patents or the Joint Patents who is not a named inventor thereof.

(e) The Company has not, and, to the Knowledge of the Company, Licensee has not, received any written notice of any claim by any Person challenging inventorship or ownership of, the rights of the Company or Licensee, as applicable, in and to, or the patentability, validity or enforceability of, any Licensed Patent, or asserting that the development, manufacture, importation, sale, offer for sale or use of any Licensed Product infringes any patent or other intellectual property rights of such Person.

(f) To the Knowledge of the Company, the discovery and development of any Licensed Product did not and has not infringed, violated or misused any patent or other intellectual property rights owned by any third party. The Company has not, except as set forth in Schedule 4.19(f) of the Disclosure Schedule, and, to the Knowledge of the Company, Licensee has not, in-licensed any intellectual property right covering the manufacture, use, sale, offer for sale or import of any Licensed Product.

(g) To the Knowledge of the Company, the manufacture, use, marketing, sale, offer for sale, importation or distribution of any Licensed Product has not and will not, infringe, misappropriate or otherwise violate any patent rights or other intellectual property rights owned by any other Person, including the UNC Patents.

(h) To the Knowledge of the Company, there is no, nor has there been any, infringement or misappropriation or other violation of, any of the Licensed Patents or any other patent right claiming the composition of matter of, or the method of making or using, any Licensed Product by any third party.

(i) All required maintenance fees, annuities and like payments with respect to the Licensed Patents for which Company controls the prosecution and maintenance in accordance with Section 8.2 of the License Agreement, and to the Knowledge of the Company, with respect to all other Licensed Patents, have been timely paid.

4.20 ***UCC Representation and Warranties***. The Company's exact legal name is, and for the immediately preceding ten years has been, "Epizyme, Inc.". The Company is, and for the prior ten years has been, incorporated under the laws of the State of Delaware.

4.21 ***Brokers***. There is no investment banker, broker, finder, financial advisor or other intermediary who has been retained by or is authorized to act on behalf of the Company who might be entitled to any fee or commission in connection with the transactions contemplated by this Agreement.

SECTION 5

Representations and Warranties of the Investor

The Investor hereby represents and warrants the following as of the date hereof:

5.1 ***Experience***. The Investor is experienced in evaluating companies such as the Company, has such knowledge and experience in financial and business matters that the Investor is capable of evaluating the merits and risks of the Investor's prospective investment in the Company, and has the ability to bear the economic risks of the investment.

5.2 ***Investment***. The Investor is acquiring the Japan Royalty, the Shares and the Warrant, and, upon exercise or conversion of the Warrant, the Warrant Shares, and, when and if issued and sold in accordance with Section 2.1(b), the Put Shares, for investment for the Investor's own account and not with the view to, or for resale in connection with, any distribution thereof. The Investor understands that the Securities have not been and will not be registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. The Investor further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Securities.

5.3 ***Rule 144***. The Investor acknowledges that the Securities must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. The Investor is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. In connection therewith, the Investor acknowledges that the Company will make a notation on its stock books regarding the restrictions on transfers set forth in this Section 5, subject to Section 9.2, and will transfer the Shares, the Put Shares and the Warrant Shares on the books of the Company only to the extent not inconsistent herewith and therewith.

5.4 ***Access to Information***. The Investor has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities. The Investor has had a full opportunity to ask questions of and receive answers from the Company, or any person or persons acting on behalf of the Company, concerning the terms and conditions of the purchase of the Japan Royalty and an investment in the Securities. The Investor is not relying upon, and has not relied upon, any statement, representation or warranty made by any person, except for the statements, representations and warranties contained in this Agreement.

5.5 ***Enforceability***. This Agreement when executed and delivered by the Investor will constitute a valid and legally binding obligation of the Investor, enforceable in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) Bankruptcy Laws.

5.6 ***Authorization***. The Investor has the requisite trust power and authority to enter into and perform its obligations under the Transaction Documents

. The execution, delivery and performance of the Transaction Documents by the Investor and the consummation by the Investor of the transactions contemplated thereby have been duly authorized by all necessary corporate action on the part of its owner trustee and no further consent or authorization of the Investor and its owner trustee is required.

5.7 ***No Conflicts.***

(a) The execution, delivery and performance of this Agreement, and any other document or instrument contemplated hereby, by the Investor and the consummation by the Investor of the transactions contemplated hereby, do not and will not:

(i) violate any provision of the organizational documents of the Investor;

(ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Investor is a party;

(iii) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, writ, judgment or decree (including federal and state securities laws and regulations) applicable to the Investor or any of its Subsidiaries; or

(iv) require any consent of any third-party that has not been obtained pursuant to any material contract to which the Investor is subject.

(b) Assuming the accuracy of the relevant representations and agreements of the Company set forth herein, the Investor is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental agency or other Person in connection with the execution, delivery or performance of any of its obligations under the Transaction Documents, other than any required filings or approvals under the Exchange Act, the HSR Act or any foreign antitrust or competition laws, requirements or regulations.

5.8 ***Investor Status***. The Investor acknowledges that it is either (i) an institutional “accredited investor” as defined in Rule 501(a) of Regulation D or (ii) a “qualified institutional Investor” as defined in Rule 144A of the Securities Act, as indicated on Schedule A hereto, and the Investor shall submit to the Company such further assurances of such status as may be reasonably requested by the Company.

5.9 ***No Inducement***. The Investor was not induced to participate in the offer and sale of the Securities by the filing of any registration statement in connection with any public offering of the Company's securities, and the Investor's decision to purchase the Shares hereunder was not influenced by the information contained in any such registration statement.

SECTION 6

Covenants

6.1 ***Efforts to Consummate Transactions***. Subject to the terms and conditions of this Agreement, each of the Company and the Investor shall use its commercially reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, all things reasonably necessary under applicable law to consummate the transactions contemplated by the Transaction Documents. Each of the Company and the Investor agrees to execute and deliver such other documents, certificates, agreements and other writings and to take such other actions as may be reasonably necessary in order to consummate or implement expeditiously the transactions contemplated by the Transaction Documents.

6.2 ***Authorization and Reservation of Warrant Shares and Put Shares***. The Company covenants to continue to keep authorized and reserved, free of preemptive rights and other similar contractual rights of stockholders, a sufficient number of shares of Common Stock for issuance to the Investor (i) in accordance with the Company's obligations under the Warrant and (ii) in accordance with Section 2.1(b) hereof.

6.3 ***Exchange Listing***. Promptly following the date hereof, the Company shall prepare and file the applicable listing of additional shares notification with Nasdaq and use its reasonable best efforts to cause the Shares, the Put Shares and the Warrant Shares to be approved for listing on Nasdaq Global Select Market as promptly as practicable and in any event before the Closing.

6.4 ***Antitrust Approval***. The Company and the Investor acknowledge that (a) no filing under the HSR Act is necessary before or at the Closing, and (b) a filing under the HSR Act may be necessary in connection with the acquisition of Warrant Shares or Put Shares contemplated by the Transaction Documents. The Investor will notify the Company if any such filing is required on the part of the Investor (x) in advance of exercise of the Warrant or (y) promptly following the Company's exercise of the Put Option. The Company, the Investor and any other applicable Affiliate of the Investor or of the Company will use reasonable best efforts to cooperate in timely making or causing to be made all required applications and filings under the HSR Act (and other applicable antitrust laws) in connection with the acquisition of Warrant Shares or the Put Shares in a timely manner. In furtherance (and without limitation) thereof, each of the Company and the Investor shall (and Investor shall cause its applicable Affiliates to) make any such applications or filings required in connection with the acquisition of Warrant Shares or Put Shares as promptly as practicable (and in any event within five (5) Business Days) after the date the Investor delivers a notice to the Company indicating that such filing is required. For as long as the Warrant or the Put Option is outstanding and owned by the Investor, the Company shall as promptly as reasonably practicable after receipt of the Investor's written request provide (no more than four (4) times per calendar year) such information regarding the Company and its Subsidiaries as the Investor may reasonably request in order to determine whether any antitrust requirements may exist with respect to any potential exercise of the Warrant or the Put Option and issuance of the Warrant Shares or Put Shares (it being understood that the Investor shall keep such information confidential in accordance with Section 7 and the Company shall have no obligation to disclose any information to the extent the disclosure thereof would result in the breach of any contract to which the Company is a party or the violation of any applicable law, rule, regulation

or stock exchange requirement). Except to the extent prohibited by applicable law, each of the Investor and the Company will consult and cooperate with one another, and consider in good faith the views of one another, in connection with, and provide to the other parties in advance, any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made or submitted by or on behalf of any party hereto in connection with proceedings under or relating to the HSR Act or any other applicable antitrust law. The Investor and the Company shall each use reasonable best efforts to satisfy the conditions set forth in Section 8.5 and Section 9.3 on or prior to the date specified in Section 12.1(b).

