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

FORM 10-K

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
- 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 001-35403

Verastem, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)
117 Kendrick Street, Suite 500
Needham, Massachusetts
(Address of principal executive offices)

27-3269467
(I.R.S. Employer
Identification No.)

02494
(Zip Code)

Registrant's telephone number, including area code: **(781) 292-4200**

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

Title of each class	Name of each exchange on which registered
Common Stock, \$0.0001 par value	NASDAQ Global Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

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

Aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2016 was \$47,609,884.

The number of shares outstanding of the registrant's common stock as of March 15, 2017 was 36,992,418.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements related to present facts or current conditions or historical facts, contained in this Annual Report on Form 10-K, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward looking statements. Such statements relate to, among other things, the development of our product candidates, including duvelisib, defactinib (VS-6063), VS-4718 and VS-5584, and our FAK, PI3K, and mTOR programs generally, the timeline for clinical development and regulatory approval of our product candidates, the expected timing for the reporting of data from on-going trials, the structure of our planned or pending clinical trials, additional planned studies, our rights to develop or commercialize our product candidates and our ability to finance contemplated development activities and fund operations for a specified period. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements we make. Factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, our ability to raise additional capital to support our clinical development program and other operations, our ability to develop products of commercial value and to identify, discover and obtain rights to additional product candidates, our ability to protect and maintain our intellectual property and the ability of our licensors to obtain and maintain patent protection for the technology or products that we license from them, the fact that the preclinical and clinical testing of our product candidates and preliminary data from clinical trials may not be predictive of the success of ongoing or later clinical trials, that data may not be available when we expect it to be, that enrollment of clinical trials may take longer than expected, that our product candidates may cause unexpected safety events, that we will be unable to successfully initiate or complete the clinical development of our product candidates, including duvelisib, defactinib, VS-4718 and VS-5584, that development of our product candidates will take longer or cost more than planned, that we or Infinity Pharmaceuticals, Inc. (Infinity) will fail to fully perform under our license agreement for duvelisib, that the transition of the duvelisib program from Infinity will not be completed, our reliance on third-parties, competitive developments, the effect of current and future legislation and regulation and regulatory actions, as well as other risks described in this Annual Report on Form 10-K and other filings with the Securities and Exchange Commission (SEC).

As a result of these and other factors, we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I

Item 1. Business

OVERVIEW

We are a biopharmaceutical company focused on discovering and developing drugs to improve outcomes for patients with cancer. Our most advanced product candidates, duvelisib and defactinib (VS-6063), utilize a multi-faceted approach to treat cancers originating either in the blood or major organ systems. We are currently evaluating these compounds in both preclinical and clinical studies as potential therapies for certain cancers, including leukemia, lymphoma, lung cancer, ovarian cancer, mesothelioma, and pancreatic cancer. We believe that these compounds may be beneficial as therapeutics either as single agents or when used in combination with immuno-oncology agents or other current and emerging standard of care treatments in aggressive cancers that are poorly served by currently available therapies.

Duvelisib targets the Phosphoinositide 3-kinase (PI3K) and defactinib targets the Focal Adhesion Kinase (FAK) signaling pathways. The PI3K signaling pathway plays a central role in cancer proliferation and survival. Duvelisib is an investigational oral therapy designed to attack both malignant B-cells and T-cells and disrupt the tumor microenvironment to help thwart their growth and proliferation for patients with lymphatic cancers through the dual inhibition of PI3K delta and gamma. FAK is a non-receptor tyrosine kinase encoded by the *PTK-2* gene that is involved in cellular adhesion and, in cancer, metastatic capability. Defactinib is a targeted inhibitor of the FAK signaling pathway. Similar to duvelisib, defactinib is also orally available and designed to be a potential therapy for patients to take at home under the advice of their physician.

Duvelisib is currently being studied in the DUO™ study, which is a Phase 3, randomized, open-label, two-arm trial of duvelisib versus treatment with ofatumumab. This study will evaluate the safety and efficacy of duvelisib as compared to ofatumumab in approximately 300 patients with relapsed or refractory chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL).

Duvelisib has successfully completed the Phase 2 DYNAMO™ study which is an open-label, single-arm trial of duvelisib that evaluated the safety and efficacy of duvelisib in 129 patients with refractory indolent non-Hodgkin lymphoma (iNHL). This study met its primary endpoint of overall response rate (ORR) and the majority of reported side effects were expected, reversible and clinically manageable.

Defactinib is currently being evaluated in a Phase 1b study in combination with Merck & Co.'s PD-1 inhibitor pembrolizumab and gemcitabine in patients with advanced pancreatic cancer, a Phase 1/2 clinical collaboration with Pfizer Inc. (Pfizer) and Merck KGaA to evaluate defactinib in combination with avelumab, an anti-PD-L1 antibody, in patients with ovarian cancer, and a Phase 1/2 study in collaboration with Cancer Research UK and Merck & Co. for the combination of defactinib and pembrolizumab in patients with non-small cell lung cancer (NSCLC), mesothelioma or pancreatic cancer.

In addition to duvelisib and defactinib, we have additional earlier-stage programs that have undergone preliminary clinical testing, including clinical trials of the FAK inhibitor VS-4718 and the PI3K/mTOR inhibitor VS-5584. Though both of these programs are slated to complete their Phase 1 testing, we have no plans for further development at this time as we focus most of our resources on duvelisib and defactinib.

THE PROBLEM

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. The American Cancer Society estimated that in the United States in 2017, approximately 1.7 million new cases of cancer would be diagnosed and approximately 600,000 people would die from the disease. Current treatments for cancer include surgery, radiation therapy, chemotherapy, hormonal therapy, immunotherapy, and targeted therapy. The cancer death rate in the United States has only decreased modestly since the early 1990s. Despite years of intensive research and clinical use, current treatments often fail to cure cancer. Cancer remains one of the world's most serious health problems and is the second most common cause of death in the United States after heart disease. The following table sets forth the U.S. annual incidence of certain cancers, based on 2016 estimates from the National Cancer Institute's Surveillance, Epidemiology, and End Results Program (NCI; SEER).

Cancer type	U.S. annual incidence
Lymphoma	
Non-Hodgkin lymphoma	72,580
Chronic lymphocytic leukemia	18,960
Solid tumor	
Lung and bronchus cancer	224,390
Pancreatic cancer	53,070
Ovarian cancer	22,280

With the application of new technologies and key discoveries, we believe that we are now entering an era of cancer research characterized by a more sophisticated understanding of the biology of cancer. We believe that the potential of oral, targeted therapies, along with the rapidly advancing field of immunotherapy, or using the body's immune system to fight cancer, are important new insights that present the opportunity to develop more effective cancer treatments.

OUR STRATEGY

Our product candidates seek to utilize a multi-faceted approach to treat cancer by directly targeting the cancer cells, enhancing anti-tumor immunity, and modulating the local tumor microenvironment. Our goal is to build a leading biopharmaceutical company focused on the discovery, development and, ultimately, commercialization of novel drugs that use a multi-faceted approach to improving outcomes for patients with cancer.

Key elements of our strategy to achieve this goal are:

- Advance our product candidates through clinical development. We have ongoing clinical trials of duvelisib and defactinib both as single agents and in combination with other agents in several hematologic and solid tumor indications.
- Expand the indications in which our product candidates may be used. In parallel to CLL, SLL, iNHL, NSCLC, ovarian cancer, pancreatic cancer and mesothelioma trials that we are currently conducting, we plan to pursue additional disease indications to expand the potential of our product candidates.
- Collaborate selectively to augment and accelerate translational research, development and commercialization. We may seek third-party collaborators for the development and eventual commercialization of our product candidates. In particular, we may enter into third-party arrangements for target oncology indications in which our potential collaborator has particular expertise or for which we need access to additional research, development, or commercialization resources.

- Consider acquiring or in-licensing rights to additional agents. We may pursue the acquisition or in-license of rights to additional agents from third parties that may supplement our internal programs and allow us to initiate clinical development of a diverse pipeline of agents more quickly.
- Build and maintain scientific leadership in the areas of lymphoid malignancies, immuno-oncology and cancer stem cells (CSCs). We plan to continue to conduct research in the hematological, immuno-oncology and CSC fields to further our understanding of the underlying biology of enhancing the body's immune response to tumors as well as cancer progression and metastasis. We also plan to continue fostering relationships with top scientific advisors, researchers and physicians. We believe that exceptional advisors, employees and management are critical to leadership in the development of new therapies for the treatment of cancer.
- Selectively build a commercial infrastructure in the U.S. for the potential launch of duvelisib in hematologic malignancies as an oral monotherapy for patients needing additional lines of therapy following previous treatment.

OUR PRODUCT CANDIDATES

We are focused on the discovery and development of small molecules for optimized efficacy and safety primarily as orally available drug candidates. We have several product candidates currently in clinical trials, including duvelisib and defactinib. We are running clinical trials in cancers where there are limited treatment options, including CLL, iNHL, T-cell lymphoma, lung cancer, ovarian cancer, pancreatic cancer, mesothelioma, and other advanced cancers.

Conventional chemotherapy works by stopping the function of cancer cells through a variety of mechanisms. Chemotherapies are usually not targeted at any specific differences between cancer cells and normal cells. Rather, they kill cancer cells because cancer cells generally grow more rapidly than normal cells and, as a result, are relatively more affected by the chemotherapy than normal cells. As a result, the treatments may succeed at initially decreasing tumor burden but ultimately fail to kill all of the cancer cells or effectively disrupt the tumor microenvironment, potentially resulting in disease progression.

Our goal is to develop targeted agents that both specifically kill cancer cells and disrupt the tumor microenvironment to enhance the efficacy of cancer treatment. Agents that can modulate the tumor microenvironment to increase cytotoxic T-cell access to the tumor cells and decrease immunosuppressive T-cells in tumors have been sought after to increase the proportion of responding cancer patients and the duration of response to cancer treatment.

Non-Hodgkin Lymphoma, Chronic Lymphocytic Leukemia

Hematologic malignancies are cancers of the blood or bone marrow such as non-Hodgkin lymphoma (NHL) and CLL. In general, lymphomas are a disease that occurs in patients over the age of 65.

The overall five-year relative survival rate for people with NHL is 69%, and the 10-year relative survival rate is 59%. The type and stage of the lymphoma can often provide useful information about a person's prognosis, but for some types of lymphomas the stage is less informative on its own. In these cases, other factors can give doctors a better idea about a person's prognosis. These factors are included in the International Prognostic Index and other metrics which take into account the patient's age, stage of disease, presence of metastases, performance status and blood levels of lactate dehydrogenase. In the case of indolent follicular lymphomas, the Follicular Lymphoma International Prognostic Index is better suited to evaluate the prognosis of follicular lymphoma (FL) and to help guide treatment decisions.

There have been only incremental advances in treatment options for FL beyond chemotherapy or immunotherapies like the antibodies against CD20, such as rituximab and obinutuzumab, and the overall clinical outlook for patients still remains poor.

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The NCI estimates that there were 18,960 new cases of CLL in the U.S. in 2016 and that the overall five-year survival rate for patients with CLL is approximately 83%. As CLL is generally a slow-growing disease, the advent of new oral anti-cancer therapies since 2013 have been a significant advance as treatment options beyond chemotherapy or anti-CD20 immunotherapies, including ofatumumab. Unlike in FL, the BTK and BCL-2 inhibitors have demonstrable activity in the treatment of CLL. However, evidence coming from studies on real-world use of these agents is revealing that a significant number of patients either relapse following treatment, become refractory to current agents, or are unable to tolerate treatment due to unmanageable side effects resulting from treatment, representing a significant medical need.

The potential of additional oral agents, particularly as a monotherapy that can be used in the general community physician's armamentarium, may hold significant value in the treatment of patients with either CLL, SLL or FL.

Ovarian Cancer

Ovarian cancer forms in tissues of the ovary, one of a pair of female reproductive glands in which the ova, or eggs, are formed. Most ovarian cancers are either ovarian epithelial carcinoma, cancer that begins in the cells on the surface of the ovary, or malignant germ cell tumors that begin in egg cells. According to the NCI, epithelial carcinoma of the ovary is one of the most common gynecologic malignancies and the fifth most frequent cause of cancer death in women, with 50% of all cases occurring in women older than 65 years.

The American Cancer Society estimated that in 2017 there will be approximately 22,000 new cases of ovarian cancer diagnosed and approximately 14,000 women will die from the disease.

For patients with ovarian cancer, the most important prognostic factor is stage of the disease. Unfortunately, most patients with ovarian cancer have widespread disease at diagnosis. This may be partly explained by relatively early spread to the rest of the abdominal cavity. General symptoms such as abdominal pain and swelling, gastrointestinal symptoms, and pelvic pain often go unrecognized, leading to delays in diagnosis.

Most patients are treated with a combination of surgery, chemotherapy, targeted therapy and radiation therapy. Surgery is often comprehensive to remove as much of the tumor as possible and may include removal of the ovaries or a total hysterectomy where the uterus is also removed.

Unfortunately, available therapies are rarely curative in the treatment of ovarian cancer and many tumors become resistant to platinum-based chemotherapy, which is the primary treatment regimen. Further therapy with conventional chemotherapy is generally palliative, not curative, as the tumor is able to metastasize and spread to other sites in the body.

Pancreatic Cancer

Pancreatic cancer begins in the tissues of the pancreas — an organ in the abdomen that lies horizontally behind the lower part of the stomach. The pancreas secretes enzymes that aid digestion and hormones that help regulate the metabolism of sugars. Patients present initially with vague symptoms that are often mistaken for other common abdominal conditions and diseases. It is the 12th most common cancer diagnosed in the United States and the disease represents the fourth leading cause of cancer-related death in the country.

Pancreatic cancer often has a poor prognosis, even when diagnosed early. Pancreatic cancer typically spreads rapidly and is seldom detected in its early stages, which is a major reason why it is a leading cause of cancer death. Signs and symptoms may not appear until pancreatic cancer is so advanced that complete surgical removal is not possible. An estimated 54,000 Americans will be diagnosed with pancreatic cancer in 2017 and over 43,000 will die from the disease. Pancreatic cancer is one of the few cancers where survival has not improved significantly during the past 40 years. Pancreatic cancer has a very high mortality rate with 92.3% of patients dying within five years of their initial diagnosis. The median age for diagnosis is 70 with the disease affecting males slightly more than females.

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Treatment options for pancreatic cancer are limited with surgical resection of the tumor possible in less than 20% of patients. Chemotherapy or chemotherapy plus radiation is offered to patients whose tumors are unable to be removed surgically. Immuno-oncology agents have not demonstrated a significant improvement in treatment outcome for patients with pancreatic cancer. The limited impact of chemotherapies and immunotherapies to improve the outcome may be due to the dense stroma that is prevalent in pancreatic tumors and the presence of CSCs in the tumor.

Non-Small Cell Lung Cancer

According to the NCI, the most common types of NSCLC are squamous cell carcinoma, large cell carcinoma, and adenocarcinoma. Although NSCLCs are associated with cigarette smoke, adenocarcinomas may be found in patients who have never smoked. As a class, NSCLCs are relatively insensitive to chemotherapy and radiation therapy compared with small cell lung cancer (SCLC). The NCI estimates that in 2016 there were 224,390 new cases of lung cancer (both NSCLC and SCLC) in the United States and 158,080 deaths. Lung cancer is the leading cause of cancer-related mortality in the United States. The five-year relative survival rate from 2006 to 2012 for patients with lung cancer was 17.9%.

Patients with resectable disease may be cured by surgery or surgery followed by chemotherapy. Local control can be achieved with radiation therapy in a large number of patients with unresectable disease, but cure is seen only in a small number of patients. Patients with locally advanced unresectable disease may achieve long-term survival with radiation therapy combined with chemotherapy. Patients with advanced metastatic disease may achieve improved survival and palliation of symptoms with chemotherapy, targeted agents, and other supportive measures. The disease becomes resistant to therapy and returns in the vast majority of patients. The presence of CSCs may contribute to this resistance and eventual disease progression.

Mesothelioma

Mesothelioma is a form of cancer most often caused by asbestos, that affects the smooth lining of the chest, lungs, heart, and abdomen. The layer of tissue surrounding these organs is made up of mesothelial cells, hence the name mesothelioma. Mesothelioma most often forms in the pleural cavity of the chest or into the abdomen. Mesothelioma forms a solid tumor that begins as a result of insult to the tissues caused by asbestos particles, which penetrate into the pleural cavity of the chest.

Pleural mesothelioma accounts for approximately 2,500 - 3,000 cases a year in the United States. This disease affects the pleura, which is the thin balloon shaped lining of the lungs. In its early stages, mesothelioma is difficult to detect as it may start with a thickening of the pleural rind, or fluid, which can be associated with many other conditions. This rind is normally thin and smooth in the non-diseased state. In time it begins to demonstrate progression, forming a more pronounced irregular rind and nodules which coalesce into a crust that compresses and invades into adjacent structures compromising lung and cardiac function.

The symptoms of mesothelioma gradually become more noticeable, prompting the patient to seek a medical consultation. By this time the progression of the disease may already be too advanced, as the tumor may have spread to the lymph nodes and/or begun to metastasize to remote organs of the body like the brain, spleen, liver or kidneys.

PI3K Inhibition Program

The PI3Ks are a family of enzymes involved in multiple cellular functions, including cell proliferation and survival, cell differentiation, cell migration, and immunity. PI3K-delta and PI3K-gamma are two proteins with distinct and mostly non-overlapping roles believed to support the growth and survival of malignant B-cells and T-cells. Specifically, preclinical data suggest that PI3K-delta signaling can lead to the proliferation of malignant B-cells, and that both PI3K-gamma and PI3K-delta play an important role in the formation and maintenance of the supportive tumor microenvironment.

Duvelisib

Our lead product candidate, duvelisib, is an oral, dual inhibitor of PI3K-delta and PI3K-gamma. Duvelisib is an investigational compound in clinical trials for hematologic malignancies, and its safety and efficacy have not yet been evaluated by the U.S. Food and Drug Administration (FDA) or any other health authority for marketing authorization.