6.5 ***Board Nomination***. The Company agrees to appoint Pablo Legorreta to the Board of Directors, effective as of the Closing (or such later date as may be mutually agreed by the Company and the Investor), by taking all necessary action to increase the size of the Board of Directors prior to the Closing unless there otherwise is a vacancy in the Board of Directors and in either event filling the vacancy thereby created with such individual. The initial Investor Designee described in the immediately preceding sentence shall be appointed as a "Class III" director.

6.6 ***Section 16 Matters***. If the Company becomes a party to a consolidation, merger or other similar transaction or if there is any event or circumstance that may result in the Investor or the Investor Designee being deemed to have made a disposition or acquisition of equity securities of the Company or derivatives thereof for purposes of Section 16 of the Exchange Act, and if the Investor Designee is serving or participating on the Board of Directors at such time or has served on the Board of Directors during the preceding six months, then upon request of the Investor or the Investor Designee, (i) the Board of Directors or a committee of the Board of Directors composed solely of two or more "non-employee directors" as defined in Rule 16b-3 of the Exchange Act will pre-approve such acquisition or disposition of equity securities of the Company or derivatives thereof for the express purpose of exempting the Investor's and/or the Investor Designee's interests (in each case, to the extent such person may be deemed to be a director or "director by deputization") in such transaction from Section 16(b) of the Exchange Act pursuant to Rule 16b-3 thereunder to the extent applicable and (ii) if the transaction involves (A) a merger or consolidation to which the Company is a party and the Common Stock is, in whole or in part, converted into or exchanged for equity securities of a different issuer, (B) a potential acquisition or deemed acquisition, or disposition or deemed disposition, by the Investor or the Investor Designee of equity securities of such other issuer or derivatives thereof and (C) an Affiliate or other designee of the Investor or its Affiliates will serve on the board of directors (or its equivalent) of such other issuer, then the Company shall require that such other issuer pre-approve any such acquisitions of equity securities or derivatives thereof for the express purpose of exempting the interests of the Investor or the Investor Designee (in each case, to the extent such persons may be deemed to be a director or "directors by deputization" of such other issuer) in such transactions from Section 16(b) of the Exchange Act pursuant to Rule 16b-3 thereunder to the extent applicable.

6.7 ***D&O Indemnification; Insurance Priority Matters***. The Investor Designee shall be entitled to enter into the Company's standard form of indemnification agreement, a copy of which has been publicly filed with the Commission. The Company acknowledges and agrees that the Investor Designee may have certain rights to indemnification, advancement of expenses and/or insurance provided by the Investor or its Affiliates (collectively, the "Investor Indemnitors"). The Company acknowledges and agrees that the Company shall be the indemnitor of first resort with respect to any indemnification, advancement of expenses and/or insurance provided in the Company's certificate of incorporation, bylaws and/or indemnification agreement to the Investor Designee, in his or her capacity as a director of the Company (such that the Company's obligations to such indemnitee in his or her capacities as director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification or insurance for the same expenses or liabilities incurred by such indemnitees are secondary). Such indemnitee shall, in his or her capacities as director, be entitled to all the rights to indemnification, advancement of expenses and entitled to insurance to the extent provided under (i) the certificate of incorporation and/or bylaws of the Company as in effect from time to time and/or (ii) such other agreement, if any, between the Company and such indemnitee, without regard to any rights such indemnitee may have against the Investor Indemnitors. No advancement or payment by the Investor Indemnitors on behalf of such indemnitees with respect to any claim for which such indemnitees have sought indemnification, advancement of expenses or insurance from the Company in their capacities as directors shall affect the foregoing and the Investor Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such indemnitees against the Company.

6.8 ***Disclosures***. Except for a press release previously approved in form and substance by the Company and the Investor or any other public announcement using substantially the same text as such press release, neither the Company nor the Investor shall, and each party hereto shall cause its respective Representatives, Affiliates and Affiliates' Representatives not to, issue a press release or other public announcement or otherwise make any public disclosure with respect to the terms of the Transaction Documents or the subject matter hereof without the prior written consent of the other party hereto (which consent shall not be unreasonably withheld, conditioned or delayed), except as may be required by applicable law or stock exchange rule (in which case the party hereto required to make the press release or other public announcement or disclosure shall allow the other party hereto reasonable time to comment on such press release or other public announcement or disclosure in advance of such issuance).

6.9 ***Payments Received in Error; Interest***.

(a) Commencing on the Closing Date and at all times thereafter, if any payment of any portion of the Japan Royalty is made to the Company, the Company shall pay such amount to the Investor, promptly (and in any event within five (5) Business Days) after the receipt thereof, by wire transfer of immediately available funds to an account designated in writing by the Investor, without any deduction, recoupment, or offset for any reason whatsoever. The Company shall notify the Investor of such wire transfer and provide reasonable details regarding the Japan Royalty payment so received by the Company. The Company agrees that, in the event any portion of the Japan Royalty is paid to the Company, the Company (i) until paid to the Investor, shall hold such payment received in trust for the benefit of the Investor, and (ii) shall have no right, title or interest in such payment and shall not pledge or otherwise grant any security interest in such payment.

(b) Commencing on the Closing Date and at all times thereafter, if any payment due under the License Agreement that does not constitute the Japan Royalty, or to which the Investor is not entitled under the Eisai Royalty Purchase Agreement, is made to the Investor, the Investor shall pay such amount to the Company, promptly (and in any event within five (5) Business Days) after the receipt thereof, by wire transfer of immediately available funds to an account designated in writing by the Company, without any deduction, recoupment, or offset for any reason whatsoever. The Investor shall notify the Company of such wire transfer and provide reasonable details regarding the erroneous payment so received by the Investor. The Investor agrees that, in the event any payment due under the License Agreement that does not constitute the Japan Royalty, or to which the Investor is not entitled under the Eisai Royalty Purchase Agreement, is paid to the Investor, the Investor (i) until paid to the Company, shall hold such payment received in trust for the benefit of the Company, and (ii) shall have no right, title or interest in such payment and shall not pledge or otherwise grant any security interest in such payment.

(c) A late fee of 4% over the Prime Rate shall accrue on all unpaid amounts with respect to any sum payable under Section 6.9(a) or 6.9(b) beginning five (5) Business Days after notice that such payment was received in error.

6.10 ***Royalty Reduction***. If Licensee exercises any Royalty Reduction against any payment of the Japan Royalty other than for a Permitted Reduction, and if such Royalty Reduction reduces any amount paid to the Investor on account of the Japan Royalty to below the amount that would have been received by the Investor on account of the Japan Royalty had such Royalty Reduction other than a Permitted Reduction not been exercised by Licensee, then the Company shall promptly (and in any event within five (5) Business Days following the payment of the Japan Royalty affected by such Royalty Reduction) make a true-up payment to the Investor such that the Investor receives the full amount of such Japan Royalty payment that would have been payable to the Investor had such Royalty Reduction, other than a Permitted Reduction, not occurred. For the avoidance of doubt, any nonpayment by Licensee as a result of a Credit Event shall not constitute a Royalty Reduction for purposes of this Section 6.10 and shall not obligate the Company to make any payment under this Section 6.10.

6.11 ***Royalty Reports***. Promptly (and in any event within five (5) Business Days) following the receipt by the Company of any Eisai Royalty Report, notice, correspondence or other confidential information provided to the Company under the License Agreement that, to the Company's Knowledge, the Licensee has not provided to the Investor directly, the Company shall furnish a true, correct and complete copy of the same to the Investor.

6.12 ***Notices and Other Information to the Licensee***. The Company and the Investor shall consult prior to the Company sending any material written notice or correspondence to Licensee relating to, or involving, the Japan Royalty, the Licensed IP or the License Agreement that would reasonably be expected to result in a Material Adverse Change. Except for such notices and correspondence required to be given or made by the Company under the License Agreement that would not reasonably be expected to result in a Material Adverse Change, the Company shall not send any such notice or correspondence without the prior written consent of the Investor. The Company shall send to the Investor a copy of each notice and correspondence send by the Company to the License that relates to, or involves, the Japan Royalty, the Licensed IP or the License Agreement.

6.13 ***Inspections and Audits.***

(a) At the written request of the Investor, the Company shall, to the extent permitted under Section 6.8.2 of the License Agreement, cause an inspection or audit by an independent public accounting firm to be made for the purpose of determining the correctness of the Japan Royalty payments made under the License Agreement. With respect to any inspection requested by the Investor, the Company shall, for purposes of Section 6.8.2 of the License Agreement, select such independent public accounting firm as the Investor shall recommend for such purpose (as long as such independent certified public accountant is reasonably acceptable to Licensee as required by Section 6.8.2 of the License Agreement). The Company shall not, without the Investor's prior written consent, cause an inspection or audit to be made under Section 6.8.2 of the License Agreement. The Investor shall pay the Company the expenses of any inspection or audit (including the fees and expenses of such independent public accounting firm designated for such purpose) that would otherwise be borne by the Company pursuant to the License Agreement (if and as such expenses are actually incurred by the Company).

(b) If the Company elects, in accordance with Section 3.2(b) to offset any Applicable Reduction Payments against the Investor WW Royalty Payment, then, following such election made in accordance with Section 3.2(b), upon at least fourteen (14) Business Days' written notice and during normal business hours, no more frequently than once per calendar year, the Investor may cause an inspection and/or audit by an independent public accounting firm reasonably acceptable to the Company to be made of the Company's books of account for the three (3) calendar years prior to the audit for the purpose of determining the correctness of any Applicable Reduction Payment offset against the Investor WW Royalty Payment. All of the expenses of any inspection or audit caused by the Investor hereunder (including the fees and expenses of such independent public accounting firm designated for such purpose) shall be borne by (i) the Investor if the independent public accounting firm determines that an Applicable Reduction Payment was incorrect by an amount less than five percent (5%) of the Applicable Reduction Payment actually offset or (ii) the Company if the independent public accounting firm determines that an Applicable Reduction Payment was incorrect by an amount equal to or greater than five percent (5%) of the Applicable Reduction Payment actually offset. All information obtained by the Investor as a result of any such inspection or audit shall be Confidential Information of the Company subject to Section 7 and the independent public accounting firm shall be considered a Representative of the Investor for purposes of Section 7.

6.14 ***Amendment or Assignment of License Agreement***. The Company shall not, without the Investor's prior written consent, assign, amend, modify, supplement or restate (or consent to any assignment, amendment, modification, supplement or restatement of) any provision of the License Agreement in any manner that would reasonably be expected to result in a Material Adverse Change. Subject to the foregoing, promptly, and in any event within five (5) Business Days, following receipt by the Company of any final assignment, amendment, modification, supplement or restatement of the License Agreement, the Company shall furnish a copy of the same to the Investor.

6.15 ***Maintenance of Agreements***. The Company shall comply in all material respects with its obligations under the License Agreement and shall not take any action or forego any action that would reasonably be expected to constitute a material breach thereof or default thereunder by the Company that would reasonably be expected to result in a Material Adverse Change. Promptly, and in any event within five (5) Business Days, after receipt of any (written or oral) notice from Licensee

of an alleged breach or default by the Company under the License Agreement, the Company shall give notice thereof to the Investor, including delivering to the Investor a copy of any such written notice. The Company shall use its reasonable best efforts to cure any breaches or defaults by it and shall give written notice to the Investor upon curing any such breach or default. The Company shall consult with the Investor as to any action the Company proposes to take to dispute or cure any such breach or default under the License Agreement, and in connection with any dispute regarding such breach or default under the License Agreement, shall employ such counsel, reasonably acceptable to the Company, as the Investor may select. The Company shall not, without the prior consent of the Investor, (a) forgive, release or compromise any amount owed to or becoming owed to the Company under the License Agreement in respect of the Japan Royalty or (b) waive any obligation of, or grant any consent to, Licensee under, in respect of or related to the Japan Royalty, provided that neither the occurrence of a Credit Event nor any automatic effect of a Credit Event under the License Agreement without an affirmative action of the Company shall itself be deemed any forgiving, release, compromise, waiver, or consent by the Company. The Company shall not exercise or enforce its applicable rights under the License Agreement in any manner that would be reasonably likely to result in a Material Adverse Change.

6.16 ***Enforcement of Agreements.***

(a) Notice of Breaches by Licensee. Promptly (and in any event within five (5) Business Days) after the Company becomes aware of, or comes to believe in good faith that there has been, a breach of the License Agreement by Licensee, the Company shall provide notice of such breach to the Investor. In addition, the Company shall provide to the Investor a copy of any written notice of breach or alleged breach of the License Agreement delivered by the Company to Licensee as soon as practicable and in any event not less than five (5) Business Days following such delivery.

(b) Enforcement of License Agreement. In the case of any breach by Licensee referred to in Section 6.16(a), the Company shall consult with the Investor regarding the timing, manner and conduct of any enforcement of Licensee's obligations under the License Agreement. The Company shall, (i) if (and only if) requested in writing by the Investor, within ten (10) Business Days after receipt of such request, exercise such rights and remedies relating to any such breach related to the Eisai Territory as shall be available to the Company, whether under the License Agreement or by operation of law, as instructed by the Investor, and (ii) if requested by the Investor, the Company shall employ such counsel reasonably acceptable to the Company as the Investor shall recommend for such purpose.

(c) Allocation of Proceeds and Costs of Enforcement. The Investor shall pay all costs and expenses incurred by the Investor and the Company (including the fees and expenses of attorneys engaged jointly or separately by the Investor and the Company) of any enforcement pursuant to this Section 6.16 undertaken at the Investor's request, as they are incurred and paid. All Proceeds resulting from any enforcement of Licensee's obligations under the License Agreement that relate to the Japan Royalty and are undertaken at the Investor's request pursuant to this Section 6.16 shall be paid to the Investor. The Company hereby assigns and, if not presently assignable, agrees to assign to the Investor the amount of Proceeds due to the Investor in accordance with this Section 6.16(c).

6.17 ***Termination of Agreements***

(a) The Company shall not exercise any right to terminate the License Agreement, agree with Licensee to terminate the License Agreement, or take, or permit any Affiliate or sublicensee to take, any action that would reasonably be expected to give Licensee the right to terminate the License Agreement, under Article 12 of the License Agreement, in each case, except with the prior written consent of the Investor, provided that in no event shall the Company be obligated to prevent any termination of the License Agreement as a result of a Credit Event and not a result of any affirmative action of the Company.

(b) If the License Agreement or Licensee's rights in the Eisai Territory are terminated by the Company pursuant to Section 12.3.1 or Section 12.4 of the License Agreement or by Licensee pursuant to Section 12.2.1(b) (including any deemed termination pursuant to Section 12.2.2) of the License Agreement such that the Company is granted the license and other rights by Licensee under Section 12.5.1(d) (and the remainder of such Section 12.5.1) of the License Agreement (collectively, the "Product Rights"), the Company shall, upon the written request of the Investor, take commercially reasonable efforts to negotiate the terms of a license with a third party under the Licensed IP, to make, have made, use, import, offer for sale and sell the Licensed Products in the Eisai Territory for any purpose that Licensee would have been permitted to make, have made, use, import, offer for sale and sell the Licensed Products in the Eisai Territory under the License Agreement and subject to rights retained, if any, by Licensee following such termination (any such license, a "New Arrangement"). The Company and the Investor shall each provide assistance to, and cooperate with the each other, in connection with the negotiation of a New Arrangement. The Investor shall reimburse the Company for any action taken by the Company at the Investor's written request in connection therewith (including the Investor's payment, upon written demand, of the Company's reasonable attorneys' fees, if any, in connection therewith). Any New Arrangement shall (i) not become effective earlier than the effective date of the termination of the License Agreement in its entirety or as to the Eisai Territory, as the case may be, (ii) include terms, conditions and limitations that are, in the aggregate, not materially more burdensome to the Company than those contained in the License Agreement and (iii) require the advance written consent (not to be unreasonably withheld, conditioned or delayed) of the Investor. The Company agrees to duly execute and deliver one or more agreements effecting such New Arrangement that satisfies the foregoing requirements promptly upon the written request of the Investor.

6.18 ***Preservation of Rights***. The Company shall not hereafter sell, transfer, hypothecate, assign or in any manner convey or mortgage, pledge or grant a security interest or other encumbrance of any kind in any of its interest in any portion of the Licensed Epizyme Patents, Joint Patents, or the License Agreement without the prior written consent of the Investor, except for any transaction in which the Company transfers all or substantially all of its assets and business to which the Licensed Epizyme Patents, Joint Patents, and the License Agreement relate and as part of which the counterparty assumes the obligations of the Company in respect of the Japan Royalty hereunder and subordinates any rights obtained in such transaction to the rights of the Investor to the Japan Royalty as set forth herein. The Company shall not hereafter subject to a Lien (other than a Permitted Lien), sell, transfer, assign, convey title (in whole or in part), grant any right to, or otherwise dispose of any portion of the Japan Royalty.