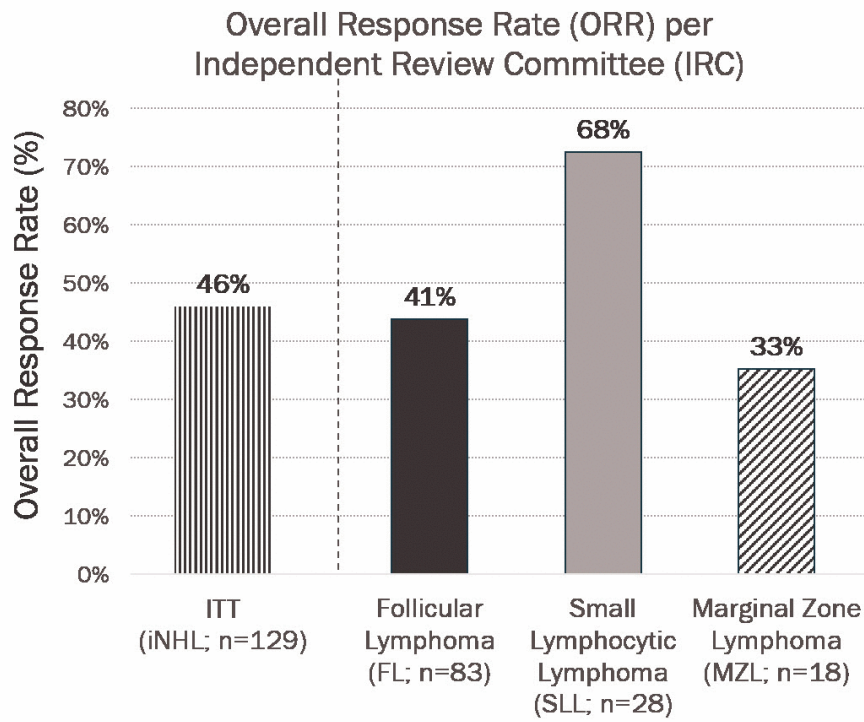
We are conducting worldwide clinical investigation of duvelisib in blood cancers initially focusing on iNHL and CLL. The investigation of duvelisib is supported by data from a Phase 1, open-label, dose-escalation study designed to evaluate the safety, pharmacokinetics and clinical activity of duvelisib in patients with advanced hematologic malignancies. The maximum tolerated dose of duvelisib was defined at 75 mg twice daily (BID) and the trial has been completed. A 25 mg BID dosing regimen has been determined for further development based on efficacy, safety, pharmacokinetics and pharmacodynamics. Data from this study, presented in December 2014 at the Annual Meeting of the American Society for Hematology (ASH 2014), showed that duvelisib is clinically active in CLL, SLL, iNHL, and T-cell lymphoma, as well as other hematologic malignancies.

Indolent Non-Hodgkin Lymphoma

The FDA and European Medicines Agency (EMA) have granted orphan drug designation to duvelisib for the potential treatment of FL, and the FDA has granted fast track designation to the investigation of duvelisib for the treatment of patients with FL who have received at least two prior therapies. The DYNAMO study is a Phase 2, open-label, single-arm monotherapy study evaluating the safety and efficacy of duvelisib dosed at 25 mg BID in 129 patients with iNHL. Patients in DYNAMO that continue to derive benefit remain on treatment. DYNAMO enrollment criteria included patients with FL, the most common subtype of iNHL, marginal zone lymphoma (MZL) and SLL, whose disease is refractory to rituximab, a monoclonal antibody treatment, and to either chemotherapy or radioimmunotherapy and who must have progressed within six months of receiving their final dose of a previous therapy. The primary endpoint of the study was an ORR according to the International Working Group Criteria, which includes change in target nodal lesion in combination with other measurements to determine response to treatment.

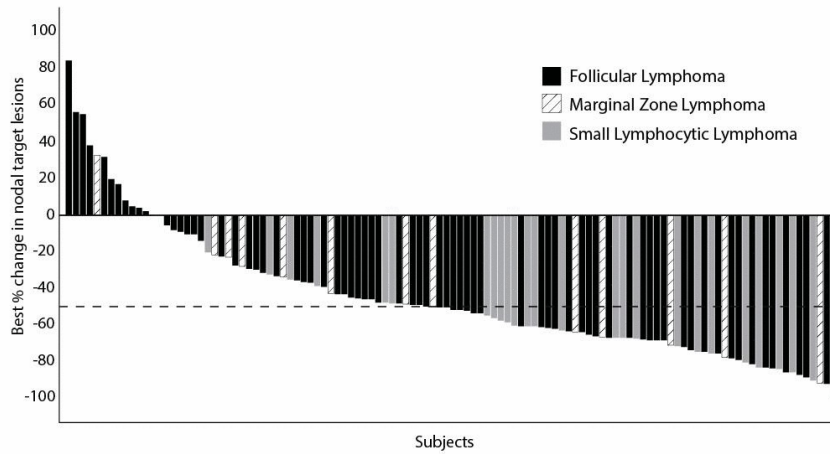
The results from the DYNAMO study were presented at the 2016 Annual Meeting of the American Society for Hematology conference. DYNAMO achieved the primary endpoint in a heavily pre-treated, double refractory to chemotherapy and rituximab, patient population with an ORR of 46% ($p=0.0001$) in the intent to treat population (ITT), as assessed by an independent review committee with a median duration of response of 10 months. The breakdown of ORR in the three subtypes of iNHL for the overall study population was 41% in FL ($n=83$), 68% in SLL ($n=28$) and 33% in MZL ($n=18$). 83% of patients had a reduction in target lymph nodes.

FIGURE 1



**Adapted from Flinn et al., ASH 2016*

FIGURE 2



**Flinn et al., ASH 2016*

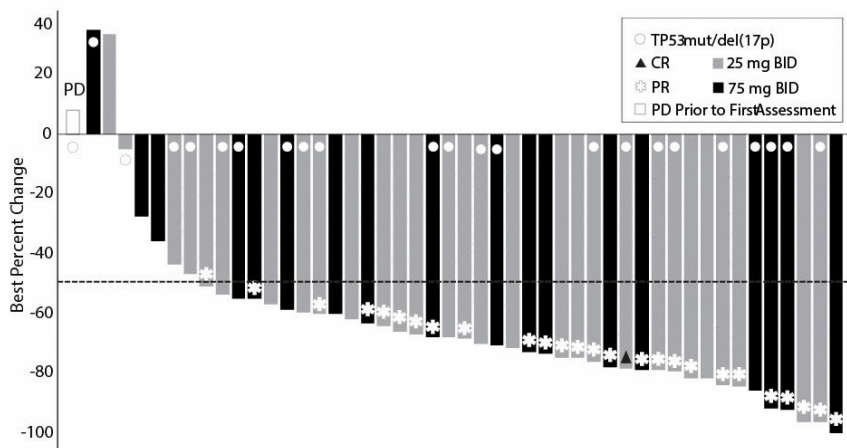
Duvelisib was generally well tolerated, with an expected and manageable safety profile with appropriate risk mitigation. The majority of adverse events were Grade 1 or 2 in severity, reversible and/or clinically manageable. The most common (>5%) Grade 3 adverse effects were an increase in diarrhea (14%), anemia (10%), and neutropenia (9%). Grade 3 or 4 adverse effects of special interest included neutropenia (28%), infection (18%), diarrhea (15%), thrombocytopenia (13%), anemia (12%), pneumonia (9%), hepatotoxicity (8%), rash (7%), colitis (5%), and pneumonitis (2%). Serious opportunistic infections were <5% with none being fatal. Four treatment-related adverse events had the outcome of death (one septic shock; one viral infection; one drug reaction/eosinophilia/ systemic symptoms, one toxic epidermal necrolysis/sepsis syndrome).

Chronic Lymphocytic Leukemia

The FDA and EMA have granted orphan drug designation to duvelisib for the potential treatment of CLL and SLL. The FDA has granted fast track designation to the investigation of duvelisib for the potential treatment of patients with CLL who have received at least one prior therapy. We are evaluating duvelisib for the treatment of CLL in the DUO study. DUO is a randomized, Phase 3 monotherapy study designed to evaluate the safety and efficacy of duvelisib dosed at 25 mg BID compared to ofatumumab, a monoclonal antibody treatment, in approximately 300 patients with relapsed or refractory CLL. The primary endpoint of the study is progression-free survival. Enrollment of DUO was completed in November 2015, and we expect to report topline data mid-year 2017.

The investigation of duvelisib in DUO is supported by preliminary data from a Phase 1 study that demonstrated that duvelisib administered at 25 mg BID was clinically active in patients with relapsed or refractory CLL, with a 57% ORR (17 of 30 evaluable patients), including one complete response, as per investigator assessment. At the time of the presentation of the study at ASH 2014, the median progression free survival in the 31 patients who received the 25 mg BID dose had not yet been reached with 66% of patients progression free at twelve months and 59% of patients progression free at 24 months.

FIGURE 3



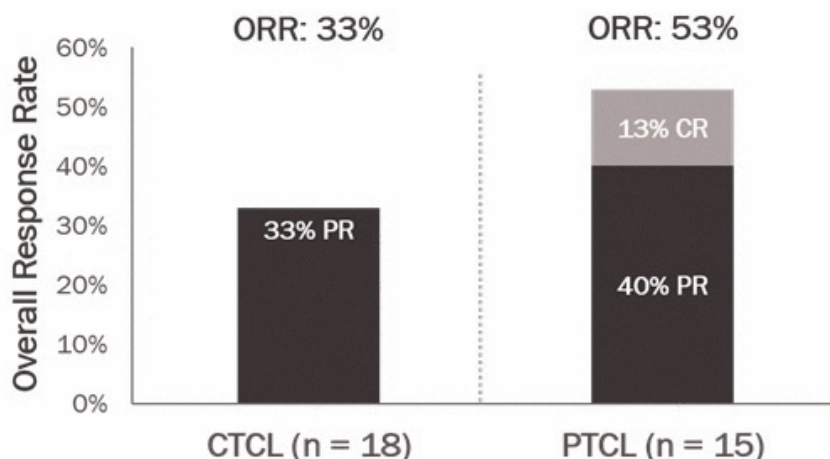
CR: Complete Response; PR: Partial Response; PD: Progressive Disease; TP53mut/del(17p): high-risk cytogenetic markers
*O'Brien et al., ASH 2014

The majority of side effects were Grade 1 or 2 in severity, reversible and/or clinically manageable. Across all doses evaluated in the study (n=55), the most common Grade 3 side effects were pneumonia (24%), neutropenia (18%) and anemia (16%). Grade 4 side effects included pneumonia in one patient (2%), neutropenia in 13 patients (24%) and anemia in one patient (2%).

T-cell Lymphoma, Aggressive NHL and Other Lymphomas

Data from the Phase 1 study presented at ASH 2014 and at the Annual T-cell Lymphoma Forum held in January 2015 demonstrates that duvelisib is clinically active in advanced T-cell lymphomas. Treatment with duvelisib in heavily pre-treated patients with relapsed or refractory T-cell lymphoma resulted in an ORR of 42% (14 of 33 patients evaluable for response), including two complete responses and twelve partial responses. Among the 15 patients with peripheral T-cell lymphoma (PTCL) who were evaluable for response, treatment with duvelisib resulted in two complete responses and six partial responses, for an ORR of 53%. Among the 18 patients with cutaneous T-cell lymphoma (CTCL) evaluable for response, treatment with duvelisib resulted in six partial responses for an ORR of 33%. Stable disease was observed in one patient with PTCL and six patients with CTCL. The Grade 3 side effects in patients with T-cell lymphoma included increases in aspartate transaminase (ALT) or alanine transaminase (AST) in 11 patients (31%), rash in six patients (17%) and pneumonia in five patients (14%). Two patients (6%) had Grade 4 ALT or AST increases, and one patient (3%) had Grade 4 pneumonia.

FIGURE 4



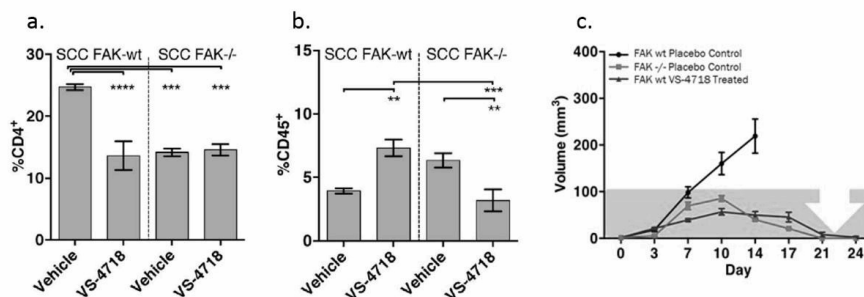
CR: Complete Response; PR: Partial Response;
ORR: CR + PR
*Horwitz, et al., T-Cell Lymphoma Forum 2015

FAK Inhibition Program

Our product candidates that inhibit FAK utilize a multi-faceted approach to treat cancer by reducing CSCs, enhancing anti-tumor immunity, and modulating the local tumor microenvironment. Our lead FAK inhibitor is known as defactinib (VS-6063) and our early-stage FAK inhibitor is known as VS-4718. The effects of FAK inhibition on the tumor microenvironment make defactinib a good candidate for combination therapy with immuno-oncology agents and other anti-cancer compounds. FAK expression is greater in many tumor types compared to normal tissue, particularly in cancers that have a high invasive and metastatic capability. The contact between cancer cells and connective tissue stimulates FAK signaling. However, CSCs acquire the ability to survive in the absence of contact with connective tissue. We believe that FAK signaling in CSCs may be maintained through alternative mechanisms, thus providing CSCs the ability to survive in the absence of cell contact. Accordingly, we believe that FAK signaling may be a central component of CSC biology that allows CSCs to survive after exiting from a tumor mass and enable metastatic growth at other sites in the body.

In September 2015, researchers from the University of Edinburgh published a study in the journal *Cell* that highlights the potential of FAK inhibition to enable the body's immune system to fight cancer. The paper discussed results from preclinical research showing that FAK enables cancer cells to evade attack by the immune system. This research showed that genetic knock down of FAK or oral dosing of mice with a FAK inhibitor decreases immunosuppressive cells called T-regulatory cells (Figure 5a) and increases cytotoxic T-cells (Figure 5b) in skin cancer tumors leading to a reduction in tumor burden (Figure 5c). This work has since been expanded into pancreatic cancer and colorectal cancer models in which FAK inhibition similarly extends survival of tumor-bearing mice through increasing cytotoxic T-cells in the tumor and decreasing T regulatory cells as published in *Nature Medicine* in August, 2016. Additionally, FAK inhibition was found to decrease other key immunosuppressive cell populations in tumors, known as myeloid-derived suppressor cells and M2 tumor-associated macrophages. Coincident with this immunomodulation, FAK inhibition was shown to substantially increase survival of mice when combined with an anti-PD-1 immune checkpoint antibody. These results have indicated the potential promise of FAK inhibitors in combination with immune checkpoint inhibitors in the clinic.

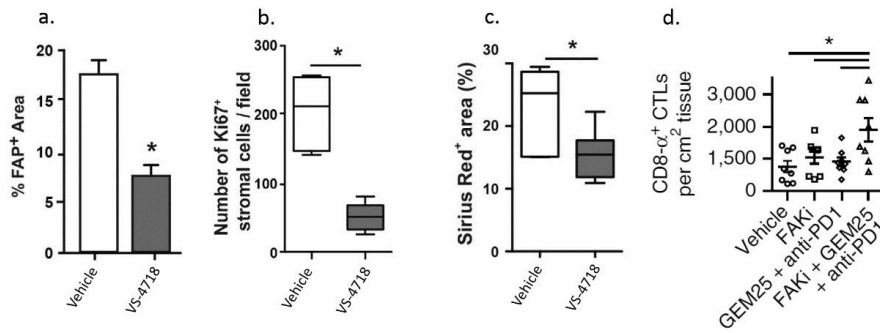
FIGURE 5



*Adapted from: Serrels et al. Nuclear FAK controls chemokine transcription, Tregs, and evasion of anti-tumor immunity. *Cell*. 2015.

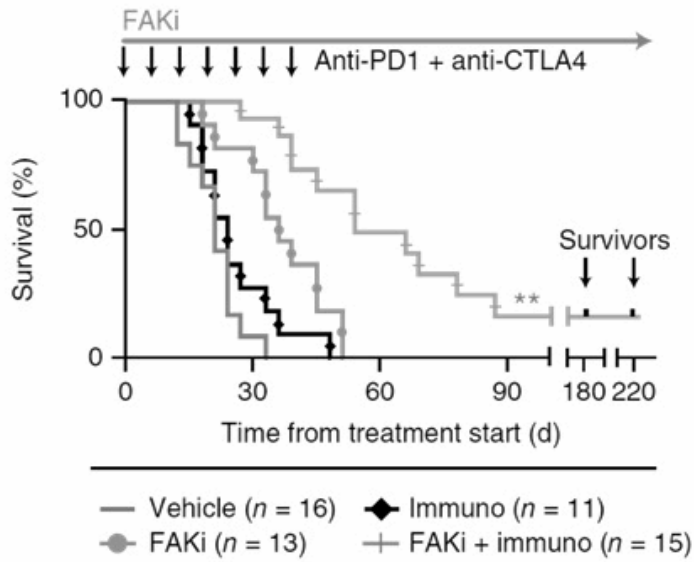
In the 2016 *Nature Medicine* paper, preclinical data were presented (Jiang, et al) demonstrating that FAK inhibition reduces stromal density and increases T-cell entry into tumors. In this study, it was discovered that treating mice bearing pancreatic cancer tumors with a FAK inhibitor reduces stromal density. This was measured as a decrease in the number (Figure 6a) and proliferation (Figure 6b) of tumor-associated fibroblasts, together with a decrease in collagen and other extracellular matrix proteins (Figure 6c) in the tumors. The paper's authors went on to show that this reduction in stromal density by FAK inhibition augments the effectiveness of the chemotherapeutic agent gemcitabine, and also allowed cytotoxic T-cells to enter the tumors (Figure 6d) to induce more durable survival of transgenic mice bearing pancreatic tumors (Figure 7). We believe these data provide strong rationale for the clinical evaluation of FAK inhibitors, including defactinib, in combination with a PD-1 or PD-L1 antibody in patients with pancreatic and other cancers. Based on this research, we have initiated clinical trials to assess the combination of defactinib with either avelumab (anti-PD-L1) or pembrolizumab (anti-PD-1) for the treatment of patients with ovarian cancer, pancreatic cancer, mesothelioma, or NSCLC.

FIGURE 6



**Adapted from: Jiang et al. Targeting focal adhesion kinase renders pancreatic cancers responsive to checkpoint immunotherapy. Nature Medicine. 2016.*

FIGURE 7



Vehicle: Placebo control; Immuno: Gem +/- anti-PD-1 +/- anti-CTLA-4

**Adapted from: Jiang et al. Targeting focal adhesion kinase renders pancreatic cancers responsive to checkpoint immunotherapy. Nature Medicine. 2016.*

Defactinib

Defactinib is an orally-available small molecule kinase inhibitor designed to inhibit FAK signaling. We are currently evaluating defactinib as a potential therapy for ovarian cancer, pancreatic cancer, mesothelioma, NSCLC, and other solid tumors. Defactinib has orphan drug designation in ovarian cancer and mesothelioma in the United States, the European Union, and Australia.

The clinical evaluation of defactinib is supported by a growing body of preclinical research suggesting that FAK inhibition, when combined with PD-1 inhibitors, increases the anti-tumor activity of these immunotherapeutic agents. As published in the journals *Cell* and *Nature Medicine*, FAK inhibition has been shown to increase cytotoxic (CD8+) T-cells in tumors, decrease T-cell exhaustion, decrease immunosuppressive cell populations, enhance T-cell killing of tumor cells, and create a generally more favorable tumor microenvironment, which may allow for enhanced efficacy of immuno-oncology therapeutics.

Pancreatic cancer, along with other tumors such as ovarian cancer and prostate cancer, are tumor types in which immunotherapeutics have achieved limited clinical benefit, possibly due to the dense desmoplastic stroma and the abundance of immunosuppressive cells. Preclinical research has demonstrated that high stromal density prevents anti-cancer agents and T-cells from entering pancreatic tumors thereby limiting efficacy. In preclinical research conducted by us and others, FAK inhibition was shown to reduce stromal density and allow cytotoxic T-cells to better penetrate the tumor and kill the cancer cells. Collectively, these data provide strong rationale for combining our FAK inhibitors with checkpoint inhibitors in the clinic for pancreatic and other solid tumors.

Phase 1/2 study with Pfizer and Merck KGaA in combination with immunotherapy in ovarian cancer. In March 2016, we announced a new clinical collaboration with Pfizer and Merck KGaA to evaluate defactinib in combination with avelumab in patients with ovarian cancer. Avelumab is a human programmed death ligand 1 (PD-L1), blocking antibody that binds to the PD-L1 ligand expressed on tumor cells.

Phase 1/2 study with Cancer Research United Kingdom (CRUK) in combination with pembrolizumab. In September 2016, we announced a new clinical collaboration with CRUK and Merck & Co. to evaluate defactinib in combination with pembrolizumab in patients with NSCLC, mesothelioma, or pancreatic cancer.

Phase 1/1b study in combination with immunotherapy in pancreatic cancer. Defactinib is in a dose escalation study in combination with Merck & Co.'s PD-1 inhibitor pembrolizumab and gemcitabine in patients with advanced pancreatic cancer. This Phase 1 clinical trial is anticipated to enroll approximately 50 patients and is being conducted at the Washington University School of Medicine's Division of Oncology under the direction of Andrea Wang-Gillam, M.D., Ph.D., Clinical Director of the Gastrointestinal Oncology Program. This trial is primarily designed to evaluate the safety of the combination regimen and may also provide a greater understanding of how FAK inhibition in combination with immunotherapies could improve outcomes for patients with pancreatic cancer.

OUR MANAGEMENT TEAM AND SCIENTIFIC CO-FOUNDERS AND ADVISORS

Our experienced management team includes our President and Chief Executive Officer, Robert Forrester, and our Chief Operating Officer, Daniel Paterson.

Mr. Forrester has been the Chief Executive Officer, Chief Operating Officer and chief financial officer of both private and public life science companies, including Forma Therapeutics, Inc., CombinatoRx, Inc. and Coley Pharmaceutical Group, Inc., which was acquired by Pfizer Inc. in 2007.

Mr. Paterson has over 25 years of experience in management roles at healthcare and biotechnology companies, including as chief executive officer, Chief Operating Officer and Chief Business Officer, and specific expertise in oncology drug and diagnostic product development, business development, and launch planning. Mr. Paterson was Head of Global Strategy for Specialty Market and Patient-Level Data at IMS Health after playing a key role in the acquisition of PharMetrics by IMS Health as Vice President of Marketing and Corporate Development.

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Our scientific co-founders are recognized leaders in the field of cancer biology. Robert Weinberg, Ph.D., Founding Member of the Whitehead Institute and Professor of Biology at MIT, has played a key role in identifying the genetic basis of cancer. Dr. Weinberg discovered the first tumor oncogene, the first tumor suppressor gene, the role of a protein related to the cell surface receptor HER2 in preclinical studies and the mechanisms underlying the formation of CSCs. Eric Lander, Ph.D., Founding Director of the Broad Institute, Professor of Biology at MIT and Professor of Systems Biology at Harvard Medical School, played a central role in the Human Genome Project.

INTELLECTUAL PROPERTY

We strive to protect the proprietary technology that we believe is important to our business, including seeking and maintaining patents intended to cover our product candidates and compositions, their methods of use and processes for their manufacture, and any other aspects of inventions that are commercially important to the development of our business. We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

We plan to continue to expand our intellectual property estate by filing patent applications directed to compositions, methods of treatment and patient selection created or identified from our ongoing development of our product candidates. Our success will depend 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, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and proprietary rights of third parties. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position. We seek to obtain domestic and international patent protection, and endeavor to promptly file patent applications for new commercially valuable inventions.

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

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

Patents

Our patent portfolio includes issued and pending applications worldwide. These patent applications fall into three categories: (1) PI3K inhibition program; (2) FAK inhibition program; and (3) other programs.

PI3K inhibition program

We are currently developing the PI3K inhibitor duvelisib.

DUVELISIB

We have exclusively licensed a portfolio of patent applications owned by Intellikine LLC and Infinity Pharmaceuticals, Inc. (Infinity), which are directed to PI3K inhibitor compounds and methods of their use, for example, in cancer. Certain patent families are related to duvelisib. These patent families include issued patents having claims covering duvelisib generically and specifically. Also included are issued patents covering certain polymorphs of duvelisib. Exemplary patents covering duvelisib, pharmaceutical compositions comprising duvelisib, methods of use, polymorphs, and methods of manufacture include US 8,193,182; US 8,785,456, and US 9,216,982. These U.S. patents have issued and will expire between 2029 and 2032. Related issued and pending worldwide patents and applications with claims to duvelisib, pharmaceutical compounds, methods of use, polymorphs, and methods of manufacture are pending in about 40 countries. Additional patent applications related to certain methods of use and combination therapies, as issued, would expire between 2029 and 2036.

FAK inhibition program

We are currently developing the FAK inhibitor defactinib.

DEFACTINIB

We have exclusively licensed a portfolio of patent applications owned by Pfizer, which are directed to FAK inhibitor compounds and methods of their use, for example in cancer. One patent family is related generally to defactinib. This patent family includes issued patents having claims covering defactinib generically and specifically. For example, US 7,928,109 covers the composition of matter of defactinib specifically and US 8,247,411 covers the composition of matter of defactinib generically. Also included are issued and pending patent applications having claims directed to methods of treatment and methods of making defactinib. For example, US 8,440,822 covers methods of making defactinib. Any U.S. patents that have issued or will issue in this family will have a statutory expiration date in April of 2028. Related cases are pending worldwide, including for example in Europe, Brazil, Thailand, Hong Kong, and India, and granted in Australia, Mexico, Canada, China, Korea, Israel, New Zealand, South Africa, Singapore, Taiwan, and Japan.

In addition to the issued and pending patent applications exclusively licensed from Pfizer, we own three patent families covering defactinib. One family is directed to compositions (e.g., oral dosage forms) of defactinib and certain methods of use. Any U.S. patents that will issue in this family will have a statutory expiration date in January of 2035. The other two families are directed to methods of using a FAK inhibitor in combination with another agent, such as defactinib in combination with a mitogen-activated protein kinase kinases (MEK) inhibitor for treating a patient or defactinib in combination with an immunotherapeutic agent. Any U.S. patents that will issue in these families will have a statutory expiration date in February of 2035 and June of 2036.

Our licensed portfolio of patent applications from Pfizer also includes four families of patent applications directed to VS-6062 and related methods of use. The patent families include issued and pending patent applications having claims directed to VS-6062, methods of manufacture, and pharmaceutical salts. Patents have issued in these families in the U.S. that will expire in December of 2023, April of 2025, and November of 2028, respectively. Related cases have been granted worldwide, including for example in Australia, Canada, China, Japan, and Europe.

VS-4718

We have exclusively licensed a family of patent applications owned by the Scripps Research Institute, which is directed to VS-4718 and related methods of use. For example, US 8,501,763 covers the composition of matter of VS-4718. The statutory expiration of any patent that has issued or will issue pertaining to VS-4718 has or will have a statutory expiration date in March of 2028. Related cases are pending worldwide, including for example in China and Canada. The patent has also been allowed in Japan and Europe.

Patent Term

The base term of a U.S. patent is 20 years from the filing date of the earliest-filed non-provisional patent application from which the patent claims priority. The term of a U.S. patent can be lengthened by patent term adjustment, which compensates the owner of the patent for administrative delays at the U.S. Patent and Trademark Office. In some cases, the term of a U.S. patent is shortened by terminal disclaimer that reduces its term to that of an earlier-expiring patent.

The term of a United States patent may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act, to account for at least some of the time the drug is under development and regulatory review after the patent is granted. With regard to a drug for which FDA approval is the first permitted marketing of the active ingredient, the Hatch-Waxman Act allows for extension of the term of one United States patent that includes at least one claim covering the composition of matter of an FDA-approved drug, an FDA-approved method of treatment using the drug, and/or a method of manufacturing the FDA-approved drug. The extended patent term cannot exceed the shorter of five years beyond the non-extended expiration of the patent or 14 years from the date of the FDA approval of the drug. Some foreign jurisdictions, including Europe and Japan, have analogous patent term extension provisions, which allow for extension of the term of a patent that covers a drug approved by the applicable foreign regulatory agency. In the future, if and when our pharmaceutical products receive FDA approval, we expect to apply for patent term extension on patents covering those products, their methods of use, and/or methods of manufacture.

LICENSES

Infinity Pharmaceuticals, Inc.

In November 2016, we entered into an amended and restated license agreement with Infinity, under which we acquired an exclusive worldwide license for the research, development, commercialization, and manufacture of products in oncology indications containing duvelisib. In connection with the license agreement, we assumed operational and financial responsibility for certain activities that were part of Infinity's duvelisib program, including the DUO study for patients with relapsed/refractory CLL, and Infinity assumed financial responsibility for the shutdown of certain other clinical studies up to a maximum of \$4.5 million. We are obligated to use diligent efforts to develop and commercialize a product in an oncology indication containing duvelisib. During the term of the license agreement, Infinity has agreed not to research, develop, manufacture or commercialize duvelisib in any other indication in humans or animals.

Pursuant to the terms of the license agreement, we are required to make the following payments to Infinity in cash or, at our election, in whole or in part, in shares of our common stock: (i) \$6.0 million upon the completion of the DUO study if the results of the study meet certain pre-specified criteria and (ii) \$22.0 million upon the approval of a new drug application in the United States or an application for marketing authorization with a regulatory authority outside of the United States for a product in an oncology indication containing duvelisib. For any portion of any of the foregoing payments that we elect to issue in shares of our common stock in lieu of cash, the number of shares of common stock to be issued will be determined by multiplying (1) 1.025 by (2) the number of shares of common stock equal to (a) the amount of the payment to be paid in shares of common stock divided by (b) the average closing price of a share of common stock as quoted on NASDAQ for a twenty-day period following the public announcement of the applicable milestone event. The shares of common stock will be issued as unregistered securities, and we will have an obligation to promptly file a registration statement with the SEC to register such shares for resale. Any issuance of shares will be subject to the satisfaction of closing conditions, including that all material authorizations, consents, approvals and the like necessary for such issuance shall have been obtained.

We are also obligated to pay Infinity royalties on worldwide net sales of any products in an oncology indication containing duvelisib ranging from the mid-single digits to the high single digits. The royalties will expire on a product-by-product and country-by-country basis until the latest to occur of (i) the last-to-expire patent right covering the applicable product in the applicable country, (ii) the last-to-expire patent right covering the manufacture of the applicable product in the country of manufacture of such product, (iii) the expiration of non-patent regulatory exclusivity in such country and (iv) ten years following the first commercial sale of a product in a

country, provided that if royalties on net sales for a product in the United States are payable solely on the basis of non-patent regulatory exclusivity, the applicable royalty on net sales for such product in the United States will be reduced by 50%. The royalties are also subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

In addition to the foregoing, we are obligated to pay Infinity an additional royalty of 4% on worldwide net sales of any products in an oncology indication containing duvelisib to cover the reimbursement of research and development costs owed by Infinity to Mundipharma International Corporation Limited (MICL) and Purdue Pharmaceutical Products L.P. (Purdue). Once Infinity has fully reimbursed MICL and Purdue, the royalty obligations will be reduced to 1% of net sales in the United States. These trailing MICL royalties are payable until the later to occur of the last-to-expire of specified patent rights and the expiration of non-patent regulatory exclusivities in a country. Each of the above royalty rates is reduced by 50% on a product-by-product and country-by-country basis if the applicable royalty is payable solely on the basis of non-patent regulatory exclusivity. In addition, the trailing MICL royalties are subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

The Scripps Research Institute

In November 2011, we entered into a license agreement with Poniard Pharmaceuticals, Inc. (Poniard), under which we acquired an exclusive, worldwide license under patent rights and know-how owned or controlled by Poniard to develop, make, use and sell compounds and products covered by the licensed patent rights for the diagnosis, treatment, prevention or control of all human diseases and conditions. These licensed patent rights include patent rights owned by The Scripps Research Institute (Scripps), and licensed to Poniard. Under the agreement, we paid Poniard an upfront license fee and agreed to pay Poniard milestone payments upon the achievement of specified development and regulatory milestones.

On August 2, 2013, patents and other rights which were the subject of our license agreement with Poniard were sold to Encarta, Inc. (Encarta). We purchased these assets from Encarta in an asset purchase agreement dated February 21, 2014 and also entered into a securities issuance agreement. Under the terms of these agreements, we issued 97,500 shares of common stock, issued a warrant to purchase 142,857 shares of common stock with an exercise price equal to \$17.16 per share and paid Encarta \$25,000. All existing obligations under the license agreement, including an achieved development milestone and an obligation to issue a warrant, were settled as part of this transaction.

In connection with the asset purchase agreement, we also assumed the rights and obligations under the license agreement by and between Scripps and Poniard, dated May 5, 2008 (the Scripps License Agreement). Pursuant to the Scripps License Agreement, we acquired an exclusive, worldwide license under patent rights owned or controlled by Scripps to make and have made, to use and have used, to offer to sell, to sell and have sold, and import products covered by the licensed patent rights for the diagnosis, treatment or prevention of human diseases or conditions. The licensed patent rights include patents covering our product candidate VS-4718. Under the Scripps License Agreement, Scripps retains the right to grant non-exclusive licenses to nonprofit or academic institutions, without the right to sublicense and to use any of the licensed patent rights for any noncommercial research or education purposes.

Pursuant to the Scripps License Agreement, we are obligated to pay Scripps potential product development milestone payments of up to an aggregate of \$3.0 million upon the achievement of specified development and regulatory milestones. In addition, we are obligated to pay Scripps low single-digit royalties as a percentage of net sales of licensed products. Our obligation to pay royalties on net sales is on a country-by-country basis. In the event that we challenge a patent or patent application covered by the Scripps License Agreement, our royalties will increase by fifty percent during the pendency of the challenge (and increase by one hundred percent in the event the challenge is not successful). We also forfeit the right to recoup any royalties, sublicense payments, milestone payments, patent costs or other payments during the period of any challenge to the patents covered under the Scripps License Agreement.

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If we license or acquire technology from a third party in order to commercialize a licensed product and to pay such third party royalties or other amounts, then we may deduct up to 50% of the amount paid to such third party from the payments owed to Scripps for such licensed product. This deduction is subject to specified limitations, including that in no event will any such deduction reduce a payment that we owe to Scripps to less than 50% of the otherwise applicable amount.

We are required to use reasonable and diligent efforts to commercialize (directly or through sublicense arrangements) licensed products (including our product candidate VS-4718) in either the United States, the United Kingdom, France, Germany or Japan.

The Scripps License Agreement expires upon the last expiration of any of the licensed patent rights. We have the right to terminate the Scripps License Agreement or any portion of our licensed rights under the Scripps License Agreement for any reason upon at least 90 days prior written notice and payment of a low five-figure termination fee. We are not responsible for the termination fee if Scripps defaults in the performance of its material obligations and fails to cure. Scripps can terminate the Scripps License Agreement for certain material breaches by us or defaults in our performance of material obligations.

Pfizer Inc.

On July 11, 2012, we entered into a license agreement with Pfizer under which Pfizer granted us worldwide, exclusive rights to research, develop, manufacture and commercialize products containing certain of Pfizer's inhibitors of FAK, including defactinib, for all therapeutic, diagnostic and prophylactic uses in humans. We have the right to grant sublicenses under the foregoing licensed rights, subject to certain restrictions. We are solely responsible, at our own expense, for the clinical development of these products, which is to be conducted in accordance with an agreed-upon development plan. We are also responsible for all manufacturing and commercialization activities at our own expense. Pfizer provided us with an initial quantity of clinical supplies of one of the products for an agreed upon price.

Upon entering into the license agreement, we made a one-time cash payment to Pfizer in the amount of \$1.5 million and issued 192,012 shares of our common stock. Pfizer is also eligible to receive up to \$2.0 million in developmental milestones and up to an additional \$125.0 million based on the successful attainment of regulatory and commercial sales milestones. Pfizer is also eligible to receive high single to mid-double digit royalties on future net sales of the products. Our royalty obligations with respect to each product in each country begin on the date of first commercial sale of the product in that country, and end on the later of 10 years after the date of first commercial sale of the product in that country or the date of expiration or abandonment of the last claim contained in any issued patent or patent application licensed by Pfizer to us that covers the product in that country.

The license agreement will remain in effect until the expiration of all of our royalty obligations to Pfizer, determined on a product-by-product and country-by-country basis. So long as we are not in breach of the license agreement, we have the right to terminate the license agreement at will on a product-by-product and country-by-country basis, or in its entirety, upon 90 days written notice to Pfizer. Either party has the right to terminate the license agreement in connection with an insolvency event involving the other party or a material breach of the license agreement by the other party that remains uncured for a specified period of time. If the license agreement is terminated by either party for any reason, worldwide rights to the research, development, manufacture and commercialization of the products revert back to Pfizer.

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, development experience and scientific knowledge 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.

Many of our competitors may 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. 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. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

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

Our commercial opportunity 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. There are many generic products 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 therapeutic product candidates are approved, 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, including chemotherapy, hormone therapy and targeted 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 drug 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 general, although there has been considerable progress over the past few decades in the treatment of cancer and the currently marketed therapies provide benefits to many patients, these therapies all are limited to some extent in their efficacy and frequency of adverse events, and none of them are successful in treating all patients. As a result, the level of morbidity and mortality from cancer remains high.

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 market approval.

Our competitors may commence and complete clinical testing of their product candidates, obtain regulatory approvals and begin commercialization of their products sooner than we may for our own product candidates. These competitive products may have superior safety or efficacy, or be manufactured less expensively, than our product candidates. If we are unable to compete effectively against these companies on the basis of safety, efficacy or cost, then we may not be able to commercialize our product candidates or achieve a competitive position in the market. This would adversely affect our business.

PI3K inhibition program

We believe that the following companies, among others, have developed or are in the clinical stage of development of compounds targeting PI3K:

- Gilead Sciences, Inc. has received approval from the FDA of idelalisib for the treatment of people with CLL, SLL, or FL, and which we believe is conducting a Phase 1b clinical trial of acalabisib (GS-9820);

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- Novartis, which we believe is conducting a Phase 2 clinical trial of buparlisib;
- TG Therapeutics, Inc., which we believe is conducting multiple clinical trials of TGR-1202;
- AstraZeneca, which we believe is conducting Phase 2 clinical trials of ACP 319; and
- Incyte Corporation, which we believe is conducting a Phase 2 clinical trial of INCB-050465, and which we also believe is conducting a Phase 2 clinical trial of INCB-040093.