6.19 ***Enforcement; Infringement Claims; Prosecution.***

(a) The Company shall promptly inform the Investor of any suspected infringement by a third party of any of the Licensed Patents or any other patent right claiming the composition of matter of, or the method of making or using, any Licensed Product in the Eisai Territory. The Company shall provide to the Investor a copy of any written notice of any suspected infringement in the Eisai Territory of any of the Licensed Patents delivered or received under Section 8.5.1 of the License Agreement or otherwise as soon as practicable and in any event not less than five (5) Business Days following such delivery.

(b) If the Company has the right to initiate an enforcement action in the Eisai Territory as set forth in Section 8.5.2 or 8.5.3 of the License Agreement or to defend a Licensed Patent in the Eisai Territory as set forth in Section 8.4 of the License Agreement, the Company shall, if and only if requested in writing by the Investor, promptly, and in any event within five (5) Business Days after receipt of such request, exercise such right as instructed by the Investor and, if requested by the Investor, the Company shall employ such counsel reasonably acceptable to the Company as the Investor shall recommend for such purpose, at the sole cost and expense of the Investor to the extent instructed by the Investor.

(c) The Company shall use commercially reasonable efforts to, or shall cause the same to be done, (i) take any and all actions, and prepare, execute, deliver and file any and all agreements, documents and instruments, that are reasonably necessary or desirable to diligently prosecute, preserve and maintain the Licensed Patents in the Eisai Territory for which it controls the prosecution and maintenance in accordance with Section 8.2 of the License Agreement that are necessary or reasonably useful to develop, make, have made, use, sell, have sold, import or export any Licensed Product, including payment of maintenance fees or annuities on any such Licensed Patents, which shall be reimbursed to the extent provided under Section 8.3 of the License Agreement (ii) prosecute any corrections, substitutions, reissues, reviews and reexaminations of the Licensed Patents in the Eisai Territory for which it controls the prosecution and maintenance in accordance with Section 8.2 of the License Agreement and any other forms of patent term restoration in any applicable jurisdiction in accordance with Section 8.5.8 of the License Agreement, and (iii) not disclaim or abandon, or fail to take any action necessary or desirable to prevent the disclaimer or abandonment, of the Licensed Patents in the Eisai Territory for which it controls the prosecution and maintenance in accordance with Section 8.2 of the License Agreement. For purposes of compliance with this Section 6.19(c), the Company shall employ such counsel, reasonably acceptable to the Company, as the Investor shall recommend for such purpose. Notwithstanding the foregoing, to the extent the Company decides not to file any such Licensed Patent in the Eisai Territory or intends to allow such Licensed Patent to lapse or become abandoned without having first filed a substitute and Licensee does not exercise its step-in rights under Section 8.2.2 of the License Agreement in respect of such Licensed Patent, the Company shall notify and consult with the Investor on such decision or intention at least thirty (30) days prior to the date upon which the subject matter of such Licensed Patent shall become unpatentable or such Licensed Patent shall lapse or become abandoned, and, to the extent the Licensee has declined to step-in to assume, as applicable, the filing, prosecution or maintenance of such Licensed Patent in accordance with Section 8.2.2 of the License Agreement, the Investor shall thereupon have the right (but not the obligation) to assume the same at its own expense with counsel of its own choice. In such case, the Company shall use commercially reasonable efforts to transfer such prosecution and maintenance to the Investor, at the sole cost of the Investor.

6.20 ***Third Party Stacking***. The Company agrees that, if at any time during the Royalty Term (as defined in the License Agreement) of the WW Royalty, the Company is entitled to credit, under Section 6.4.4 of the License Agreement, any amount against the royalties due by the Company to the Licensee on Net Sales of a Licensed Product as a result of any payments, royalties or other amounts of any kind paid to a third party with respect to the Company's license rights, covenant not to sue or any other rights to or under one or more of patents or patent applications, which the Company and Investor have agreed in writing is subject to this Section 6.20, then the Company shall not exercise its right to credit such amount and shall pay the full amount of the WW Royalty due in accordance with the Instruction Letter then in effect as if the Company was not entitled to credit such amount under Section 6.4.4 of the License Agreement.

SECTION 7

Confidentiality

7.1 ***Confidentiality***. Except as provided in this Section 7 or otherwise agreed in writing by the parties, the parties hereto agree that, during the term of this Agreement and for five (5) years thereafter, each party (the "Receiving Party") shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as provided for in this Agreement (which includes the exercise of any rights or the performance of any obligations hereunder) any information furnished to it by or on behalf of the other party (the "Disclosing Party") pursuant to this Agreement (such information, "Confidential Information" of the Disclosing Party), except for that portion of such information that:

(a) was already known to the Receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the Disclosing Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the Receiving Party in breach of this Agreement;

(d) is independently developed by the Receiving Party or any of its Affiliates, as evidenced by written records, without the use of or reference of the Confidential Information; or

(e) is subsequently disclosed to the Receiving Party on a non-confidential basis by a third party without obligations of confidentiality with respect thereto.

7.2 ***Authorized Disclosure***.

(a) Either party may disclose Confidential Information to the extent such disclosure is reasonably necessary in the following situations:

(i) prosecuting or defending litigation;

(ii) complying with applicable laws and regulations, including regulations promulgated by securities exchanges;

(iii) complying with a valid order of a court of competent jurisdiction or other Governmental Entity;

(iv) for regulatory, tax or customs purposes;

(v) for audit purposes, provided that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure;

(vi) disclosure to its Affiliates and Representatives on a need-to-know basis, provided that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure; or

(vii) upon the prior written consent of the Disclosing Party; or

(viii) disclosure to its actual or potential investors and co-investors, and other sources of funding, including debt financing, or potential partners, collaborators or acquirers, and their respective accountants, financial advisors and other professional representatives, provided, that such disclosure shall be made only to the extent (A) that the Disclosing Party determines in good faith that the information to be disclosed is material to an investment in the Disclosing Party and is customarily required to consummate such investment, financing transaction partnership, collaboration or acquisition and that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure, or (B) that the information is the sales of the Licensed Product and such information is to be included in the Investor's financial reports to its investors.

(b) Notwithstanding the foregoing, in the event the Disclosing Party is required to make a disclosure of the Receiving Party's Confidential Information pursuant to Sections 7.2(a)(i), (ii), (iii) or (iv), it will, except where impracticable, give reasonable advance notice to the Receiving Party of such disclosure and use reasonable efforts to secure confidential treatment of such information and to avoid and/or minimize the extent of such disclosure. In any event, the Investor shall not file any patent application based upon or using the Confidential Information of Company provided hereunder.

SECTION 8

Conditions to Investor's Obligations at Closing

The obligations of the Investor under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions, any of which may be waived in writing by the Investor (except to the extent not permitted by law):

8.1 ***No Injunction, etc***. No preliminary or permanent injunction or other binding order, decree or ruling issued by a court or governmental agency shall be in effect which shall have the effect of preventing the consummation of the transactions contemplated by the Transaction Documents. No

action or claim shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local or foreign jurisdiction or before any arbitrator wherein an unfavorable injunction, judgment, order, decree, ruling or charge would be reasonably likely to (i) prevent consummation of any of the transactions contemplated by the Transaction Documents, (ii) cause any of the transactions contemplated by the Transaction Documents to be rescinded following consummation, (iii) have the effect of making illegal the purchase, sale, transfer and assignment of the Japan Royalty to the Investor or (iv) have the effect of making illegal the purchase of, or payment for, any of the Securities by the Investor.

8.2 ***Representations and Warranties***. The representations and warranties of the Company contained in Section 4 shall be true and correct in all material respects as of the Closing Date as though made at and as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of a particular date, in which case it shall be true and correct in all material respects as of such date; provided, that to the extent that any such representation or warranty is qualified by the term "material," "material adverse effect" or "Material Adverse Change," such representation or warranty (as so written, including the term "material" or "Material Adverse Change") shall be true and correct in all respects as of the Closing Date or such other date, as applicable.

8.3 ***Performance***. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

8.4 ***No Material Adverse Change***. After the date of this Agreement, there shall not have occurred any fact, circumstance, effect, change, event or development that, individually or in the aggregate, has resulted, or would reasonably be likely to result, in a Material Adverse Change.