In addition, many companies are developing product candidates directed to disease targets such as Bruton's Tyrosine Kinase (BTK), B-cell lymphoma 2 (BCL-2), Janus Kinase (JAK), B-lymphocyte antigen CD-19, and programmed death 1/ligand 1 (PD-1/PD-L1), Cluster of Differentiation 79B antibody-drug conjugate (CD79B ADC), and pleiotropic pathways in the fields of hematology-oncology, including in the specific diseases for which we are currently developing duvelisib, or for which we may develop duvelisib or other PI3K inhibitors in the future. Such companies include:

- Pharmacyclics LLC, a wholly-owned subsidiary of AbbVie, through its collaboration with Janssen Biotech, which has received approval from the FDA of ibrutinib, a BTK inhibitor, for the treatment of people with mantle cell lymphoma (MCL), CLL, MZL, SLL, or Waldenström's macroglobulinemia, and is conducting multiple late stage clinical studies of ibrutinib in additional hematologic malignancies;
- AbbVie, through its collaboration with Roche, which has received approval from the FDA of venetoclax, a BCL-2 inhibitor, for the treatment of people with CLL, and is conducting multiple late stage clinical studies of ventoclax in additional hematologic malignancies;
- Celgene Corporation, which has received FDA approval of lenalidomide, an immunomodulator, for the treatment of people with multiple myeloma, MCL, and myelodysplastic syndromes, and is conducting late stage clinical studies of lenalidomide in additional hematologic malignancies; we also believe that Celgene is conducting a Phase 1 clinical trial of CC-292, a BTK inhibitor, in patients with CLL;
- AstraZeneca, which we believe is conducting a Phase 3 clinical trial of ACP-196, a BTK inhibitor, in patients with CLL; and
- Incyte Corporation, which has received FDA approval of ruxolitinib, a JAK inhibitor, in patients with intermediate or high-risk myelofibrosis, and which we believe is conducting Phase 2 clinical trials in CLL.

FAK inhibition program

There are other companies working to develop therapies to treat cancer including some who also target the tumor microenvironment or CSCs. These companies include divisions of large pharmaceutical companies including Astellas Pharma Inc., Celgene, Inc., Sanofi-Aventis U.S. LLC, GlaxoSmithKline plc, Boehringer Ingelheim GmbH, Pfizer Inc. and others. There are also biotechnology companies of various sizes that are developing therapies against CSCs, including OncoMed Pharmaceuticals, Inc., Boston Biomedical Inc. (a division of Dainippon Sumitomo Corp), Stemline Therapeutics, Inc. and others.

MANUFACTURING

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties for the manufacture of our product candidates and any products that we may develop, other than small amounts of compounds that we may synthesize ourselves for preclinical testing. To date, we have obtained starting materials for our supply of the bulk drug substance and drug product for our product candidates from third-party manufacturers. We obtain our supplies from these manufacturers on a purchase order basis and do not have long-term supply arrangements in place. We do not currently have arrangements in place for redundant supply or a second source for bulk drug substance and drug product. If our current third-party manufacturers should become unavailable to us for any reason, we believe that there are several potential replacements, although we might incur some delay in identifying and qualifying such replacements.

All of our drug candidates are organic compounds of low molecular weight, generally called small molecules. We select compounds not only on the basis of their potential efficacy and safety, but also for their ease of synthesis and reasonable cost of their starting materials. We expect to continue to develop drug candidates that can be produced cost-effectively at third-party manufacturing facilities.

GOVERNMENT REGULATION

Government authorities in the United States, at the federal, state and local level, and in other countries extensively regulate, among other things, the research, development, testing, manufacture, including any manufacturing changes, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, import and export of pharmaceutical products, such as those we are developing.

United States drug approval process

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act (FDCA) and implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the 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 applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement of profits or civil or criminal penalties.

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

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice (GLP) regulations;
- submission to the FDA of an investigational new drug (IND) application, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board (IRB) at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices (GCP) to establish the safety and efficacy of the proposed drug for each indication;
- submission to the FDA of a new drug application (NDA);

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- 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 (cGMP) requirements and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and
- FDA review and approval of the NDA.

Preclinical studies

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as *in vitro* and animal studies to assess the potential for adverse events and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical studies, among other things, to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

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, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the objectives of the study, 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 conduct continuing review. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health for public dissemination on their ClinicalTrials.gov website.

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

- *Phase 1:* The drug is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness.
- *Phase 2:* The drug 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.
- *Phase 3:* The drug is administered to an expanded patient population in adequate and well-controlled clinical trials to generate sufficient data to statistically confirm 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.

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

Marketing approval

Assuming successful completion of the required clinical testing, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to a substantial application user fee, currently scheduled to exceed \$2.0 million, and the sponsor of an approved NDA is also subject to annual product and establishment user fees, currently exceeding \$97,000 per product and \$512,000 per establishment. These fees are typically adjusted annually. User fee statutory authority expires every five years. The current authority ends on September 30, 2017, so the United States Congress will have to enact new legislation by then to continue the program. We cannot predict if Congress will authorize a new user fee program or what, if any, changes will be made in the program.

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 has agreed to specified performance goals in the review of NDAs. Under these goals, the FDA has committed to review most such applications for non-priority products within 10 months after accepting the application for filing, and most applications for priority review products, that is, drugs that the FDA determines represent a significant improvement over existing therapy, within six months after accepting the application for filing. The review process may be extended by the FDA for three additional months to consider certain information or clarification regarding information already provided in the submission. The FDA may also refer applications for novel drugs or products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the 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. In addition, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP and integrity of the clinical data submitted.

The testing and approval process requires substantial time, effort and financial resources, and each may take many years to complete. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. We may encounter difficulties or unanticipated costs in our efforts to develop our product candidates and secure necessary governmental approvals, which could delay or preclude us from marketing our products.

After the FDA's evaluation of the NDA and inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such

resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval and refuse to approve the NDA.

Even if the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, 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-market 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.

Fast track designation

The FDA is required to facilitate the development and expedite the review of drugs that are intended for the treatment of a serious or life-threatening condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the sponsor of a new drug candidate may request the FDA to designate the product for a specific indication as a fast track product concurrent with or after the filing of the IND for the product candidate. The FDA must determine if the product candidate qualifies for fast track designation within 60 days after receipt of the sponsor's request.

In addition to other benefits, such as the ability to use surrogate endpoints and have greater interactions with the FDA, the FDA may initiate review of sections of a fast track product's NDA before the application is complete. This rolling review is available if the applicant provides and the FDA approves a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the FDA's time period goal for reviewing a fast track application does not begin until the last section of the NDA is submitted. In addition, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Priority review

Under FDA policies, a product candidate may be eligible for priority review, or review within a six-month time frame from the time a complete application is accepted for filing. Products regulated by the FDA's Center for Drug Evaluation and Research (CDER) are eligible for priority review if they provide a significant improvement compared to marketed products in the treatment, diagnosis or prevention of a disease. A fast track designated product candidate would ordinarily meet the FDA's criteria for priority review.

Accelerated approval

Under the FDA's accelerated approval regulations, the FDA may approve a drug for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit. In clinical trials, a surrogate endpoint is a measurement of laboratory or clinical signs of a disease or condition that substitutes for a direct measurement of how a patient feels, functions or survives. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. A product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

Orphan drugs

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally defined as a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The first NDA applicant to receive FDA approval for a particular active ingredient to treat a particular disease with FDA orphan drug designation is entitled to a seven-year exclusive marketing period in the United States for that product, for that indication. During the seven-year exclusivity period, the FDA may not approve any other applications to market the same drug for the same orphan indication, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity in that it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA application user fee.

Pediatric information

Under the Pediatric Research Equity Act of 2003, as amended and reauthorized by the Food and Drug Administration Amendments Act of 2007 (FDAAA), 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. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan drug designation.

The Hatch-Waxman act

Abbreviated new drug applications

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 (ANDA). 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.

The ANDA 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;

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- 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.

A certification that the new 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 application will not be approved until all the listed patents claiming the referenced product have expired.

If the ANDA 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 ANDA 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 a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months after the NDA or patent holder's receipt of the Paragraph IV certification, expiration of the patent, settlement of the lawsuit or a decision in the infringement case that is favorable to the ANDA applicant.

The ANDA also will not be approved until any applicable non-patent exclusivity period, such as exclusivity for obtaining approval of a new chemical entity, for the referenced product has expired. Federal law provides a period of five years following approval of a drug containing no previously approved active moiety during which ANDAs for generic versions of those drugs cannot be submitted unless the submission contains a Paragraph IV challenge to a listed patent, in which case the submission may be made four years following the original product approval. Federal law provides for a period of three years of exclusivity during which the FDA cannot grant effective approval of an ANDA for the conditions of use covered by the exclusivity, but FDA requires as a condition of approval new clinical trials conducted by or for the sponsor. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication. Under the Best Pharmaceuticals for Children Act, federal law also provides that periods of patent and non-patent marketing exclusivity listed in the Orange Book for a drug may be extended by six months if the NDA sponsor conducts pediatric studies identified by the FDA in a written request. For written requests issued by the FDA after September 27, 2007, the date of enactment of the FDAAA, the FDA must grant pediatric exclusivity no later than nine months prior to the date of expiration of patent or non-patent exclusivity in order for the six-month pediatric extension to apply to that exclusivity period.

Section 505(b)(2) new drug applications

Most drug products obtain FDA marketing approval pursuant to an NDA or an ANDA. A third alternative is a special type of NDA, commonly referred to as a Section 505(b)(2) NDA, which enables the applicant to rely, in part, on the FDA's previous approval of a similar product, or published literature, in support of its application.

505(b)(2) NDAs often provide an alternate path to FDA approval for new or improved formulations or new uses of previously approved products. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. If the 505(b)(2) applicant can establish that reliance on the FDA's previous approval is scientifically appropriate, it may eliminate the need to conduct certain preclinical or clinical studies of the new product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new product candidate for all or some of the labeled indications for which the referenced product has been approved, as well as for any new indication sought by the Section 505(b)(2) applicant.

To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would. As a result, approval of a 505(b)(2) NDA can be stalled until all the listed patents claiming the referenced product have expired, until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced

product has expired, and, in the case of a Paragraph IV certification and subsequent patent infringement suit, until the earlier of 30 months, settlement of the lawsuit or a decision in the infringement case that is favorable to the Section 505(b)(2) applicant.

Combination products

The FDA regulates combinations of products that cross FDA centers, such as drug, biologic or medical device components that are physically, chemically or otherwise combined into a single entity, as a combination product. The FDA center with primary jurisdiction for the combination product will take the lead in the premarket review of the product, with the other center consulting or collaborating with the lead center.

The FDA's Office of Combination Products (OCP) determines which center will have primary jurisdiction for the combination product based on the combination product's "primary mode of action." A mode of action is the means by which a product achieves an intended therapeutic effect or action. The primary mode of action is the mode of action that provides the most important therapeutic action of the combination product, or the mode of action expected to make the greatest contribution to the overall intended therapeutic effects of the combination product.

Often it is difficult for the OCP to determine with reasonable certainty the most important therapeutic action of the combination product. In those difficult cases, the OCP will consider consistency with other combination products raising similar types of safety and effectiveness questions, or which center has the most expertise to evaluate the most significant safety and effectiveness questions raised by the combination product.

A sponsor may use a voluntary formal process, known as a Request for Designation, when the product classification is unclear or in dispute, to obtain a binding decision as to which center will regulate the combination product. If the sponsor objects to that decision, it may request that the agency reconsider that decision.

Overview of FDA regulation of companion diagnostics

FDA officials have issued guidance that address issues critical to developing *in vitro* companion diagnostics, such as biomarker qualification, establishing clinical validity, the use of retrospective data, the appropriate patient population and when the FDA will require that the device 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 previously has required *in vitro* companion diagnostics intended to select the patients who will respond to the cancer treatment to obtain Pre-Market Approval (PMA), simultaneously with approval of the drug. Based on the draft guidance, and the FDA's past treatment of companion diagnostics, we believe that the FDA will require one or more of our *in vitro* companion diagnostics to obtain PMA for our companion diagnostics to identify patient populations suitable for our cancer therapies, such as the *in vitro* companion diagnostic for our product candidates. The review of these *in vitro* companion diagnostics in conjunction with the review of our potential cancer treatments will involve coordination of review by CDER and by the FDA's Center for Devices and Radiological Health Office of In Vitro Diagnostics Device Evaluation and Safety.

PMA approval pathway

A medical device, including an *in vitro* diagnostic (IVD) to be commercially distributed in the United States must receive either 510(k) clearance or PMA approval from the FDA prior to marketing. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k) cleared device or a pre-amendment class III device for which PMA applications have not been called, are placed in Class III requiring PMA approval. The PMA approval pathway requires proof of the safety and effectiveness of the device to the FDA's satisfaction.

The PMA approval pathway generally takes from one to three years or even longer from submission of the application.

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A PMA application for an IVD must provide extensive preclinical and clinical trial data. Preclinical data for an IVD includes many different tests, including how reproducible the results are when the same sample is tested multiple times by multiple users at multiple laboratories. The clinical data need to establish that the test is sufficiently safe, effective and reliable in the intended use population. In addition, the FDA must be convinced that a device has clinical utility, meaning that an IVD provides information that is clinically meaningful. A biomarker's clinical significance may be obvious, or the applicant may be able to rely upon published literature or submit data to show clinical utility.

A PMA application also must provide information about the device and its components regarding, among other things, device design, manufacturing and labeling. The sponsor must pay an application fee.

As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with Quality System Regulation (QSR) requirements, which impose elaborate testing, control, documentation and other quality assurance procedures.

Upon submission, the FDA determines if the PMA application is sufficiently complete to permit a substantive review, and, if so, the FDA accepts the application for filing. The FDA then commences an in-depth review of the PMA application. The entire process typically takes one to three years, but may take longer. The review time is often significantly extended as a result of the FDA asking for more information or clarification of information already provided. The FDA also may respond with a not approvable determination based on deficiencies in the application and require additional clinical trials that are often expensive and time-consuming and can substantially delay approval.

During the review period, an FDA advisory committee, typically a panel of clinicians, may be convened to review the application and recommend to the FDA whether, or upon what conditions, the device should be approved. Although the FDA is not bound by the advisory panel decision, the panel's recommendation is important to the FDA's overall decision making process.

If the FDA's evaluation of the PMA application is favorable, the FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, in order to secure final approval of the PMA. If the FDA concludes that the applicable criteria have been met, the FDA will issue an approval order, which may be for more limited indications than those originally sought by the manufacturer. The approval order can include post-approval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution. Failure to comply with the conditions of approval can result in material adverse enforcement action, including the loss or withdrawal of the approval.

Even after approval of a PMA, a new PMA or PMA supplement may be required in the event of a modification to the device, its labeling or its manufacturing process. Supplements to a PMA often require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to the information needed to support the proposed change from the product covered by the original PMA.

Clinical trials

A clinical trial is almost always required to support a PMA application. In some cases, one or more smaller Investigational Device Exemption (IDE) studies may precede a pivotal clinical trial intended to demonstrate the safety and efficacy of the investigational device.

All clinical studies of investigational devices must be conducted in compliance with the FDA's requirements. If an investigational device could pose a significant risk to patients pursuant to FDA regulations, the FDA must approve an IDE application prior to initiation of investigational use. IVD trials usually do not require an IDE, as the FDA does not judge them to be a significant risk because the results do not affect the patient's safety in the study. The FDA has confirmed that one of our IVDs does not need an IDE application as it does not pose significant risk at this time. Should interim clinical trial data detect a safety signal between patients who test positive or negative for the specific biomarker, then an IDE would be required.

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An IDE application must be supported by appropriate data, such as laboratory test results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The FDA typically grants IDE approval for a specified number of patients. A nonsignificant risk device does not require FDA approval of an IDE. Both significant risk and nonsignificant risk investigational devices require approval from IRBs at the study centers where the device will be used.

During the trial, the sponsor must comply with the FDA's IDE requirements for investigator selection, trial monitoring, reporting and record keeping. The investigators must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of investigational devices and comply with all reporting and record keeping requirements. Prior to granting PMA approval, the FDA typically inspects the records relating to the conduct of the study and the clinical data supporting the PMA application for compliance with applicable requirements.

Although the QSR does not fully apply to investigational devices, the requirement for controls on design and development does apply. The sponsor also must manufacture the investigational device in conformity with the quality controls described in the IDE application and any conditions of IDE approval that the FDA may impose with respect to manufacturing.

Post-market

After a device is on the market, numerous regulatory requirements apply. These requirements include: the QSR, labeling regulations, the FDA's general prohibition against promoting products for unapproved or "off label" uses, the Medical Device Reporting regulation, which requires that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur, and regulations requiring manufacturers to report recalls and field actions to the FDA if initiated to reduce a risk to health posed by the device or to remedy a violation of the FDCA.

The FDA enforces these requirements by inspection and market surveillance. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from a public warning letter to more severe sanctions such as: fines, injunctions and civil penalties; recall or seizure of products; operating restrictions, partial suspension or total shutdown of production; refusing requests for PMA approval of new products; withdrawing PMA approvals already granted; and criminal prosecution.

Other regulatory requirements

Any drug manufactured or distributed by us pursuant to FDA approvals would be 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.

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. Regulatory approval of oncology products often requires that patients in clinical trials be followed for long periods to determine the overall survival benefit of the drug.

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 us and any third-party manufacturers that we may decide to use. Accordingly,

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manufacturers must continue to expend time, money and effort in the areas 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 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 Risk Evaluation and Mitigation Strategy 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 applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- consent decrees, 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.

Additional provisions

Anti-kickback and false claims laws

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain marketing practices in the pharmaceutical industry. These laws include anti-kickback statutes and false claims statutes. 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 the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and various third parties, including prescribers, purchasers and health plans (including formulary managers) on the other. Violations of the anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. A number of pharmaceutical and other healthcare companies have been prosecuted under these laws for various activities, including allegedly inflating drug prices that the manufacturers report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates or providing free samples to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws.

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The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Physician drug samples

As part of the sales and marketing process, pharmaceutical companies frequently provide samples of approved drugs to physicians. The Prescription Drug Marketing Act (PDMA) imposes requirements and limitations upon the provision of drug samples to physicians, as well as prohibits states from licensing distributors of prescription drugs unless the state licensing program meets certain federal guidelines that include minimum standards for storage, handling and record keeping. In addition, the PDMA sets forth civil and criminal penalties for violations.

Foreign regulation

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our 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.

Pharmaceutical coverage, pricing and reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we obtain regulatory approval. Sales of any of our product candidates, if approved, will depend, in part, on the extent to which the costs of the products will be covered by third-party payors, including government health programs such as Medicare and Medicaid, commercial health insurers and managed care organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product once coverage is approved. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the approved drugs for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. We may also need to provide discounts to purchasers, private health plans or government healthcare programs. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Third-party reimbursement may not be sufficient to enable us to maintain price levels high enough to realize an appropriate return on our investment in product development.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of drugs have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. Adoption of such controls and measures, and tightening of restrictive policies in jurisdictions

with existing controls and measures, could limit payments for pharmaceuticals such as the drug candidates that we are developing and could adversely affect our net revenue and results.