8.5 ***HSR Act.*** The waiting period(s) (and any extension thereof) applicable to the transactions contemplated by this Agreement under the HSR Act shall have expired or been terminated.

8.6 ***Company Closing Certificate***. The Company shall have delivered the Company Closing Certificate.

8.7 ***Licensee Consent***. The Company shall have delivered to the Investor a consent and instruction letter, in substantially the form attached hereto as Exhibit H (the "Licensee Consent"), duly executed by the Company and Licensee.

8.8 ***Form W-9***. The Company shall have delivered to the Investor a valid, properly executed IRS Form W-9 certifying that the Company is exempt from U.S. federal withholding tax and "backup" withholding tax.

8.9 ***Securities Laws***. The offer and sale of the Shares to the Investor pursuant to this Agreement shall be exempt from the registration requirements of the Securities Act and the registration and/or qualification requirements of all applicable state securities laws.

8.10 ***Authorizations***. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body that are required in connection with (i) the lawful issuance and sale of the Securities and (ii) the sale, transfer and assignment of the Japan Royalty pursuant to this Agreement, including any authorizations required under the HSR Act, shall have been duly obtained and shall be effective on and as of the Closing.

8.11 ***Warrant***. The Company shall have delivered to the Investor the duly executed Warrant.

8.12 ***Legal Opinion***. The Investor shall have received a legal opinion from counsel to the Company and in a form previously agreed upon by the Company and the Investor.

8.13 ***Dataroom***. Goodwin Procter LLP, counsel to the Investor shall have received an electronic copy of all of the information and documents posted to the virtual dataroom established by the Company as of the date hereof and made available to the Investor via Merrill Corp, for archival purposes only and to be held in escrow in the event of a future dispute regarding its contents. Goodwin Procter LLP shall not make such materials available to the Investor, other than with the prior written consent of the Company, which shall not be unreasonably withheld.

SECTION 9

Conditions to the Company's Obligations at Closing

The obligations of the Company to the Investor under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions by the Investor:

9.1 ***No Injunction, etc***. No preliminary or permanent injunction or other binding order, decree or ruling issued by a court or governmental agency shall be in effect which shall have the effect of preventing the consummation of the transactions contemplated by the Transaction Documents. No action or claim shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local or foreign jurisdiction or before any arbitrator wherein an unfavorable injunction, judgment, order, decree, ruling or charge would be reasonably likely to (i) prevent consummation of any of the transactions contemplated by the Transaction Documents, (ii) cause any of the transactions contemplated by the Transaction Documents to be rescinded following consummation, (iii) have the effect of making illegal the purchase, sale, transfer and assignment of the Japan Royalty to the Investor or (iv) have the effect of making illegal the purchase of, or payment for, any of the Securities by the Investor.

9.2 ***Representations and Warranties***. The representations and warranties of the Investor contained in Section 5 shall be true and correct in all material respects as of the Closing Date as though made at and as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of a particular date, in which case it shall be true and correct in all material respects as of such date; provided, that to the extent that any such representation or warranty is qualified by the term "material," "material adverse effect" or "Material Adverse Change," such representation or warranty (as so written, including the term "material," "material adverse effect" or "Material Adverse Change") shall be true and correct in all respects as of the Closing Date or such other date, as applicable.

9.3 ***HSR Act.*** The waiting period(s) (and any extension thereof) applicable to the transactions contemplated by this Agreement under the HSR Act shall have expired or been terminated.

9.4 ***Licensee Consent***. The Company shall have received from Licensee the Licensee Consent, duly executed by the Company and Licensee.

9.5 ***Performance***. The Investor shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

9.6 ***Securities Law Compliance***. The offer and sale of the Securities to the Investor pursuant to this Agreement shall be exempt from the registration requirements of the Securities Act and the registration and/or qualification requirements of all applicable state securities laws.

9.7 ***Investor Closing Certificate***. The Investor shall have delivered the Investor Closing Certificate.

9.8 ***Investor Incumbency Certificate***. The Investor shall have delivered the Investor Incumbency Certificate.

9.9 ***Form W-8BEN-E***. The Investor shall have delivered to the Company a valid, properly executed IRS Form W-8BEN-E certifying that the Investor is exempt from U.S. federal withholding tax with respect to any and all payments of and in respect of the Japan Royalty

9.10 ***Authorization***. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body that are required in connection with (i) the lawful issuance and sale of the Securities and (ii) the sale, transfer and assignment of the Japan Royalty pursuant to this Agreement, including any

SECTION 10

Resales

10.1 ***Rule 144 Reporting***. With a view to making available to the Investor the benefits of certain rules and regulations of the Commission which may permit the sale of the Shares, the Put Shares and the Warrant Shares to the public without registration, the Company agrees to use commercially reasonable efforts to:

(a) Make and keep public information available, as those terms are understood and defined in Rule 144 promulgated under the Securities Act;

(b) File with the Commission in a timely manner all reports and other documents required of the Company under the Exchange Act; and

Furnish the Investor forthwith upon request (i) a written statement by the Company as to its compliance with the public information requirements of said Rule 144, (ii) a copy of the most recent annual or quarterly report of the Company, and (iii) such other reports and documents as may be reasonably requested in availing the Investor of any rule or regulation of the Commission permitting the sale of any such securities without registration.

10.2 ***Restrictive Legend***. The certificates representing the Shares, the Warrant Shares, when issued, and the Put Shares, when issued, will bear a restrictive legend in substantially the following form:

"THE SECURITIES EVIDENCED OR CONSTITUTED HEREBY HAVE BEEN ISSUED WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED WITHOUT REGISTRATION UNDER THE ACT UNLESS EITHER (i) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH DISPOSITION OR (ii) THE SALE OF SUCH SECURITIES IS MADE PURSUANT TO SECURITIES AND EXCHANGE COMMISSION RULE 144."

The legend set forth in this Section 10.2 and the related notation in the Company's stock books shall be removed and the Company shall issue a certificate without such legend or any other legend to the holder of the Shares, the Warrant Shares and/or the Put Shares or issue to such holder by electronic delivery at the applicable balance account at the Depository Trust Company, if (i) the Shares, the Warrant Shares and/or the Put Shares are registered for resale under the Securities Act, (ii) the Shares, the Warrant Shares and/or the Put Shares are sold or transferred in compliance with Rule 144, or (iii) the Shares, the Warrant Shares and/or the Put Shares are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144. Following Rule 144 becoming available for the resale of Shares, Warrant Shares and/or Put Shares, without the requirement for the Company to be in compliance with the current public information required under Rule 144, the Company shall (at the Company's expense), upon the written request of Investor, cause its counsel to issue to the Company's transfer agent a legal opinion authorizing the issuance of a certificate representing the Shares, Warrant Shares and/or Put Shares without any restrictive or other legends, if requested by such transfer agent.

SECTION 11

Indemnification

11.1 ***Indemnification***. Each party (an "Indemnifying Party") hereby indemnifies and holds harmless the other party, such other party's respective officers, directors, employees, consultants, representatives and advisers, and any and all Affiliates of the foregoing (each of the foregoing, an "Indemnified Party") from and against all losses, liabilities, costs, damages and expense (including reasonable legal fees and expenses) (collectively, "Losses") suffered or incurred by any such Indemnified Party to the extent arising from, connected with or related to (i) breach of any representation or warranty of such Indemnifying Party in this Agreement; and (ii) breach of any covenant or undertaking of any Indemnifying Party in this Agreement, provided that in no event shall