Pricing and reimbursement schemes vary widely from country to country. Some countries provide that drug products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies. For example, the European Union provides options for its member states to restrict the range of drug products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union member states may approve a specific price for a drug product or may instead adopt a system of direct or indirect controls on the profitability of the company placing the drug product on the market. Other member states allow companies to fix their own prices for drug products, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert competitive pressure that may reduce pricing within a country. There can be no assurance that any country that has price controls or reimbursement limitations for drug products will allow favorable reimbursement and pricing arrangements for any of our products.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on drug pricing. Coverage policies, third-party reimbursement rates and drug pricing regulation may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

New legislation and regulations

From time to time, legislation is drafted, introduced and passed in the United States Congress that could significantly change the statutory provisions governing the testing, approval, manufacturing and marketing of pharmaceutical products. For example, in December 2016, Congress enacted and President Obama signed into law the 21st Century Cures Act, that amends a number of sections of the FDCA, including provisions related to medical device approval. In addition to new legislation, FDA regulations and policies are often revised or interpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether further legislative changes will be enacted or whether FDA regulations, guidance, policies or interpretations changed or what the effect of such changes, if any, may be.

The United States and state governments also continue to propose and pass legislation designed to reduce the cost of healthcare. For example, in March 2010, Congress enacted the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (the Healthcare Reform Act) which includes changes to the coverage and reimbursement of drug products under government health care programs, including increased rebates for drugs dispensed to Medicaid beneficiaries, extension of such Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Modifications to or repeal of all or certain provisions of the Healthcare Reform Act are expected as a result of the outcome of the recent presidential election and Republicans maintaining control of Congress, consistent with statements made by Donald Trump and members of Congress during the presidential campaign and following the election. We cannot predict the ultimate content, timing or effect of any changes to the Healthcare Reform Act or other federal and state reform efforts. There is no assurance that federal or state health care reform will not adversely affect our future business and financial results.

EMPLOYEES

As of March 15, 2017, we had 32 full-time equivalent employees, including a total of 6 employees with M.D. or Ph.D. degrees. Of these full-time employees, 18 employees are engaged in research and development activities. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

BUSINESS—EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth the name, age and position of each of our executive officers as of March 15, 2017.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Robert Forrester	53	President, Chief Executive Officer
Daniel Paterson	56	Chief Operating Officer

Robert Forrester has served as our Chief Executive Officer since July 2013, as our Chief Operating Officer from March 2011 until July 2013 and our President since January 2013. Mr. Forrester has previously held executive level positions at both private and public life sciences companies. Prior to joining us, Mr. Forrester served as Chief Operating Officer of Forma Therapeutics, Inc. from 2010 until 2011. Previously he served as Interim President and Chief Executive Officer of CombinatoRx, Inc. from 2009 until 2010 and as its Executive Vice President and Chief Financial Officer from 2004 to 2009. Mr. Forrester served as Senior Vice President, Finance and Corporate Development at Coley Pharmaceuticals Group, Inc. from 2000 to 2003. He earned his LL.B. from Bristol University in England.

Daniel Paterson has served as our Chief Operating Officer since December 2014, our Chief Business Officer from July 2013 to December 2014 and as our Vice President, Head of Corporate Development and Diagnostics from March 2012 until July 2013. Prior to joining us, Mr. Paterson was a consultant in 2011 until joining us in 2012. From 2009 through 2010, Mr. Paterson was the COO of On-Q-ity. Mr. Paterson was the President and CEO of The DNA Repair Company from 2006 until 2009, when it was acquired by On-Q-ity. Previously, he held senior level positions at IMS Health, CareTools, OnCare and Axion.

OUR CORPORATE INFORMATION

We were incorporated under the laws of the State of Delaware in August 2010. Our principal executive offices are located at 117 Kendrick Street, Suite 500, Needham, Massachusetts 02494 and our telephone number is (781) 292-4200.

ADDITIONAL INFORMATION

We maintain a website at www.verastem.com. We make available, free of charge on our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act) as soon as reasonably practicable after we electronically file those reports with, or furnish them to, the SEC. We also make available, free of charge on our website, the reports filed with the SEC by our executive officers, directors and 10% stockholders pursuant to Section 16 under the Exchange Act as soon as reasonably practicable after copies of those filings are provided to us by those persons. The information contained on, or that can be accessed through, our website is not a part of or incorporated by reference in this Annual Report on Form 10-K.

ITEM 1A. Risk Factors.

RISKS RELATED TO OUR LICENSE AGREEMENT WITH INFINITY

If we do not realize the anticipated benefits of our license agreement with Infinity for the duvelisib program, our business could be adversely affected.

Our license agreement with Infinity for the duvelisib program may fail to further our business strategy as anticipated or to achieve anticipated benefits and success. We may make or have made assumptions relating to the impact of the acquisition of the duvelisib program on our financial results relating to numerous matters, including:

- transaction and integration costs;
- the cost of development and commercialization of duvelisib products; and
- other financial and strategic risks related to the license agreement with Infinity.

Further, we may incur higher than expected operating, transaction and integration costs, and we may encounter general economic and business conditions that adversely affect us relating to our license agreement with Infinity. If one or more of these assumptions are incorrect, it could have an adverse effect on our business and operating results, and the benefits from our license agreement with Infinity for the duvelisib program may not be realized or be of the magnitude expected. For instance, if the results of the DUO study fail to meet certain pre-specified criteria we may not be able to receive regulatory approval of duvelisib.

RISKS RELATED TO THE DISCOVERY, DEVELOPMENT AND COMMERCIALIZATION OF OUR PRODUCT CANDIDATES

Preclinical testing and clinical trials of our product candidates may not be successful. In the near term, we are dependent on the success of our PI3K inhibitor program. If we are unable to complete the clinical development of, obtain marketing approval for or successfully commercialize duvelisib, or any of our other product candidates or if we experience significant delays in doing so, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources in the research and development of our product candidates, including duvelisib and defactinib, for which we are conducting clinical trials in multiple indications. Our ability to generate product revenues will depend heavily on the successful development and potential commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following:

- initiation and successful enrollment and completion of our clinical trials;
- receipt of marketing approvals from the U.S. Food and Drug Administration (FDA) and other regulatory authorities for our product candidates, including pricing approvals where required;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- establishing commercial capabilities, including hiring and training a sales force, and 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; and
- a continued acceptable safety profile of the products following approval.

Many of these factors are beyond our control, including clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any collaborator. If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must complete extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. 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. For example, a further review and analysis of this data may change the conclusions drawn from this unaudited data indicating less promising results than we currently anticipate.

In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. We do not know whether any Phase 2, Phase 3 or other clinical trial we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain regulatory approval to market our product candidates.

In addition, the design of a clinical trial may determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. 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.

A failure of one or more clinical trials could indicate a higher likelihood that subsequent clinical trials of the same product candidate in the same or other indications or subsequent clinical trials of other related product candidates will be unsuccessful for the same reasons as the unsuccessful clinical trials.

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 have delays in reaching or fail to reach agreement on 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;
- 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 participants 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;

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- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical trials for various reasons, including noncompliance with regulatory requirements or a finding that the participants 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 that includes significant use or distribution restrictions including imposition and monitoring of a Risk Evaluation and Mitigation Strategy (REMS), or safety warnings, including boxed warnings;
- be subject to additional post marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

The FDA and foreign regulatory authorities may determine that the results from our ongoing and future trials do not support regulatory approval and may require us to conduct an additional clinical trial or trials. If these agencies take such a position, the costs of development of our product candidates could increase materially and their potential market introduction could be delayed. The regulatory agencies could also require that we conduct additional clinical, nonclinical or manufacturing validation studies and submit that data before it will consider a New Drug Application. Our product development costs will also increase if we experience delays in clinical testing or marketing approvals. We do not know whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant 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 the United States. In addition, there are a number of ongoing clinical trials being conducted by other companies for product candidates treating cancer. Patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates, particularly if they view such treatments to be more conventional and established.

Patient enrollment is affected by other factors including:

- the size and nature of the patient population;
- severity of the disease under investigation;
- eligibility criteria for the study in question;
- perceived risks and benefits of the product candidate under study in relation to other available treatments including any new treatments that may be approved for the indications we are investigating;

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- efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- proximity and availability of clinical trial sites for prospective patients.

Furthermore, enrolled patients may drop out of a clinical trial, which could impair the validity or statistical significance of the clinical trial. A number of factors can influence the patient discontinuation rate, including, but not limited to:

- the inclusion of a placebo arm in a trial;
- possible inactivity or low activity of the product candidate being tested at one or more of the dose levels being tested;
- the occurrence of adverse side effects, whether or not related to the product candidate; and
- the availability of numerous alternative treatment options, including clinical trials evaluating competing product candidates, that may induce patients to discontinue their participation in the trial.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or may 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, which would cause the value of our company to decline and limit our ability to obtain additional financing.

If serious adverse or unexpected 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.

All of our product candidates are in various stages of clinical development and their 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 marketing approval. If our product candidates are associated with undesirable side effects or have characteristics that are unexpected, we may need to abandon their development or limit development to certain 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. A small percentage of patients in our clinical trials have experienced serious adverse events (SAEs) deemed by us and the clinical investigator to be related to our product candidates. SAEs generally refer to adverse events (AEs) that result in death, are life threatening, require hospitalization or prolonging of hospitalization, or cause a significant and permanent disruption of normal life functions, congenital anomalies or birth defects, or require intervention to prevent such outcomes.

Duvelisib is in our Phase 3 DUO study and the development program continues to progress. Duvelisib has successfully completed the Phase 2 DYNAMO study, in which duvelisib was generally well tolerated, with a manageable safety profile with appropriate risk mitigation.

Defactinib is in our Phase 1 and Phase 2 clinical trials and the development program continues to progress. The toxicities reported thus far are consistent with other drugs in this class.

As a result of adverse events observed to date, or further safety or toxicity issues that we may experience in our clinical trials in the future, we may not receive approval to market any product candidates, which could prevent us from ever generating revenue from the sale of products or achieving profitability. Results of our trials could reveal an unacceptably high severity and prevalence of side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our products candidates for any or all targeted indications.

Many compounds that initially showed promise in early stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound. In addition, while we and our clinical trial investigators currently determine if serious adverse or unacceptable side effects are drug related, the FDA or other non-U.S. regulatory authorities may disagree with our or our clinical trial investigators' interpretation of data from clinical trials and the conclusion that a serious adverse effect or unacceptable side effect was not drug related.

Preclinical studies and preliminary and interim data from clinical trials of our product candidates are not necessarily predictive of the results or success of ongoing or later clinical trials of our product candidates. If we cannot replicate the results from our preclinical studies and clinical trials of our product candidates, we may be unable to successfully develop, obtain regulatory approval for and commercialize our product candidates.

Preclinical studies and any positive preliminary and interim data from our clinical trials of our product candidates may not necessarily be predictive of the results of ongoing or later clinical trials. Even if we are able to complete our planned clinical trials of our product candidates according to our current development timeline, the positive results from clinical trials of our product candidates may not be replicated in subsequent clinical trial results. Also, our later stage clinical trials could differ in significant ways from earlier stage clinical trials, which could cause the outcome of the later stage trials to differ from our earlier stage clinical trials. For example, these differences may include changes to inclusion and exclusion criteria, efficacy endpoints and statistical design. Many companies in the pharmaceutical and biotechnology industries, including us, have suffered significant setbacks in late stage clinical trials after achieving positive results in an earlier stage of development. If we fail to produce positive results in our planned clinical trials of any of our product candidates, the development timeline and regulatory approval and commercialization prospects for our product candidates, and, correspondingly, our business and financial prospects, would be materially adversely affected.

Our approach to the treatment of cancer through the killing of cancer cells and disruption of the tumor micro-environment is unproven, and we do not know whether we will be able to develop any products of commercial value.

We are discovering and developing product candidates to treat cancer by using targeted agents to kill cancer cells or disrupt the tumor microenvironment and thereby thwart their growth and proliferation of cancer cells. Research on the use of small molecules to inhibit PI3K and FAK signaling pathways and disrupt the tumor microenvironment is an emerging field and, consequently, there is uncertainty about whether duvelisib and defactinib are effective in improving outcomes for patients with cancer. With respect to our FAK inhibition program, there is some debate in the scientific community regarding cancer stem cells (CSCs), the existence of these cells, the defining characteristics of these cells, as well as whether targeting such cells is an effective approach to treating cancer. Some believe that targeting CSCs as part of our multi-faceted approach should be sufficient for a positive clinical outcome, while others believe that, at times or always, the use of FAK inhibitors that reduce CSCs should be coupled with conventional chemotherapies for a positive clinical outcome.

Any products that we develop may not effectively target cancer cells, enhance anti-tumor immunity, or modulate the local tumor microenvironment. While we are currently conducting clinical trials for product candidates that we believe will attack cancer cells through the inhibition of the PI3K or FAK signaling pathways and potentially disrupt the tumor microenvironment, we may not ultimately be successful in demonstrating their efficacy, alone or in combination with other treatments.

The approval of our product candidates as part of a combination therapy for the treatment of certain cancers may be more costly than our prior clinical trials, may take longer to achieve regulatory approval, may be associated with new, more severe or serious and unanticipated adverse events, and may have a smaller market opportunity.

Part of our current business model involves conducting clinical trials to study the effects of combining our product candidates with other approved and investigational targeted therapies, chemotherapies, and immunotherapies to treat patients with cancer. Regulatory approval for a combination treatment generally requires clinical trials to evaluate the activity of each component of the combination treatment. As a result, it may be more difficult and costly to obtain regulatory approval of our product candidate for use as part of a combination treatment than obtaining regulatory approval of our product candidates alone. In addition, we also risk losing the supply of any

approved or investigational product being combined with our product candidate in these clinical trials. Furthermore, the potential market opportunity for our product candidates is difficult to estimate precisely. For instance, if one of our product candidates receives regulatory approval from a combination study, it may be approved solely for use in combination with the approved or investigational product in a particular indication and the market opportunity our product candidate would be dependent upon the continued use and availability of the approved or investigational product. In addition, because physicians, patients and third-party payors may be sensitive to the addition of the cost of our product candidates to the cost of treatment with the other products, we may experience downward pressure on the price that we can charge for our product candidates if they receive regulatory approval. Further, we cannot be sure that physicians will view our product candidates, if approved as part of a combination treatment, as sufficiently superior to a treatment regimen consisting of only the approved or investigational product. Additionally, the adverse side effects of our product candidates may be enhanced when combined with other products. If such adverse side effects are experienced, we could be required to conduct additional pre-clinical and clinical studies and if such adverse side effects are severe, we may not be able to continue the clinical trials of the combination therapy because the risks may outweigh the therapeutic benefit of the combination.

We may not be successful in our efforts to identify or discover additional potential product candidates.

Part of our strategy involves identifying or discovering product candidates. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- the research methodology used may not be successful in identifying potential product candidates;
- potential product candidates may, on further study, be 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; or
- potential product candidates may not be effective in treating their targeted diseases.

Research programs to identify new product candidates require substantial technical, financial and human resources. We may choose to focus our efforts and resources on a potential product candidate that ultimately proves to be unsuccessful.

If we are unable to identify suitable compounds for preclinical and clinical development, 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 impact our stock price.

We may not be successful in obtaining necessary rights to compounds and product candidates for our development pipeline through acquisitions and in-licenses.

We may seek to acquire new compounds and product candidates from other pharmaceutical and biotechnology companies, academic scientists and other researchers, such as our recent exclusive in-license from Infinity to research, develop, commercialize, and manufacture products in oncology indications containing duvelisib. The success of this strategy depends partly upon our ability to identify, select, discover and acquire promising pharmaceutical product candidates and products. The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We also may be unable to license or acquire the relevant compound or product candidate on terms that would allow us to make an appropriate return on our investment. Any product candidate that we acquire may require additional development efforts prior to commercial sale, including manufacturing, pre-clinical testing, extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development.

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In addition, future product or business acquisitions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention to develop acquired products, product candidates or technologies;
- higher than expected acquisition and integration costs;
- increased amortization expenses; and
- incurrence of substantial debt, dilutive issuances of securities or depletion of cash to pay for acquisitions.
- Future business acquisitions may also entail certain additional risks, such as:
 - difficulty in combining the operations and personnel of any acquired businesses with our operations and personnel;
 - impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
 - inability to motivate key employees of any acquired businesses.

If we fail to obtain regulatory approval in jurisdictions outside the United States, we will not be able to market our products in those jurisdictions.

We intend to seek regulatory approval for our product candidates in a number of countries outside of the United States and expect that these countries will be important markets for our products, if approved. Marketing our products in these countries will require separate regulatory approvals in each market and compliance with numerous and varying regulatory requirements. The regulations that apply to the conduct of clinical trials and approval procedures vary from country to country and may require additional testing. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval. In addition, in many countries outside the United States, a drug must be approved for reimbursement before it can be approved for sale in that country. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. Failure to obtain regulatory approval in one country may have a negative effect on the regulatory approval process in others. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any foreign market.

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.

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

If any of our product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenues and we

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may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- the ability to offer our products for sale at competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- whether our products are designated under physician treatment guidelines as a first, second or third line therapy;
- changes in the standard of care for the targeted indications for our products;
- limitations or warnings, including distribution or use restrictions, contained in the approved labeling for any of our products;
- the strength of marketing and distribution support;
- sufficient third-party coverage or reimbursement;
- safety concerns with similar products marketed by others; and
- the prevalence and severity of any side effects.

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

We do not have a sales or marketing infrastructure and have limited experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales and marketing infrastructure to market or co-promote some of our product candidates if and when they are approved.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any 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. This 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 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 enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues or the profitability of these product revenues to us are likely to be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary

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resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our 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 our current product candidates and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our product candidates, including Gilead Sciences, Inc., Abbvie, Pharmacyclics LLC, Roche, Celgene Corporation, AstraZeneca, Incyte Corporation, TG Therapeutics, Inc., Novartis and others. 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.

We are developing our product candidates for the treatment of cancer. There are a variety of available therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. Some of these drugs 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. Insurers and other third-party payors may also encourage the use of generic products. We expect that if any of our product candidates are approved, they will be priced at a significant premium over competitive generic products.

Many of our competitors 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.

In addition, to the extent that product or product candidates of our competitors demonstrate serious adverse side effects or are determined to be ineffective in clinical trials, the development of our product candidates could be negatively impacted.

Even if we are able to commercialize any product candidates, the products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. In the United States, recently passed legislation may significantly change the purchase of pharmaceutical products, resulting in lower prices and a reduction in product demand. 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 commercialize any products successfully also will depend in part on the extent to which 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. We cannot be sure that reimbursement will be available for any product that we commercialize and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with drugs administered under the supervision of a physician. If reimbursement is not available or 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 the United States. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. 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 profitable payment 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.

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 our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our 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;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

We currently hold \$10.0 million in product liability insurance coverage in the aggregate, with a per incident limit of \$10.0 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we initiate additional clinical trials in the United States and around the world or upon the commercialization of our product candidates, if ever. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

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

We 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.