the Company be liable for any Losses as a result of any Credit Event or any Permitted Reduction. If an event or omission (including, without limitation, any claim asserted or action or proceeding commenced by a third party) occurs which an Indemnified Party asserts to be an indemnifiable event pursuant to this Section 11, the Indemnified Party will provide written notice to the Indemnifying Party, setting forth the nature of the claim and the basis for indemnification under this Agreement. The Indemnified Party will give such written notice to the Indemnifying Party promptly after it becomes aware of the existence of any such event or occurrence. Such notice will be a condition precedent to any obligation of the Indemnifying Party to act under this Agreement but will not relieve it of its obligations under the indemnity except to the extent that the failure to provide prompt notice as provided in this Agreement prejudices the Indemnifying Party with respect to the transactions contemplated by this Agreement and to the defense of the liability. In case any such action is brought by a third party against any Indemnified Party and it notifies the Indemnifying Party of the commencement thereof, the Indemnifying Party will be entitled to participate therein and, to the extent that it wishes, to assume the defense and settlement thereof with counsel reasonably selected by it and, after notice from the Indemnifying Party to the Indemnified Party of such election so to assume the defense and settlement thereof, the Indemnifying Party will not be liable to the Indemnified Party for any legal expenses of other counsel or any other expenses subsequently incurred by such Indemnified Party in connection with the defense thereof, provided, however, that an Indemnified Party shall have the right to employ separate counsel at the expense of the Indemnifying Party if (i) the employment thereof has been specifically authorized in writing by the Indemnifying Party; or (ii) representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interests between such parties (which such judgment shall be made by counsel to the Indemnified Party in good faith). The Indemnified Party agrees to cooperate fully with (and to provide all relevant documents and records and make all relevant personnel available to) the Indemnifying Party and its counsel, as reasonably requested, in the defense of any such asserted claim at no additional cost to the Indemnifying Party. No Indemnifying Party will consent to the entry of any judgment or enter into any settlement with respect to any such asserted claim without the prior written consent of the Indemnified Party, not to be unreasonably withheld or delayed, (a) if such judgment or settlement does not include as an unconditional term thereof the giving by each claimant or plaintiff to each Indemnified Party of a release from all liability in respect to such claim or (b) if, as a result of such consent or settlement, injunctive or other equitable relief would be imposed against the Indemnified Party or such judgment or settlement would materially and adversely affect the business, operations or assets of the Indemnified Party. No Indemnified Party will consent to the entry of any judgment or enter into any settlement with respect to any such asserted claim without the prior written consent of the Indemnifying Party, not to be unreasonably withheld or delayed. If an Indemnifying Party makes a payment with respect to any claim under the representations or warranties set forth herein and the Indemnified Party subsequently receives from a third party or under the terms of any insurance policy a sum in respect of the same claim, the receiving party will repay to the other party such amount that is equal to the sum subsequently received.

11.2 ***Limitations on Liability***. No party hereto shall be liable for any punitive or special damages under this Section 11 (and no claim for indemnification hereunder shall be asserted) as a result of any breach or violation of any covenant or agreement of such party (including under this Section 7) in or pursuant to this Agreement. For the avoidance of doubt, and notwithstanding anything to the contrary in this Agreement, the Investor shall have no recourse against the Company as a result of any Credit Event or any Permitted Reduction.

11.3 ***Exclusive Remedy***. The rights of the parties hereto pursuant to (and subject to the conditions of) this Section 11 shall be the sole and exclusive remedy of the parties hereto and their respective Affiliates with respect to any Losses (whether based in contract, tort or otherwise) resulting from or relating to any breach of the representations, warranties covenants and agreements made under this Agreement or any certificate, document or instrument delivered hereunder, and each party hereto hereby waives, to the fullest extent permitted under applicable law, and agrees not to assert after Closing, any other claim or action in respect of any such breach. Notwithstanding the foregoing, claims for common law fraud shall not be waived or limited in any way by this Section 11.

SECTION 12

Termination

12.1 ***Grounds for Termination***. This Agreement may be terminated at any time prior to the Closing:

(a) by mutual written agreement of the Investor and the Company;

(b) by the Investor upon notice in writing to the Company at any time after November 11, 2019, if by such date the Closing shall not have been consummated for any reason other than a material breach by the Investor of any of its representations, warranties, covenants, agreements or obligations under this Agreement; or

(c) by the Company upon notice in writing to the Investor at any time after November 11, 2019, if by such date the Closing shall not have been consummated for any reason other than a material breach by the Company of any of its representations, warranties, covenants, agreements or obligations under this Agreement.

12.2 ***Automatic Termination***. Unless earlier terminated as provided in Section 12.1, this Agreement shall continue in full force and effect until the end of the Royalty Term (as defined in the License Agreement), at which point this Agreement shall automatically terminate, except with respect to any rights that shall have accrued prior to such termination.

12.3 ***Survival***. Notwithstanding anything to the contrary in this Section 12, the following provisions shall survive termination pursuant to 12.2 of this Agreement: Section 6.2 (Authorization and Reservation of Warrant Shares and Put Shares), Section 6.7 (D&O Indemnification; Insurance Priority Matters), Section 6.8 (Disclosures), Section 6.9 (Payments Received in Error; Interest), Section 6.13 (Inspections and Audits), Section 7 (Confidentiality), Section 10 (Resales), Section 11 (Indemnification), Section 12.3 (Survival) and Section 13 (Miscellaneous). Termination of the Agreement shall not relieve any party of liability in respect of breaches under this Agreement by any party on or prior to termination.

SECTION 13

Miscellaneous

13.1 ***Governing Law***. This Agreement shall be governed in all respects by the laws of the State of New York as applied to agreements entered into and performed entirely in the State of New York by residents thereof.

13.2 ***Successors, Assigns***. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto. This Agreement may not be assigned by either party without the prior written consent of the other; except that either party may assign this Agreement to an Affiliate of such party or to any third party that acquires all or substantially all of such party's business, whether by merger, sale of assets or otherwise.

13.3 ***Notices***. All notices and other communications required or permitted hereunder shall be in writing and shall be sent by facsimile (receipt confirmed) or mailed by registered or certified mail, postage prepaid, return receipt requested, or otherwise delivered by hand or by messenger, addressed

if to the Investor, at the following address:

RPI Finance Trust
c/o RP Management, LLC
110 East 59th St, 33rd Floor
New York, NY 10022
Attention: George Lloyd
Telephone: (212) 883-2280
E-mail: glloyd@royaltypharma.com
Facsimile: (212) 883-2260

with a copy to:

Goodwin Procter LLP
100 Northern Avenue
Boston, Massachusetts 02210
Attention: Arthur McGivern and Karen A. Spindler
Telephone: (617 570-1971; (415) 733-6058
Facsimile: (617) 523-1231
E-mail: AMcGivern@goodwinlaw.com; KSpindler@goodwinlaw.com

if to the Company, at the following address:

Epizyme, Inc.
Robert Bazemore
Attention: Chief Executive Officer
Telephone: (617) 229-5872

Facsimile: (617) 349-0707
E-mail: rbazemore@epizyme.com

with a copy to:

WilmerHale
60 State Street
Boston, MA 02109
Attention: Stuart Falber
Telephone: (617) 526-6663
Facsimile: (617) 526-5000
E-mail: stuart.falber@wilmerhale.com

or at such other address as one party shall have furnished to the other party in writing. All notices and communications under this Agreement shall be deemed to have been duly given (i) when delivered by hand, if personally delivered, (ii) when received by a recipient, if sent by email, (iii) when sent, if sent by facsimile, with an acknowledgement of sending being produced by the sending facsimile machine or (iv) one Business Day following sending within the United States by overnight delivery via commercial one-day overnight courier service.

13.4 ***Expenses***. Each of the Company and the Investor shall bear its own expenses and legal fees incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

13.5 ***Finder's Fees***. Each of the Company and the Investor shall indemnify and hold the other harmless from any liability for any commission or compensation in the nature of a finder's fee, placement fee or underwriter's discount (including the costs, expenses and legal fees of defending against such liability) for which the Company or the Investor, or any of its respective partners, employees, or representatives, as the case may be, is responsible.

13.6 ***Counterparts***. This Agreement may be executed in counterparts, each of which shall be enforceable against the party actually executing the counterpart, and all of which together shall constitute one instrument.

13.7 ***Severability***. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision; provided that no such severability shall be effective if it materially changes the economic benefit of this Agreement to any party.

13.8 ***Entire Agreement***. This Agreement, including the exhibits and schedules attached hereto and thereto, and the Licensee Consent constitute the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof, and this Agreement shall supersede any existing confidentiality agreements between the parties, including that certain Confidentiality Agreement by and between the Company and the Investor, dated as of October 16, 2018, with all Confidential Information exchanged thereunder deemed Confidential Information hereunder and subject to the confidentiality and non-use restrictions set forth in Section 7. No party shall be liable or bound to any other party in any manner with regard to the subjects hereof or thereof

by any warranties, representations or covenants except as specifically set forth herein or therein. In the event that the Investor or any Affiliate of the Investor enters into any other agreement with the Company, neither the Company, on the one hand, nor the Investor or any applicable Affiliate of the Investor, on the other hand, shall have any right to deduct or offset any amount owing to the other under this Agreement as a result of any obligation under any such other agreement.

13.9 ***Waiver***. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party. None of the terms, covenants and conditions of this Agreement can be waived except by the written consent of the party waiving compliance.