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. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

RISKS RELATED TO OUR FINANCIAL POSITION AND NEED FOR ADDITIONAL CAPITAL

We have incurred significant losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. As of December 31, 2016, we had an accumulated deficit of \$235.3 million. To date, we have not generated any revenues and have financed our operations through private placements of our preferred stock, public offerings of our common stock, and sales of our common stock pursuant to our at-the-market equity offering program. In March 2017, Verastem, Inc. (Borrower) entered into a term loan facility with Hercules Capital, Inc. (Hercules), the proceeds of which will be used for our ongoing research and development programs and for general corporate purposes. We have devoted substantially all of our efforts to research and development. Our product candidates, including duvelisib and defactinib, are in clinical trials. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter. We anticipate that our expenses will increase substantially if and as we:

- continue our ongoing clinical trials with our product candidates, including duvelisib and defactinib;
- initiate additional clinical trials for our product candidates;
- ultimately establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- continue our preclinical research or acquire or in-license additional product candidates;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, development 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 develop and eventually commercialize a product or products with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our product candidates, obtaining marketing approval for these product candidates and manufacturing, marketing and selling those products for which we may obtain marketing

approval. We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will continue to need substantial additional funding. If we are unable to raise capital when needed, we would 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 continue the clinical development of our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our clinical development programs or commercialization efforts.

We expect our existing cash, cash equivalents and investments will enable us to fund our current operating plan and capital expenditure requirements for at least the next twelve months from the date of filing of this Annual Report on Form 10-K and into 2018. Our future capital requirements will depend on many factors, including:

- the scope, progress and, results of our other ongoing clinical trials and potential future clinical trials;
- the extent to which we acquire or in-license other product candidates;
- the costs, timing and outcome of regulatory review of our other product candidates (including our efforts to seek approval and fund the preparation and filing of regulatory submissions) and the costs of future commercialization activities for such product candidates, for which we receive marketing approval;
- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property related claims;
- whether we realize the full amount of any projected cost savings associated with our organizational restructuring; and
- our ability to establish collaborations or partnerships on favorable terms, if at all.

Conducting clinical trials is a time consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that may not be commercially available for several years, if at all. Accordingly, even if we receive regulatory approval of one of our product candidates, it will take several years to achieve peak sales and we will need to continue to rely on additional financing to further our clinical development objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Raising additional capital or entering into certain licensing arrangements may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our 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, collaborations, grants and government funding, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt, 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 existing stockholders. To the extent that we enter into certain licensing arrangements, the ownership interest of our existing stockholders may be diluted if we elect to make certain payments in shares of our common stock. For example, pursuant to the

terms of our license agreement with Infinity, we may elect to make certain milestone payments in shares of common stock in lieu of cash, according to a formula set forth in the license agreement. Debt 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. For example, see our risk factors under the heading “Risks Related to Our Indebtedness.”

If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish future revenue streams or valuable rights to product candidates or to 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 future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

RISKS RELATED TO OUR INDEBTEDNESS

Our level of indebtedness and debt service obligations could adversely affect our financial condition, and may make it more difficult for us to fund our operations.

In March 2017, the Borrower entered into a Loan and Security Agreement (the Loan Agreement), with Hercules. Under the Loan Agreement, Hercules will provide access to term loans with an aggregate principal amount of up to \$25.0 million (the Term Loan). Concurrently with the closing of the Loan Agreement, the Borrower borrowed an initial tranche of \$2.5 million.

All obligations under the Loan Agreement are secured by substantially all of the Borrower’s existing property and assets, excluding its intellectual property. This indebtedness may create additional financing risk for the Borrower, particularly if its business or prevailing financial market conditions are not conducive to paying off or refinancing its outstanding debt obligations at maturity. This indebtedness could also have important negative consequences, including:

- the Borrower will need to repay its indebtedness by making payments of interest and principal, which will reduce the amount of money available to finance our operations, our research and development efforts and other general corporate activities; and
- the Borrower’s failure to comply with the restrictive covenants in the Loan Agreement could result in an event of default that, if not cured or waived, would accelerate its obligation to repay this indebtedness, and Hercules could seek to enforce its security interest in the assets securing such indebtedness.

To the extent additional debt is added to the Borrower’s current debt levels, the risks described above could increase.

The Borrower may not have cash available in an amount sufficient to enable it to make interest or principal payments on its indebtedness when due.

Failure to satisfy the Borrower’s current and future debt obligations under the Loan Agreement, or breaching any of its covenants under the Loan Agreement, subject to specified cure periods with respect to certain breaches, could result in an event of default and, as a result, Hercules could accelerate all of the amounts due. In the event of an acceleration of amounts due under the Loan Agreement as a result of an event of default, the Borrower may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time of such acceleration. In that case, the Borrower may be required to delay, limit, reduce or terminate its product candidate development or commercialization efforts or grant to others rights to develop and market product candidates that it would otherwise prefer to develop and market itself. Hercules could also exercise its rights as collateral agent to take possession and dispose of the collateral securing the term loans for its benefit, which collateral includes substantially all of the Borrower’s property other than its intellectual property. The Borrower’s business, financial condition and results of operations could be materially adversely affected as a result of any of these events. The Borrower is subject to certain restrictive covenants which, if breached, could have a material adverse effect on its business and prospects.

The Loan Agreement imposes operating and other restrictions on the Borrower. Such restrictions will affect, and in many respects limit or prohibit, the Borrower's ability and the ability of any future subsidiary to, among other things:

- dispose of certain assets;
- change its lines of business;
- engage in mergers, acquisitions or consolidations;
- incur additional indebtedness;
- create liens on assets;
- pay dividends and make distributions or repurchase our capital stock; and
- engage in certain transactions with affiliates.

RISKS RELATED TO OUR DEPENDENCE ON THIRD PARTIES

We rely in part on third parties to conduct our clinical trials and preclinical testing, and if they do not properly and successfully perform their obligations to us, we may not be able to obtain regulatory approvals for our product candidates.

We rely on third parties, such as contract research organizations (CROs), clinical data management organizations, medical institutions and clinical investigators, to conduct, provide monitors for and manage data from all of our clinical trials. We compete with many other companies for the resources of these third parties.

Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it would delay our product development activities and ultimately the commercialization of our product candidates.

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 and other regulatory agencies require us to comply with standards, commonly referred to as Good Clinical Practices (GCP) 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 are protected. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or other regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements. We also are required to register ongoing clinical trials and post the results of completed clinical trials on government-sponsored databases, such as ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct 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 intend to rely on third parties to conduct investigator sponsored clinical trials of our product candidates. Any failure by a third party to meet its obligations with respect to the clinical development of our product candidates may delay or impair our ability to obtain regulatory approval for our product candidates.

We intend to rely on academic and private non-academic institutions to conduct and sponsor clinical trials relating to our product candidates. We will not control the design or conduct of the investigator sponsored trials, and it is possible that the FDA or non-U.S. regulatory authorities will not view these investigator-sponsored trials as providing adequate support for future clinical trials, whether controlled by us or third parties, for any one or more reasons, including elements of the design or execution of the trials or safety concerns or other trial results.

Such arrangements will provide us certain information rights with respect to the investigator sponsored trials, including access to and the ability to use and reference the data, including for our own regulatory filings, resulting from the investigator sponsored trials. However, we do not have control over the timing and reporting of the data from investigator sponsored trials, nor do we own the data from the investigator sponsored trials. If we are unable to confirm or replicate the results from the investigator sponsored trials or if negative results are obtained, we would likely be further delayed or prevented from advancing further clinical development of our product candidates. Further, if investigators or institutions breach their obligations with respect to the clinical development of our product candidates, or if the data proves to be inadequate compared to the firsthand knowledge we might have gained had the investigator sponsored trials been sponsored and conducted by us, then our ability to design and conduct any future clinical trials ourselves may be adversely affected.

Additionally, the FDA or non-U.S. regulatory authorities may disagree with the sufficiency of our right of reference to the preclinical, manufacturing or clinical data generated by these investigator-sponsored trials, or our interpretation of preclinical, manufacturing or clinical data from these investigator-sponsored trials. If so, the FDA or other non-U.S. regulatory authorities may require us to obtain and submit additional preclinical, manufacturing, or clinical data before we may initiate our planned trials and/or may not accept such additional data as adequate to initiate our planned trials.

We contract with third parties for the manufacture of our product candidates and for compound formulation research, and these third parties may not perform satisfactorily.

We do not have any manufacturing facilities or personnel. We currently obtain all of our supply of our product candidates for clinical development from third-party manufacturers or third-party collaborators, and we expect to continue to rely on third parties for the manufacture of clinical and, if necessary, commercial quantities of our product candidates. In addition, we currently rely on third parties for the development of various formulations of our product candidates. We obtain our supplies from these manufacturers on a purchase order basis, and we do not have any long term supply agreements in place. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

Any of these third parties may terminate their engagement with us at any time. We do not currently have arrangements in place for redundant supply or a second source for bulk drug substance. 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, including the misappropriation of our proprietary information, trade secrets and know how;
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us; and
- disruptions to the operations of our manufacturers or suppliers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier or a catastrophic event affecting our manufacturers or suppliers.

Third-party manufacturers may not be able to comply with current good manufacturing practices (cGMP) regulations or similar regulatory requirements outside 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 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 and harm our business and results of operations.

Any products 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.

If our current contract manufacturers cannot perform as agreed, we may be required to replace that manufacturer. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement, as well as producing the drug product. In addition, we have to enter into technical transfer agreements and share our know how with the third-party manufacturers, which can be time consuming and may result in delays.

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.

If we are not able to establish collaborations, we may have to alter our development and commercialization plans.

Our drug development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. For some of our product candidates, we may decide to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. Collaborations are complex and time consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of certain product candidates, reduce or delay our development programs, delay 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 increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

We may depend on collaborations with third parties for the development and commercialization of our product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.

We may seek third-party collaborators for the development and commercialization of our product candidates. We anticipate that we may seek to enter into a collaboration for marketing and commercialization of our product candidates in certain territories worldwide at the appropriate time in the future. Our likely collaborators for any collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. If we do enter into any such arrangements with any third parties, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates would pose the following risks to us:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors such as an acquisition that diverts resources or creates 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 or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- 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 proprietary information or expose us to potential litigation;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our products or product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If a future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated.

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

If we fail to comply with our obligations under our intellectual property licenses with third parties, we could lose license rights that are important to our business.

We are a party to a number of intellectual property license agreements with third parties, including Infinity, Scripps and Pfizer, and expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that future license agreements will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. For example, under our license agreements with Infinity, Scripps, and Pfizer, we are required to use diligent or commercially reasonable efforts to develop and commercialize licensed products under the agreement and to satisfy other specified obligations. If we fail to comply with our obligations under these licenses, our licensors may have the right to terminate these license agreements, in which event we might not be able to market any product that is covered by these agreements, or to convert the exclusive licenses to non-exclusive licenses, which could materially adversely affect the value of the product candidate being developed under these license agreements. Termination of these license agreements or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, which may not be possible. If Scripps were to terminate its license agreement with us for any reason, we would lose our rights to VS-4718. If Pfizer were to terminate its license agreement with us for any reason, we would lose our rights to defactinib. If Infinity were to terminate its license agreement with us for any reason, we would lose our rights to duvelisib.

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

Our success depends in large part on our and our licensors' ability to obtain and maintain patent protection in the United States and other countries with respect to our products. We and our licensors seek to protect our proprietary position by filing patent applications in the United States and abroad related to our products that are important to our business. We cannot be certain that any patents will issue with claims that cover our 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 products that we license from third parties and are reliant on our licensors. For example, we do not control the prosecution of the patent applications owned by Scripps. Therefore, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business. If such licensors fail to maintain such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated.

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. As a result, the issuance, scope, validity, enforceability and commercial value of our and our licensors' patent rights are highly uncertain. Our and our licensors' pending and future patent applications may not result in patents being issued which protect our products or which effectively prevent others from commercializing competitive 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.

The laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

Assuming the other requirements for patentability are met, in the United States, for patents that have an effective filing date prior to March 15, 2013, the first to make the claimed invention is entitled to the patent, while outside the United States, the first to file a patent application is entitled to the patent. In March 2013, the United States transitioned to a first inventor to file system in which, assuming the other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent. We may be subject to a third party pre issuance submission of prior art to the U.S. Patent and Trademark Office, or become involved in opposition, derivation, reexamination, inter parties review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our 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.

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, which could limit our ability to stop others from using or commercializing similar or identical products, or limit the duration of the patent protection of our 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, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, our licensors may have rights to file and prosecute such claims and we are reliant on them.

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 without infringing the proprietary rights of third parties. We have yet to conduct comprehensive freedom to operate searches to determine whether our use of certain of the patent rights owned by or licensed to us would infringe patents issued to third parties. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products, including interference proceedings before the U.S. Patent and Trademark Office. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. 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. 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 product. In addition, we could be found liable for monetary damages. 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.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

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

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 adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

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 products, 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 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 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

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.

Our product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party contract research organizations to assist us in this process. Securing FDA approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each therapeutic indication to establish the product candidate's safety and efficacy. Securing FDA approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

The 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. The FDA has 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. 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.

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 have received orphan disease status for certain of our product candidates, but there can be no assurance that we will be able to prevent third parties from developing and commercializing products that are competitive to these product candidates.

We received orphan drug designation in the United States, the European Union, and Australia for the use of defactinib in mesothelioma and ovarian cancer, and in the United States and European Union for the use of duvelisib in FL, CLL and SLL. If duvelisib or defactinib obtains marketing authorization, it will receive orphan drug exclusivity. Orphan drug exclusivity grants seven years of marketing exclusivity under the Federal Food, Drug and Cosmetic Act (FDCA), up to ten years of marketing exclusivity in Europe, and five years of marketing exclusivity in Australia. A competitor may receive orphan drug marketing authorization prior to us for the same indication for which we are developing duvelisib or defactinib. Other companies have received orphan drug designations for compounds other than duvelisib or defactinib for the same indications for which we may have received orphan drug

designation in corresponding territories. While orphan drug exclusivity for duvelisib or defactinib would provide market exclusivity against the same active ingredient for the same indication, we would not be able to exclude other companies from manufacturing and/or selling drugs using the same active ingredient for the same indication beyond that timeframe on the basis of orphan drug exclusivity. Furthermore, the marketing exclusivity in Europe can be reduced from ten years to six years if the initial designation criteria have significantly changed since the market authorization of the orphan medicinal product. We cannot guarantee that another company also with orphan drug designation will not receive marketing authorization for the same active ingredient and same indication before we do. If that were to happen, our applications for that indication may not be approved until the competing company's period of exclusivity has expired. Even if we are the first to obtain marketing authorization for an orphan drug indication, there are circumstances under which the FDA may approve a competing product for the same indication during the seven-year period of marketing exclusivity, such as if the later product is the same compound as our product but is shown to be clinically superior to our product, or if the later product is a different drug than our product candidate. Further, the seven-year marketing exclusivity would not prevent competitors from obtaining approval of the same compound for other indications or of another compound for the same use as the orphan drug.

Though we have received fast track designation by the FDA for duvelisib in certain indications, that designation may not actually lead to a faster development or regulatory review or approval process, and it does not ensure that we will receive marketing approval.

The FDA has granted fast track designation to the investigation of duvelisib for the treatment of patients with FL who have received at least two prior therapies and for the potential treatment of patients with CLL who have received at least one prior therapy. Any drug sponsor may apply for such designation if its product candidate is intended for the treatment of a serious or life-threatening disease or condition and the product candidate demonstrates the potential to address an unmet medical need. The FDA has broad discretion whether or not to grant fast track designation. Although duvelisib has received such designation, this may not actually result in a faster development process, review or approval compared to standard FDA procedures. The FDA may withdraw fast track designation if it believes that the clinical development program does not continue to meet the criteria for fast track designation.

Any product candidate for which we obtain marketing approval could be subject to restrictions or withdrawal from the market and we may be subject to 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.

Any 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 quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. 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, or contain requirements for costly post marketing testing and surveillance to monitor the safety or efficacy of the product, including the imposition of a REMS. The FDA closely regulates the post approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes 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.

In addition, later discovery of previously unknown 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 clinical trials;

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- warning 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 revenue;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may fail to obtain any marketing approvals, lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which 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 play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal healthcare 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 either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid;
- the federal False Claims Act (FCA) imposes criminal and civil penalties on individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government and actions under the FCA may be brought by private whistleblowers as well as the government;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, also establishes requirements related to the privacy, security and transmission of individually identifiable health information which apply to many healthcare providers, physicians and third-party payors with whom we interact;
- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the FDCA, which among other things, strictly regulates drug product and medical device marketing, prohibits manufacturers from marketing such products for off-label use and regulates the distribution of samples;
- federal laws that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain discounts or rebates to government authorities or private entities, often as a

condition of reimbursement under government healthcare programs;

- the federal transparency requirements under the Health Care Reform Act requires manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to payments and other transfers of value to physicians and teaching hospitals, as well as physician ownership and investment interests; and
- analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws regulate interactions between pharmaceutical companies and health care providers and 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 and pricing information.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Our employees, independent contractors, principal investigators, CROs, consultants and vendors 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 that our employees, independent contractors, principal investigators, CROs, consultants and vendors may engage in 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. Such 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 misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, 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.

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.

The U.S. healthcare industry generally and U.S. government healthcare programs in particular are highly regulated and subject to frequent and substantial changes. The U.S. government and individual states have been

aggressively pursuing healthcare reform. In March 2010, President Obama signed into law the Health Care Reform Act, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. The law, for example, increased drug rebates under state Medicaid programs for brand name prescription drugs and extending those rebates to Medicaid managed care and assessed a fee on manufacturers and importers of brand name prescription drugs reimbursed under certain government programs, including Medicare and Medicaid. Substantial new provisions affecting compliance have also been enacted, which may affect our business practices with health care practitioners.

Within the U.S., significant healthcare reform efforts are anticipated under the new Trump Administration and Congress. For example, Republican leaders recently presented a plan to replace the Health Care Reform Act. We cannot predict the ultimate content, timing or effect of any changes to the Health Care Reform Act or any other reform efforts.

We cannot be sure whether additional legislative changes will be enacted, or whether the 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. In addition, 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.

RISKS RELATED TO EMPLOYEE MATTERS AND MANAGING GROWTH

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

We are highly dependent on Robert Forrester, our President and Chief Executive Officer, and Daniel Paterson, our Chief Operating Officer, as well as the other principal members of our management and scientific teams. Although we have formal employment agreements with Robert Forrester and Daniel Paterson, these agreements do not prevent them from terminating their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees. The loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, universities and research institutions for similar personnel. Although we have implemented a retention plan for certain key employees, our retention plan may not be successful in incentivizing these employees to continue their employment with us. 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, including our scientific co-founders, 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.

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

We may experience significant growth over time in the number of our employees and the scope of our operations, particularly in the areas of drug development, regulatory affairs and sales and marketing. To manage our anticipated future growth, we may 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 when we expand. The physical 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.

Our business and operations may be materially adversely affected in the event of computer system failures.