13.10 ***Trustee Capacity of Wilmington Trust Company***. Notwithstanding anything contained herein to the contrary, it is expressly understood and agreed by the parties hereto that (i) this Agreement is executed and delivered by Wilmington Trust Company, not individually or personally but solely in its trustee capacity, in the exercise of the powers and authority conferred and vested in it under the trust deed of the Investor, (ii) each of the representations, undertakings and agreements herein made on the part of the Investor is made and intended not as a personal representation, undertaking and agreement by Wilmington Trust Company but is made and intended for the purpose of binding only the Investor and (iii) under no circumstances shall Wilmington Trust Company be personally liable for the payment of any indebtedness or expenses of the Investor or be liable for the breach or failure of any obligation, representation, warranty or covenant made or undertaken by the Investor under this Agreement or any related documents.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have executed this Purchase Agreement as of the date first set forth above.3

EPIZYME, INC.

By: /s/ Robert B. Bazemore
Name: Robert B. Bazemore
Title: Chief Executive Officer

RPI FINANCE TRUST

By: Wilmington Trust Company, not in its individual capacity but solely in its capacity as owner trustee

By: /s/ Cynthia L. Major
Name: Cynthia L. Major
Title: Officer

Schedule A

The Investor is an institutional "accredited investor" as defined in Rule 501(a) of Regulation D of the Securities Act.

Exhibit 10.46

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE STOCK

Company:	EPIZYME, INC., a Delaware corporation (the "Company")
Number of Shares:	2,500,000, subject to adjustment in accordance with Article 2 below
Class of Stock:	Common Stock of the Company, par value $0.0001 per share (the "Common Stock")
Warrant Price:	$20.00 per share
Issue Date:	November 6, 2019
Expiration Date:	The 3rd anniversary of the Issue Date
Purchase Agreement:	This Warrant is issued in connection with the Purchase Agreement, dated as of November 4, 2019, by and between the Company and RPI Finance Trust (as amended from time to time, the "Purchase Agreement").

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, including, without limitation, the mutual promises contained in the Purchase Agreement, RPI Finance Trust ("Royalty Pharma," together with any registered holder from time to time of this Warrant, "Holder") is entitled to purchase the number of fully paid and nonassessable shares of Common Stock (the "Shares") at the Warrant Price, all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may exercise this Warrant in whole or in part by delivering a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. The Holder may, at its option, elect to exercise this Warrant, in whole or in part and at any time or from time to time, on a cashless basis, by surrendering this Warrant, and delivering a duly executed Notice of Exercise in substantially the form attached as Appendix I, to the principal office of the Company (such date, the "Cashless Exercise Date"). In the event of an exercise pursuant to this Section 1.2, the number of Shares issued to the Holder shall be determined according to the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where: X= the number of Shares that shall be issued to the Holder;

Y= the number of Shares for which this Warrant is being exercised (which shall include both the number of Shares issued to the Holder and the number of Shares subject to the portion of the Warrant being cancelled in payment of the Warrant Price);

A= the Fair Market Value (as defined below) of one share of Common Stock; and

B= the Warrant Price then in effect.

The Fair Market Value per share of Common Stock shall be determined as follows:

(1) If the Common Stock is listed on a national securities exchange, the Fair Market Value shall be deemed to be the closing price per share of Common Stock on the Nasdaq Global Select Market or another nationally recognized trading system as of the Business Day immediately preceding the Cashless Exercise Date. For the purpose of this Warrant, "Business Day" means any day other than (i) a Saturday or Sunday or (ii) a day on which banking institutions located in New York are permitted or required by applicable law or regulation to remain closed.

(2) If the Common Stock is not listed on a national securities exchange, the Fair Market Value shall be deemed to be the amount most recently determined by the Board of Directors of the Company (the "Board") to represent the fair market value per share of the Common Stock (including without limitation a determination for purposes of granting Common Stock options or issuing Common Stock under any plan, agreement or arrangement with employees of the Company); and, upon request of the Holder, the Board (or a representative thereof) shall, as promptly as reasonably practicable but in any event not later than 10 days after such request, notify the Holder of the Fair Market Value per share of Common Stock and furnish the Holder with reasonable documentation of the Board's determination of such Fair Market Value. Notwithstanding the foregoing, if the Board has not made such a determination within the three-month period prior to the Cashless Exercise Date, then (A) the Board shall make, and shall provide or cause to be provided to the Registered Holder notice of, a determination of the Fair Market Value per share of the Common Stock within 15 days of a request by the Holder that it do so, and (B) the exercise of this Warrant pursuant to this subsection 1.2 shall be delayed until such determination is made and notice thereof is provided to the Holder.

1.3 Delivery of Shares and New Warrant. Promptly after Holder exercises or converts this Warrant and, if applicable, the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder (a) the acquired Shares in book-entry form and (b) upon surrender of this Warrant, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant exercisable for the number of shares of Common Stock remaining available for purchase under this Warrant.

1.4 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation on surrender and cancellation of this Warrant, the Company shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.5 Treatment of Warrant Upon Acquisition of Company.

1.5.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means (i) any sale, license, or other disposition of all or substantially all of the assets of the Company, or (ii) any reorganization, consolidation, merger or other business combination (either in one transaction or a series of related transactions) with another person or group of persons whereby such other person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock or share purchase agreement or other business combination).

1.5.2 Treatment of Warrant at Acquisition.

(a) Holder agrees that, in the event of an Acquisition under Section 1.5.1(ii) and in which the consideration is cash, Marketable Securities (as defined below), or a combination thereof, upon the written request of the Company, either (i) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) Business Days prior to the closing of the proposed Acquisition.

(b) Holder agrees that, in the event of an Acquisition under Section 1.5.1(i) to a third party that is not an Affiliate (as defined below) of the Company (a "True Asset Sale"), upon the written request of the Company, either (i) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will continue in full force and effect. The Company shall provide Holder with written notice of its request relating to the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) Business Days prior to the closing of the proposed Acquisition.

(c) Upon the closing of any Acquisition other than those particularly described in subsections (a) and (b) above, the successor entity shall assume this Warrant, and shall succeed to, and be substituted for (so that from and after the date of such Acquisition, the provisions of this Warrant referring to the "Company" shall refer instead to the successor entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such successor entity had been named as the Company herein. Upon the closing of such an Acquisition in which the Common Stock is converted into or exchanged for securities, cash or other property, this Warrant shall be exercisable for, in lieu of the Shares, the kind and amount of securities, cash, and property the Holder would have been entitled to receive pursuant to such Acquisition if such Holder had executed this Warrant immediately prior to such Acquisition. In any such case, appropriate adjustment (as determined in good faith by the Board) shall be made in the application of the provisions set forth herein with respect to the rights and interests thereafter of the Holder, to the end that the provisions set forth in this Section shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities, cash or other property thereafter deliverable upon exercise of this Warrant.

(d) As used herein (x) "Affiliate" shall mean any person or entity that owns or controls directly or indirectly ten percent (10%) or more of the Common Stock, any person or entity that controls or is controlled by or is under common control with such persons or entities, and each of such person's or entity's officers, directors, joint venturers or partners, as applicable; and (y) "Marketable Securities" shall mean securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is then current in its filing of all required reports and other information under the Securities Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise or convert this Warrant on or prior to the closing thereof is then traded on a national securities exchange or over-the-counter market; (iii) Holder would not be restricted by contract or by applicable federal or state securities laws from publicly re-selling, within six (6) months following the closing of such Acquisition, all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to convert this Warrant pursuant to Section 1.2 above in full on or prior to the closing of such Acquisition; and (iv) the issuer has a market capitalization, as of the date immediately prior to and on the closing of such Acquisition of at least $1,000,000,000.

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its Common Stock payable in shares of Common Stock, or other securities of the Company, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the shares of Common Stock by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of Common Stock are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased. Any adjustment made pursuant to the first sentence of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend, and any adjustment pursuant to the second and third sentences of this paragraph shall become effective immediately after the effective date of such subdivision, combination or reclassification.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any changes in the Common Stock by reason of recapitalizations, reclassifications, exchanges, substitutions, combinations, reorganizations, liquidations or similar transactions, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant (other than in connection with an Acquisition), Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such event. The Company or its successor shall promptly issue to Holder an amendment to this Warrant setting forth the number and kind of such new securities or other property issuable upon exercise or conversion of this Warrant as a result of such reclassification, exchange, substitution or other event that results in a change of the number and/or class of securities issuable upon exercise or conversion of this Warrant. The amendment to this Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or other organizational documents or through a reorganization, transfer of assets, consolidation, merger, dissolution, issuance, or sale of its securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Section against impairment.