Despite the implementation of security measures, our internal computer systems, and those of our contract research organizations and other third parties on which we rely, are vulnerable to damage from computer viruses, unauthorized access, natural disasters, fire, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our clinical development programs. For example, the loss of clinical trial data from ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

RISKS RELATED TO OUR COMMON STOCK

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

Provisions in our corporate charter and our bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions 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 not all members of the board are elected at one time;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “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 certain provisions of our charter or bylaws.

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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.

The market price of our common stock has been, and may continue to be, highly volatile.

Our stock price has been volatile. Since January 27, 2012, when we became a public company, the price for one share of our common stock has reached a high of \$18.82 and a low of \$1.05 through March 15, 2017. We cannot predict whether the price of our common stock will rise or fall. The market price for our common stock may be influenced by many factors, including:

- 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 those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

In addition, the stock market in general and the market for small pharmaceutical companies and biotechnology companies in particular have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of particular companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In the past, following periods of volatility in the market, securities class action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management’s attention and resources, which could materially and adversely affect our business and financial condition.

Failure to comply with The NASDAQ Global Market continued listing requirements may result in our common stock being delisted from The NASDAQ Global Market.

If our stock price falls below \$1.00 per share, we may not continue to qualify for continued listing on The NASDAQ Global Market. To maintain listing, we are required, among other things, to maintain a minimum closing bid price of \$1.00 per share. If the closing bid price of our common stock is below \$1.00 per share for 30 consecutive business days, we will receive a deficiency notice from NASDAQ advising us that we have a certain period of time, typically 180 days, to regain compliance by maintaining a minimum closing bid price of at least \$1.00 for at least ten consecutive business days, although NASDAQ could require a longer period.

The delisting of our common stock would significantly affect the ability of investors to trade our common stock and negatively impact the liquidity and price of our common stock. In addition, the delisting of our common stock could materially adversely impact our ability to raise capital on acceptable terms or at all. Delisting from The

NASDAQ Global Market could also have other negative results, including the potential loss of confidence by our current or prospective third-party providers and collaboration partners, the loss of institutional investor interest, and fewer licensing and partnering opportunities.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be the 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. 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.

We are an “emerging growth company,” and our election to delay adoption of new or revised accounting standards applicable to public companies may result in our financial statements not being comparable to those of other public companies. As a result of this and other reduced disclosure requirements applicable to emerging growth companies, our common stock may be less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act (JOBS Act) and may remain an emerging growth company for up to five years, until December 31, 2017. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain reporting requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes Oxley Act of 2002, not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Among other provisions, the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We may elect to delay the adoption of certain new or revised accounting standards, and as a result, we may not comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for public companies that are not emerging growth companies. As a result of such election, our financial statements may not be comparable to the financial statements of other public companies.

We cannot predict whether investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We occupy approximately 15,197 square feet of office and laboratory space in Needham, Massachusetts under a lease that expires in September 2019. We believe that our facility is sufficient to meet our current needs and that suitable additional space will be available as and when needed.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

MARKET INFORMATION

Our common stock is publicly traded on The NASDAQ Global Market under the symbol "VSTM." The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported on The NASDAQ Global Market.

Year Ended December 31, 2016	High	Low
First quarter	\$ 1.89	\$ 1.05
Second quarter	\$ 1.93	\$ 1.19
Third quarter	\$ 1.66	\$ 1.27
Fourth quarter	\$ 1.55	\$ 1.05

Year Ended December 31, 2015	High	Low
First quarter	\$ 12.35	\$ 6.78
Second quarter	\$ 10.67	\$ 6.84
Third quarter	\$ 8.07	\$ 1.50
Fourth quarter	\$ 2.43	\$ 1.56

HOLDERS

As of March 15, 2017, there were 18 holders of record of our common stock and the closing price of our common stock on the NASDAQ Global Market as of that date was \$1.44. The number of holders of record does not include beneficial owners whose shares are held by nominees in street name.

DIVIDENDS

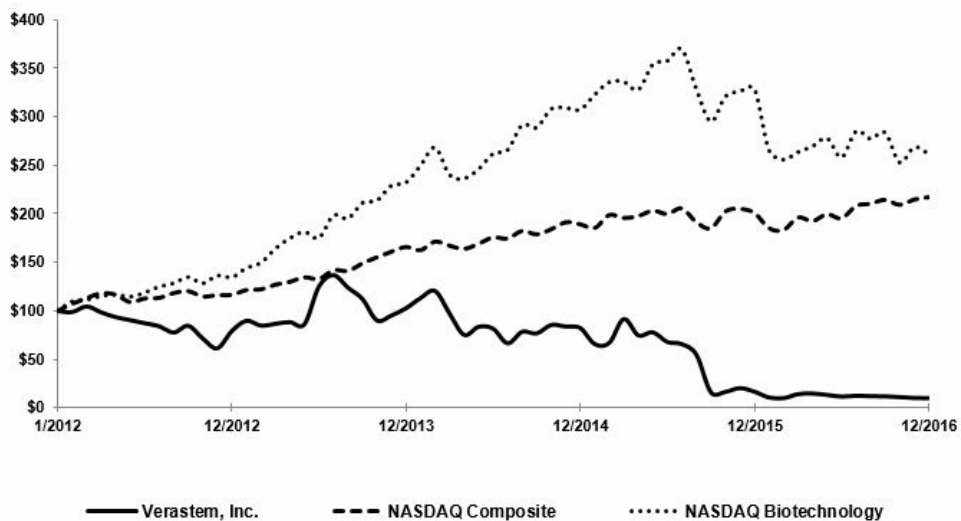
We have never declared or paid cash dividends on our common stock, and we do not expect to pay any cash dividends on our common stock in the foreseeable future.

PERFORMANCE GRAPH

The following performance graph and related information shall not be deemed to be "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act, except to the extent that we specifically incorporate it by reference into such filing.

The following graph compares the performance of our common stock to the NASDAQ Composite Index and to the NASDAQ Biotechnology Index from January 27, 2012 (the first date that shares of our common stock were publicly traded) through December 31, 2016. The comparison assumes \$100 was invested after the market closed on January 27, 2012 in our common stock and in each of the foregoing indices, and it assumes reinvestment of dividends, if any.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Verastem, Inc., the NASDAQ Composite Index, and the NASDAQ Biotechnology Index



* \$100 invested on 1/27/12 in stock or 12/31/11 in index, including reinvestment of dividends. Fiscal year ending December 31, 2016.

Cumulative Total Return Comparison

	January	December 31,				
	27, 2012	2012	2013	2014	2015	2016
Verastem, Inc.	100.00	79.26	102.80	82.42	16.77	10.10
NASDAQ Composite	100.00	116.41	165.47	188.69	200.32	216.54
NASDAQ Biotechnology	100.00	134.68	232.37	307.67	328.76	262.08

PURCHASE OF EQUITY SECURITIES

We did not purchase any of our equity securities during the period covered by this Annual Report on Form 10-K.

Item 6. Selected Financial Data

You should read the following selected financial data together with our consolidated financial statements and the related notes appearing elsewhere in this Annual Report on Form 10-K and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this Annual Report on Form 10-K. The selected historical financial information in this section is not intended to replace our financial statements and the related notes therein. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

Statement of operations data:	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands, except share and per share amounts)				
Operating expenses:					
Research and development	\$ 19,779	\$ 40,565	\$ 35,448	\$ 25,930	\$ 21,712
General and administrative	17,223	17,634	18,159	15,472	10,518
Total operating expenses	37,002	58,199	53,607	41,402	32,230
Loss from operations	(37,002)	(58,199)	(53,607)	(41,402)	(32,230)
Interest income	562	334	242	200	246
Net loss	(36,440)	(57,865)	(53,365)	(41,202)	(31,984)
Accretion of preferred stock	—	—	—	—	(6)
Net loss applicable to common stockholders	\$ (36,440)	\$ (57,865)	\$ (53,365)	\$ (41,202)	\$ (31,990)
Net loss per share applicable to common stockholders —basic and diluted	\$ (0.99)	\$ (1.61)	\$ (2.07)	\$ (1.82)	\$ (1.70)
Weighted-average number of common shares used in net loss per share applicable to common stockholders —basic and diluted	36,988	35,932	25,804	22,680	18,765

Balance sheet data:	As of December 31,				
	2016	2015	2014	2013	2012
	(in thousands)				
Cash, cash equivalents and investments	\$ 80,897	\$ 110,258	\$ 92,675	\$ 123,656	\$ 91,520
Working capital	70,304	100,734	86,112	94,151	54,683
Total assets	83,629	113,094	98,649	125,261	92,923
Accumulated deficit	(235,323)	(198,883)	(141,018)	(87,653)	(46,451)
Total stockholders’ equity	72,297	102,469	88,766	117,446	90,466

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

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed below and as set forth under "Risk Factors." Please also refer to the section under the heading "Forward-Looking Statements."

OVERVIEW

We are a biopharmaceutical company focused on discovering and developing drugs to improve outcomes for patients with cancer. Our most advanced product candidates, duvelisib and defactinib (VS-6063), utilize a multi-faceted approach to treat cancers originating either in the blood or major organ systems. We are currently evaluating these compounds in both preclinical and clinical studies as potential therapies for certain cancers, including leukemia, lymphoma, lung cancer, ovarian cancer, mesothelioma, and pancreatic cancer. We believe that these compounds may be beneficial as therapeutics either as single agents or when used in combination with immuno-oncology agents or other current and emerging standard of care treatments in aggressive cancers that are poorly served by currently available therapies.

Duvelisib targets the Phosphoinositide 3-kinase (PI3K) and defactinib targets the Focal Adhesion Kinase (FAK) signaling pathways. The PI3K signaling pathway plays a central role in cancer proliferation and survival. Duvelisib is an investigational oral therapy designed to attack both malignant B-cells and T-cells and disrupt the tumor microenvironment to help thwart their growth and proliferation for patients with lymphatic cancers through the dual inhibition of PI3K delta and gamma. FAK is a non-receptor tyrosine kinase encoded by the *PTK-2* gene that is involved in cellular adhesion and, in cancer, metastatic capability. Defactinib is a targeted inhibitor of the FAK signaling pathway. Similar to duvelisib, defactinib is also orally available and designed to be a potential therapy for patients to take at home under the advice of their physician.

Duvelisib is currently being studied in the DUO™ study, which is a Phase 3, randomized, open-label, two-arm trial of duvelisib versus treatment with ofatumumab. This study will evaluate the safety and efficacy of duvelisib as compared to ofatumumab in approximately 300 patients with relapsed or refractory chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL).

Duvelisib has successfully completed the Phase 2 DYNAMO™ study which is an open-label, single-arm trial of duvelisib that evaluated the safety and efficacy of duvelisib in 129 patients with refractory indolent non-Hodgkin lymphoma (iNHL). This study met its primary endpoint of overall response rate (ORR) and the majority of reported side effects were expected, reversible and clinically manageable.

Defactinib is currently being evaluated in a Phase 1b study in combination with Merck & Co.'s PD-1 inhibitor pembrolizumab and gemcitabine in patients with advanced pancreatic cancer, a Phase 1/2 clinical collaboration with Pfizer Inc. (Pfizer) and Merck KGaA to evaluate defactinib in combination with avelumab, an anti-PD-L1 antibody, in patients with ovarian cancer, and a Phase 1/2 study in collaboration with Cancer Research UK and Merck & Co. for the combination of defactinib and pembrolizumab in patients with non-small cell lung cancer (NSCLC), mesothelioma or pancreatic cancer.

In addition to duvelisib and defactinib, we have additional earlier-stage programs that have undergone preliminary clinical testing, including clinical trials of the FAK inhibitor VS-4718 and the PI3K/mTOR inhibitor VS-5584. Though both of these programs are slated to complete their Phase 1 testing, we have no plans for further development at this time as we focus our resources on duvelisib and defactinib.

Our operations to date have been organizing and staffing our company, business planning, raising capital, acquiring and developing our technology, identifying potential product candidates and undertaking preclinical studies and clinical trials for our product candidates. To date, we have not generated any revenues and have financed our operations with net proceeds from the private placement of our preferred stock, our initial public offering in

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February 2012, our follow-on offerings in July 2013 and January 2015 and sales of our common stock under our at-the-market equity offering program.

As of December 31, 2016, we had an accumulated deficit of \$235.3 million. Our net loss was \$36.4 million, \$57.9 million and \$53.4 million for the years ended December 31, 2016, 2015 and 2014, respectively. We expect to incur significant expenses and increasing operating losses for the foreseeable future. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development and clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts. We will need to generate significant revenues to achieve profitability, and we may never do so.

FINANCIAL OPERATIONS OVERVIEW

Revenue

To date, we have not generated any revenues. Our ability to generate product revenues will depend heavily on the successful development and potential commercialization of our product candidates.

Research and development expenses

Research and development expenses consist of costs associated with our research activities, including our drug discovery efforts, and the development of our product candidates. Our research and development expenses consist of:

- employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;
- external research and development expenses incurred under arrangements with third parties, such as contract research organizations (CROs), clinical sites, manufacturing organizations and consultants, including our scientific advisory board;
- license fees; and
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation of leasehold improvements and equipment, and laboratory and other supplies.

We expense research and development costs to operations as incurred. We account for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the service has been performed or when the goods have been received, rather than when the payment is made.

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We allocate the expenses related to external research and development services, such as CROs, clinical sites, manufacturing organizations and consultants by project. The table below summarizes our external allocation of research and development expenses to our clinical programs, including duvelisib, defactinib, VS-4718 and VS-5584, for the years ended December 31, 2016, 2015 and 2014. We use our employee and infrastructure resources across multiple research and development projects. Our project costing methodology does not allocate personnel and other indirect costs to specific clinical programs. These unallocated research and development expenses are summarized in the table below and include \$3.9 million, \$7.3 million and \$5.9 million of personnel costs for the years ended December 31, 2016, 2015 and 2014, respectively.

	Year ended December 31,		
	2016	2015	2014
	(in thousands)	(in thousands)	(in thousands)
Defactinib	\$ 3,934	\$ 20,713	\$ 16,186
Duvelisib	3,326	—	—
VS-4718	2,314	2,545	2,921
VS-5584	1,197	2,739	2,679
Unallocated and other research and development expense	7,934	12,158	9,935
Unallocated stock-based compensation expense	1,074	2,410	3,727
Total research and development expense	<u>\$ 19,779</u>	<u>\$ 40,565</u>	<u>\$ 35,448</u>

Due to the uncertainty in drug development and the stage of development of our product candidates, we are unable to predict the requirements, specific timing and estimated costs to complete the development of our product candidates or the timing of when material cash inflows may commence, if ever.

We anticipate that our research and development expenses will increase significantly in future periods as we undertake costlier development activities for our existing and future product candidates, including larger and later-stage clinical trials.

The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete development of our product candidates or the period, if any, in which material net cash inflows from our product candidates may commence. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- clinical trial results;
- the scope, rate of progress and expense of our research and development activities, including preclinical research and clinical trials;
- the potential benefits of our product candidates over other therapies;
- our ability to market, commercialize and achieve market acceptance for any of our product candidates that we receive regulatory approval for;
- the terms and timing of regulatory approvals; and
- the expense of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the U.S. Food and Drug Administration or other regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate will be required for the completion of clinical development of a product candidate or if we experience significant delays in enrollment in any clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development.

General and administrative expenses

General and administrative expenses consist primarily of salaries and related costs for personnel, including stock-based compensation expense, in our executive, finance and business development functions. Other general and administrative expenses include allocated facility costs and professional fees for legal, patent, investor and public relations, consulting, insurance premiums, audit, tax and other public company costs.

CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of certain assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation described in greater detail below. We base our estimates on our limited historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in more detail in the notes to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K. However, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our financial condition and results of operations.

Accrued research and development expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued expenses. This process involves reviewing contracts, identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred 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. The significant estimates in our accrued research and development expenses include fees paid to CROs in connection with research and development activities for which we have not yet been invoiced.

We base our expenses related to CROs on our estimates of the services received and efforts expended pursuant to quotes and contracts with CROs that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. 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 adjust the accrual or prepaid accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates of such expenses and the amounts actually incurred.

Stock-based compensation

We recognize stock-based compensation expense for stock options issued to employees based on the grant date fair value of the awards on a straight-line basis over the requisite service period. We record stock-based compensation expense for stock options issued to non-employees based on the estimated fair value of the services received or of the equity instruments issued, whichever is more reliably measured, based on the vesting date fair value of the awards on a straight-line basis over the vesting period.

We estimate the fair value of stock option awards using the Black-Scholes option-pricing model. Determining the fair value of share-based awards requires the use of subjective assumptions, including the expected term of the award and expected stock price volatility. The assumptions used in determining the fair value of share-based awards represent management's best estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors change, and we use different assumptions, our share-based compensation could be materially different in the future. The risk-free interest rate used for each grant is based on a U.S. Treasury instrument whose term is consistent with the expected term of the stock option. Because we do not have a sufficient history to estimate the expected term, we use the simplified method as described in Securities and Exchange Commission Staff Accounting Bulletin Topic 14.D.2 for estimating the expected term. The simplified method is based on the average of the vesting tranches and the contractual life of each grant. Because there was no public market for our common stock prior to our initial public offering, we lacked company-specific historical and implied volatility information. Therefore, we used the historical volatility of a representative group of public biotechnology and life sciences companies with similar characteristics to us. Our current computation of expected volatility is based on the historical volatility of five companies equally weighted, including our own and a representative group of four public biotechnology and life sciences companies with similar characteristics to us, including similar stage of product development and therapeutic focus. We have not paid and do not anticipate paying cash dividends on our shares of common stock; therefore, the expected dividend yield is assumed to be zero. We also recognize compensation expense for only the portion of options that are expected to vest. Accordingly, we have estimated expected forfeitures of stock options based on our historical forfeiture rate, adjusted for known trends, and used these rates in developing a future forfeiture rate.

We have also granted performance-based restricted stock units (RSUs) and stock options with terms that allow the recipients to vest in a specific number of shares based upon the achievement of performance-based milestones as specified in the grants. Share-based compensation expense associated with these performance-based RSUs and stock options is recognized if the performance condition is considered probable of achievement using management's best estimates of the time to vesting for the achievement of the performance-based milestones. If the actual achievement of the performance-based milestones varies from our estimates, share-based compensation expense could be materially different than what is recorded in the period. The cumulative effect on current and prior periods of a change in the estimated time to vesting for performance-based RSUs and stock options will be recognized as compensation cost in the period of the revision, and recorded as a change in estimate.

While the assumptions used to calculate and account for share-based compensation awards represent management's best estimates, these estimates involve inherent uncertainties and the application of management's judgment. As a result, if revisions are made to our underlying assumptions and estimates, our share-based compensation expense could vary significantly from period to period.

As of December 31, 2016, there was approximately \$4.9 million of unrecognized stock-based compensation, net of estimated forfeitures, related to stock options, which are expected to be recognized over a weighted-average period of 1.5 years. There is no unrecognized stock-based compensation related to RSUs or restricted common stock. The total unrecognized share-based compensation cost will be adjusted for future changes in estimated forfeitures. See Notes 2 and 7 to our consolidated financial statements located in this Annual Report on Form 10-K for further discussion of share-based compensation.