2.4 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.5 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants and covenants to Holder as follows: All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and restrictions on transfer except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon any of its stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to effect any reclassification or recapitalization of any of its stock; (c) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Company shall give Holder: (1) at least 10 Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of Common Stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) above; and (2) in the case of the matters referred to in (b) and (c) above at least 10 Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event). In addition, the Company shall give Holder notice within one Business Day of receipt by the Company of a delisting determination letter from the national securities exchange on which the Company's Common Stock is then traded. Notwithstanding the foregoing, the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

3.4 No Shareholder Rights. Except as provided in this Warrant, the Holder will not have any rights as a shareholder of the Company until the exercise of this Warrant.

ARTICLE 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER. The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by the Holder will be acquired for investment for the Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Securities Act. Holder also represents that the Holder has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. The Holder has received or has had full access to all the information about the Company it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. The Holder further has had a full opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to the Holder or to which the Holder has access.

4.3 Investment Experience. The Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. The Holder has experience as an investor in securities of companies in the development stage and acknowledges that the Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that the Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables the Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. The Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Securities Act.

4.5 The Securities Act. The Holder understands that this Warrant and the Shares issuable upon exercise or conversion hereof have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. The Holder understands that this Warrant and the Shares issued upon any exercise or conversion hereof must be held indefinitely unless subsequently registered under the Securities Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available.

ARTICLE 5. MISCELLANEOUS.

5.1 Term. This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to any "affiliate" (as such term is defined in Regulation D promulgated under the Securities Act) of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Securities Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. Royalty Pharma (and any Royalty Pharma Affiliate to which all or part of this Warrant is transferred pursuant to this Section 5.4) may transfer all or part of this Warrant to one or more of its affiliates subject to compliance, and in accordance, with Section 5.3 (each, a "Royalty Pharma Affiliate") by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Section 5.3, any Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant to any transferee, provided, however, in connection with any such transfer, (i) such transferee agrees in writing to be bound by the terms of this Warrant (ii) Royalty Pharma, the Royalty Pharma Affiliate(s) or any subsequent Holder will give the Company written notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and (iii) the transferor will surrender this Warrant to the Company for reissuance to the transferee(s) (and the transferor if applicable).

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may (or on the first business day after transmission by facsimile) be, in writing by the Company or such Holder from time to time. Effective upon receipt of the fully executed Warrant and the initial transfer described in Section 5.4 above, all notices to the Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

RPI Finance Trust
c/o Wilmington Trust Company
Rodney Square North
1100 North Market Street
Wilmington, Delaware 19890-0001
Attention: Corporate Trust Administration
Facsimile: (302) 636-4140

with a copy to:

RP Management, LLC
110 E. 59th Street, Suite 3300
New York, New York 10022
Attention: George Lloyd
E-mail: glloyd@royaltypharma.com
Facsimile: (212) 883-2280

with another copy to:

Goodwin Procter LLP
100 Northern Avenue
Boston, Massachusetts 02210
Attention: Arthur R. McGivern
E-mail: amcgivern@goodwinlaw.com
Facsimile: (617) 523-1231

Notice to the Company shall be addressed as follows until the Holder receives notice of a change in address:

Epizyme, Inc.
400 Technology Square, Cambridge, MA 02139
Attention: _____
Telephone: (___) ___-____
Email:

with a copy to:

WilmerHale
60 State Street
Boston, MA 02109
Attn: Stuart Falber
Telephone: (617) 526-6000
Facsimile: (617) 526-5000
Email: stuart.falber@wilmerhale.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Automatic Conversion upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.2 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised or converted, and the Company shall promptly deliver in book-entry form the Shares (or such other securities) issued upon such conversion to the Holder.

5.9 Trustee Capacity of Wilmington Trust Company. Notwithstanding anything contained herein to the contrary, it is expressly understood and agreed by the parties hereto that (i) this Warrant is executed and delivered by Wilmington Trust Company, not individually or personally but solely in its trustee capacity, in the exercise of the powers and authority conferred and vested in it under the trust deed of Royalty Pharma, (ii) each of the representations, undertakings and agreements herein made on the part of Royalty Pharma is made and intended not as a personal representation, undertaking and agreement by Wilmington Trust Company but is made and intended for the purpose of binding only Royalty Pharma and (iii) under no circumstances shall Wilmington Trust Company be personally liable for the payment of any indebtedness or expenses of Royalty Pharma or be liable for the breach or failure of any obligation, representation, warranty or covenant made or undertaken by Royalty Pharma under this Warrant or any related documents.

5.10 Counterparts. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement.

5.11 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principles regarding conflicts of law.

[***Balance of Page Intentionally Left Blank***]

COMPANY:

EPIZYME, INC.

By: /s/ Robert B. Bazemore
Name: Robert B. Bazemore
Title: Chief Executive Officer

HOLDER:

RPI FINANCE TRUST

By: Wilmington Trust Company, not in its individual capacity but solely in its capacity as owner trustee

By: /s/ Cynthia L. Major
Name: Cynthia L. Major
Title: Officer

APPENDIX 1

NOTICE OF EXERCISE

Holder elects to purchase shares of the common stock of Epizyme, Inc., par value $0.0001 per share (the "Common Stock"), pursuant to the terms of the attached Warrant, and tenders payment of the purchase price of the shares in full.

[or]

Holder elects to convert the attached Warrant into shares of Common Stock in the manner specified in the Warrant. This conversion is exercised for of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

Please issue in book-entry form the shares of Common Stock in the name specified below:

_____
Holders Name

_____

_____
(Address)

By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Article 4 of the Warrant as the date hereof.

HOLDER:

By: _____

Name: _____

Title: _____

(Date): _____

APPENDIX 2

ASSIGNMENT

For value received, Holder hereby sells, assigns and transfers unto

[Name: [ROYALTY PHARMA TRANSFEREE]
Address: _____

Tax ID: _____]

that certain Warrant to Purchase Stock issued by Epizyme, Inc. (the "Company"), on [___], 2019 (the "Warrant") together with all rights, title and interest therein.

HOLDER:

_____

By: _____
Name:
Title:
Date:

By its execution below, and for the benefit of the Company, [ROYALTY PHARMA TRANSFEREE] makes each of the representations and warranties set forth in Article 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[ROYALTY PHARMA TRANSFEREE]

By: _____
Name:
Title:

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement (Form S-8 No. 333-189629) pertaining to the 2008 Stock Incentive Plan, 2013 Stock Incentive Plan, and 2013 Employee Stock Purchase Plan of Epizyme, Inc.,
2. Registration Statement (Form S-8 No. 333-194205) pertaining to the 2013 Stock Incentive Plan and 2013 Employee Stock Purchase Plan of Epizyme, Inc.,
3. Registration Statement (Form S-8 No. 333-202681) pertaining to the 2013 Stock Incentive Plan of Epizyme, Inc.,
4. Registration Statement (Form S-8 No. 333-210028) pertaining to the 2013 Stock Incentive Plan of Epizyme, Inc.,
5. Registration Statement (Form S-8 No. 333-216638) pertaining to the 2013 Stock Incentive Plan of Epizyme, Inc.,
6. Registration Statement (Form S-8 No. 333-223612) pertaining to the 2013 Stock Incentive Plan of Epizyme, Inc.,
7. Registration Statement (Form S-3 No. 333-224159) and related Prospectus of Epizyme, Inc., and
8. Registration Statement (Form S-3 No. 333-229878) pertaining to the 2013 Stock Incentive Plan of Epizyme, Inc.

of our reports dated February 27, 2020, with respect to the consolidated financial statements of Epizyme, Inc. and the effectiveness of internal control over financial reporting of Epizyme, Inc. included in this Annual Report (Form 10-K) of Epizyme, Inc. for the year ended December 31, 2019.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 27, 2020

Exhibit 31.1

I, Robert B. Bazemore, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of Epizyme, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15 (f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2020

/s/ Robert B. Bazemore
Robert B. Bazemore
President and Chief Executive Officer

Exhibit 31.2

I, Paolo Tombesi, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of Epizyme, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15 (f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2020

/s/ Paolo Tombesi

Paolo Tombesi
Chief Financial Officer

Exhibit 32.1

CERTIFICATIONS OF CEO AND CFO PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report on Form 10-K of Epizyme, Inc. (the "Company") for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company hereby certifies, pursuant to 18 U.S.C. (section) 1350, as adopted pursuant to (section) 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 27, 2020

/s/ Robert B. Bazemore
Robert B. Bazemore
President and Chief Executive Officer

/s/ Paolo Tombesi
Paolo Tombesi
Chief Financial Officer