RESULTS OF OPERATIONS

All financial information presented has been consolidated and includes the accounts of our wholly owned subsidiary, Verastem Securities Company. All intercompany balances and transactions have been eliminated in consolidation.

Comparison of the Year Ended December 31, 2016 to the Year Ended December 31, 2015

Research and development expense. Research and development expense for the year ended December 31, 2016 (2016 Period) was \$19.8 million compared to \$40.6 million for the year ended December 31, 2015 (2015 Period). The \$20.8 million decrease from the 2015 Period to the 2016 Period was primarily related to a decrease of \$15.6 million in external CRO expense for outsourced biology, chemistry, development and clinical services, which includes our clinical trial costs, a \$3.4 million decrease in personnel related costs, primarily due to the reduction in workforce in October 2015, a decrease of \$1.3 million in stock-based compensation expense and a decrease of \$1.5 million in lab supplies, travel and other research and development expense. These decreases were partially offset by an increase of approximately \$947,000 in consulting and professional fees.

General and administrative expense. General and administrative expense for the 2016 Period was \$17.2 million compared to \$17.6 million for the 2015 Period. The approximate \$411,000 decrease from the 2015 Period to the 2016 Period primarily resulted from a decrease of \$2.1 million in stock-based compensation expense. This decrease was partially offset by increases of \$1.1 million in consulting and professional fees, approximately \$280,000 in personnel costs, and a net increase of approximately \$306,000 of other general and administrative costs.

Interest income. Interest income increased to approximately \$562,000 for the 2016 Period from approximately \$334,000 for the 2015 Period. This increase was primarily due to higher interest rates on investments in the 2016 Period compared to the 2015 Period.

Comparison of the Year Ended December 31, 2015 to the Year Ended December 31, 2014

Research and development expense. Research and development expense for the 2015 Period was \$40.6 million compared to \$35.4 million for the year ended December 31, 2014 (2014 Period). The \$5.2 million increase from the 2014 Period to the 2015 Period was primarily related to an increase of approximately \$5.8 million in external CRO expense for outsourced biology, chemistry, development and clinical services, which includes our clinical trial costs, a \$1.4 million increase in personnel related costs, primarily due to increased headcount and salaries (before our restructuring) and to restructuring costs associated with the reduction in workforce in October 2015, and an increase of approximately \$558,000 in consulting expense. These increases were partially offset by a decrease of \$1.3 million in stock-based compensation expense, \$1.2 million in license fees related to the Encarta asset purchase in the 2014 Period and \$126,000 in lab supplies.

General and administrative expense. General and administrative expense for the 2015 Period was \$17.6 million compared to \$18.2 million for the 2014 Period. The approximate \$525,000 decrease from the 2014 Period to the 2015 Period primarily resulted from a decrease of approximately \$1.1 million in stock-based compensation expense and a decrease in professional fees of approximately \$446,000, primarily related to lower intellectual property and general legal costs. These decreases were partially offset by an increase of approximately \$856,000 in personnel costs, due to increased headcount and salaries (before our restructuring) and to restructuring costs associated with the reduction in workforce in October 2015, and an increase in consulting fees of approximately \$189,000.

Interest income. Interest income increased to approximately \$334,000 for the 2015 Period from approximately \$242,000 for the 2014 Period. This increase was primarily due to a higher average investment balance for the 2015 Period compared to the 2014 Period.

LIQUIDITY AND CAPITAL RESOURCES

Sources of liquidity

To date, we have not generated any revenues. We have financed our operations to date through private placements of preferred stock, our initial public offering in February 2012, our follow-on offerings in July 2013 and January 2015 and sales of common stock under our at-the market equity offering program. As of December 31, 2016, we had \$80.9 million in cash, cash equivalents and investments. We primarily invest our cash, cash equivalents and investments in a U.S. Government money market fund, overnight repurchase agreements collateralized by government agency securities or U.S. Treasury securities, corporate bonds and commercial paper of publicly traded companies.

Cash flows

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

	Year Ended December 31,		
	2016	2015	2014
Net cash provided by (used in)			
Operating activities	\$ (29,484)	\$ (45,559)	\$ (36,902)
Investing activities	36,968	(27,057)	43,140
Financing activities	(5)	63,585	8,774
Net increase (decrease) in cash and cash equivalents	\$ 7,479	\$ (9,031)	\$ 15,012

Operating activities. The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in the components of working capital. The \$16.1 million decrease in cash used in operating activities for the 2016 Period compared to the 2015 Period was primarily due to a decrease in research and development expenses related to our ongoing clinical trials, including the closeout of our COMMAND trial, and development of our lead product candidates. The \$8.7 million increase in cash used in operating activities for the 2015 Period compared to the 2014 Period was primarily due to an increase in research and development expenses related to clinical trials and development of our lead product candidates.

In October 2015, we announced a reduction in our workforce of approximately 50% to 20 full time employees. All affected employees received severance pay and outplacement assistance. As a result of the reduction in force and associated costs, we estimated annual savings of approximately \$5.1 million in cash operating expenses on a going forward basis, with one-time severance and related costs of \$1.1 million. Of these one-time severance and related costs, approximately \$349,000 was paid through December 31, 2015 and approximately \$713,000 was paid in the 2016 Period. As of December 31, 2016, all one-time severance and related costs have been paid and no liability remains.

Investing activities. The cash provided by investing activities for the 2016 Period reflects net maturities of investments of \$37.0 million. The cash used for investing activities for the 2015 Period primarily reflects the net purchases of investments of \$26.8 million. The cash provided by investing activities for the 2014 Period reflects net maturities of investments of \$45.7 million, partially offset by \$2.4 million of property and equipment purchases primarily associated with the buildout of the Needham facility.

In November 2016, we entered into an amended and restated license agreement with Infinity Pharmaceuticals, Inc. (Infinity), under which we acquired an exclusive worldwide license for the research, development, commercialization, and manufacture of products in oncology indications containing duvelisib. In connection with the license agreement, we assumed operational and financial responsibility for certain activities that were part of Infinity's duvelisib program, including the DUO study for patients with relapsed/refractory CLL, and Infinity assumed financial responsibility for the shutdown of certain other clinical studies up to a maximum of \$4.5 million. We are obligated to use diligent efforts to develop and commercialize a product in an oncology indication containing duvelisib. During the term of the license agreement, Infinity has agreed not to research, develop, manufacture or commercialize duvelisib in any other indication in humans or animals.

Pursuant to the terms of the license agreement, we are required to make the following payments to Infinity in cash or, at our election, in whole or in part, in shares of our common stock: (i) \$6.0 million upon the completion of the DUO study if the results of the DUO study meet certain pre-specified criteria and (ii) \$22.0 million upon the approval of a new drug application in the United States or an application for marketing authorization with a regulatory authority outside of the United States for a product in an oncology indication containing duvelisib. For any portion of any of the foregoing payments that we elect to issue in shares of our common stock in lieu of cash, the number of shares of common stock to be issued will be determined by multiplying (1) 1.025 by (2) the number of shares of common stock equal to (a) the amount of the payment to be paid in shares of common stock divided by (b) the average closing price of a share of common stock as quoted on NASDAQ for a twenty day period following the public announcement of the applicable milestone event. The shares of common stock will be issued as unregistered securities, and we will have an obligation to promptly file a registration statement with the SEC to register such shares for resale. Any issuance of shares will be subject to the satisfaction of closing conditions, including that all material authorizations, consents, approvals and the like necessary for such issuance shall have been obtained.

We are also obligated to pay Infinity royalties on worldwide net sales of any products in an oncology indication containing duvelisib ranging from the mid-single digits to the high single-digits. The royalties will expire on a product-by-product and country-by-country basis until the latest to occur of (i) the last-to-expire patent right covering the applicable product in the applicable country, (ii) the last-to-expire patent right covering the manufacture of the applicable product in the country of manufacture of such product, (iii) the expiration of non-patent regulatory exclusivity in such country and (iv) ten years following the first commercial sale of a product in a country, provided that if royalties on net sales for a product in the United States are payable solely on the basis of non-patent regulatory exclusivity, the applicable royalty on net sales for such product in the United States will be reduced by 50%. The royalties are also subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

In addition to the foregoing, we are obligated to pay Infinity an additional royalty of 4% on worldwide net sales of any products in an oncology indication containing duvelisib to cover the reimbursement of research and development costs owed by Infinity to Mundipharma International Corporation Limited (MICL) and Purdue Pharmaceutical Products L.P. (Purdue). Once Infinity has fully reimbursed MICL and Purdue, the royalty obligations will be reduced to 1% of net sales in the United States. These trailing MICL royalties are payable until the later to occur of the last-to-expire of specified patent rights and the expiration of non-patent regulatory exclusivities in a country. Each of the above royalty rates is reduced by 50% on a product-by-product and country-by-country basis if the applicable royalty is payable solely on the basis of non-patent regulatory exclusivity. In addition, the trailing MICL royalties are subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by the us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

Financing activities. The cash used in financing activities for the 2016 Period primarily represents approximately \$5,000 used to satisfy the tax withholding obligations on certain RSUs that were net settled by employees. The cash provided by financing activities for the 2015 Period primarily represents net proceeds of \$63.9 million from the sale of shares of our common stock in our January 2015 follow-on offering and our at-the-market equity offering program, offset in part by approximately \$417,000 of cash used to satisfy the tax withholding obligations on certain RSUs that were net settled by employees. The cash provided by financing activities in the 2014 Period is primarily related to \$9.6 million of net proceeds from our at-the-market equity offering program offset by approximately \$780,000 of cash used to satisfy the tax withholding obligations on certain RSUs that were net settled by employees.

On March 21, 2017 (Closing Date), Verastem, Inc. (Borrower) entered into a term loan facility of up to \$25.0 million (Term Loan) with Hercules Capital, Inc., a Maryland corporation (Hercules), the proceeds of which will be used for its ongoing research and development programs and for general corporate purposes. The Term Loan is governed by a loan and security agreement, dated March 21, 2017 (Loan Agreement), which provides for up to four separate advances. The first tranche of \$2.5 million was drawn on the Closing Date. The second tranche of \$2.5 million and the third tranche of \$5.0 million may be drawn, at the Borrower's option but subject to the Borrower receiving favorable data from its ongoing Phase III clinical study evaluating the safety and efficacy of

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duvelisib in patients with relapsed/refractory chronic leukemia or small lymphocytic lymphoma on or prior to September 20, 2017 (Milestone Event), during the period beginning on the Closing Date and ending on the earliest to occur of the date that is 90 days after the Milestone Event and December 20, 2017. The fourth tranche of \$15.0 million may be drawn, at the Borrower's option and at the sole discretion of Hercules, on or prior to June 30, 2018.

The Term Loan will mature on December 1, 2020 (Loan Maturity Date). Each advance accrues interest at a floating per annum rate equal to the greater of either (a) 10.5% or (b) the lesser of (i) 12.75% and (ii) the sum of (x) 10.5% plus (y) (A) the prime rate minus (B) 4.5%. The Term Loan provides for interest-only payments until November 1, 2018. The interest-only period may be extended to May 1, 2019 if the Borrower obtains minimum cash proceeds of \$20.0 million from a sale of equity securities or subordinated debt and/or ongoing commercial partnerships. Thereafter, amortization payments will be payable monthly in twenty-six installments (or, if the period requiring interest-only payments has been extended to May 1, 2019, in twenty installments) of principal and interest (subject to recalculation upon a change in prime rates). Any advance may be prepaid in whole or in part upon seven business days' prior written notice to Hercules, subject to a prepayment charge of 3.0%, if such advance is prepaid in any of the first twelve (12) months following the Closing Date, 2.0%, if such advance is prepaid after twelve (12) months following the Closing Date but on or prior to twenty-four (24) months following the Closing Date, and 1.0% thereafter. In addition, a final payment equal to 4.5% of the greater of (a) \$5.0 million and (b) the total principal amount of the Term Loan extended by Hercules which is due on the Loan Maturity Date, or such earlier date specified in the Loan Agreement. Amounts outstanding during an event of default shall be payable on demand and shall accrue interest at an additional rate of 5.0% per annum of the past due amount outstanding.

The Term Loan is secured by a lien on substantially all of the assets of the Borrower, other than intellectual property and contains customary covenants and representations, including a liquidity covenant, financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions, taxes, corporate changes, deposit accounts, and subsidiaries.

The events of default under the Loan Agreement include, without limitation, and subject to customary grace periods, (1) the Borrower's failure to make any payments of principal or interest under the Loan Agreement, promissory notes or other loan documents, (2) the Borrower's breach or default in the performance of any covenant under the Loan Agreement, (3) the Borrower making a false or misleading representation or warranty in any material respect, (4) the Borrower's insolvency or bankruptcy, (5) certain attachments or judgments on the Borrower's assets, or (6) the occurrence of any material default under certain agreements or obligations of the Borrower involving indebtedness, or (7) the occurrence of a material adverse effect. If an event of default occurs, Hercules is entitled to take enforcement action, including acceleration of amounts due under the Loan Agreement.

The Loan Agreement also contains other customary provisions, such as expense reimbursement and confidentiality. Hercules has indemnification rights and the right to assign the Term Loan.

In December 2013, we established an at-the-market equity offering program pursuant to which we are able to offer and sell up to \$35.0 million of our common stock at then current market prices from time to time through Cantor Fitzgerald & Co., as sales agent. In November 2014, we commenced sales under this program. Through December 31, 2015, we sold 2,536,155 shares under this program for net proceeds of approximately \$22.5 million (after deducting commissions and other offering expenses), of which 1,189,479 shares were sold in the 2015 Period for net proceeds of \$10.9 million (after deducting commissions and other offering expenses). Of the cumulative net proceeds through December 31, 2015, \$9.6 million was received in the 2014 Period and \$12.9 million was received in the 2015 Period. No proceeds were received and no additional sales of our common stock were made under this program during the 2016 Period.

In January 2015, we completed a follow-on offering in which we sold 8,337,500 shares of our common stock to the public at a price of \$6.50 per share, including 1,087,500 shares issued pursuant to the exercise of the underwriters' option to purchase additional shares. The net proceeds from this offering were \$50.9 million, after deducting underwriting discounts and commissions.

Funding requirements

We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate that our expenses and operating losses will increase substantially if and as we:

- continue our ongoing clinical trials, including with our most advanced product candidates duvelisib and defactinib;
- initiate additional clinical trials for our product candidates;
- maintain, expand and protect our intellectual property portfolio;
- acquire or in-license other products and technologies;
- hire additional clinical, development and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- ultimately establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval.

We expect our existing cash, cash equivalents and investments will be sufficient to fund our current operating plan for at least the next twelve months from the date of filing of this Annual Report on Form 10-K and into 2018. We have based this estimate on assumptions that may prove to be wrong and we could use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, and the extent to which we may enter into collaborations with third parties for development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the development of our current product candidates. Our future capital requirements will depend on many factors, including:

- the rate and size of enrollment, results and cost of completing our ongoing clinical trials;
- the scope, progress and results of our ongoing and potential future clinical trials;
- the extent to which we acquire or in-license other products and technologies;
- the costs, timing and outcome of regulatory review and/or approval of our product candidates;
- the costs and timing of future commercialization activities for our product candidates, for which we receive marketing approval;
- revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- our ability to establish collaborations on favorable terms, if at all.

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, collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities,

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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 existing stockholders. Debt 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 collaborations, strategic alliances 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 future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table summarizes our contractual obligations at December 31, 2016:

(in thousands)	Total	2017	2018 - 2019	2020 - 2021	Thereafter
Operating lease obligations	\$ 1,484	\$ 527	\$ 957	\$ —	\$ —
License agreements (1)	—	—	—	—	—

- (1) As discussed in Note 10 to the consolidated financial statements appearing elsewhere in this Annual Report on Form 10 K, we are party to several agreements to license intellectual property. The license agreements may require us to pay upfront license fees, ongoing annual license maintenance fees, milestone payments, minimum royalty payments, as well as reimbursement of certain patent costs incurred by the licensors, as applicable. We have not included these payments in the table above as: there were no upfront license fees payable in future periods; annual license maintenance fees, which total \$15,000 per year beginning in 2017, are perpetual and the agreements are cancelable by us at any time upon prior written notice to the licensor; we cannot estimate if milestone and/or royalty payments will occur in future periods; and patent cost reimbursement costs are perpetual and the agreements are cancelable by us at any time upon prior written notice to the licensor.

In November 2016, we entered into an amended and restated license agreement with Infinity, under which we acquired an exclusive worldwide license for the research, development, commercialization, and manufacture of products in oncology indications containing duvelisib. In connection with the license agreement, we assumed operational and financial responsibility for certain activities that were part of Infinity's duvelisib program, including the DUO study for patients with relapsed/refractory CLL, and Infinity assumed financial responsibility for the shutdown of certain other clinical studies up to a maximum of \$4.5 million. We are obligated to use diligent efforts to develop and commercialize a product in an oncology indication containing duvelisib. During the term of the license agreement, Infinity has agreed not to research, develop, manufacture or commercialize duvelisib in any other indication in humans or animals.

Pursuant to the terms of the license agreement, we are required to make the following payments to Infinity in cash or, at our election, in whole or in part, in shares of our common stock: (i) \$6.0 million upon the completion of the DUO study if the results of the DUO study meet certain pre-specified criteria and (ii) \$22.0 million upon the approval of a new drug application in the United States or an application for marketing authorization with a regulatory authority outside of the United States for a product in an oncology indication containing duvelisib. For any portion of any of the foregoing payments that we elect to issue in shares of our common stock in lieu of cash, the number of shares of common stock to be issued will be determined by multiplying (1) 1.025 by (2) the number of shares of common stock equal to (a) the amount of the payment to be paid in shares of common stock divided by (b) the average closing price of a share of common stock as quoted on NASDAQ for a twenty day period following the public announcement of the applicable milestone event. The shares of common stock will be issued as unregistered securities, and we will have an obligation to promptly file a registration statement with the SEC to register such shares for resale. Any issuance of shares will be subject to the satisfaction of closing conditions, including that all material authorizations, consents, approvals and the like necessary for such issuance shall have been obtained.

We are also obligated to pay Infinity royalties on worldwide net sales of any products in an oncology indication containing duvelisib ranging from the mid-single digits to the high single-digits. The royalties will expire on a product-by-product and country-by-country basis until the latest to occur of (i) the last-to-expire patent right covering the applicable product in the applicable country, (ii) the last-to-expire patent right covering the manufacture of the applicable product in the country of manufacture of such product, (iii) the expiration of non-patent regulatory exclusivity in such country and (iv) ten years following the first commercial sale of a product in a country, provided that if royalties on net sales for a product in the United States are payable solely on the basis of non-patent regulatory exclusivity, the applicable royalty on net sales for such product in the United States will be reduced by 50%. The royalties are also subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

In addition to the foregoing, we are obligated to pay Infinity an additional royalty of 4% on worldwide net sales of any products in an oncology indication containing duvelisib to cover the reimbursement of research and development costs owed by Infinity to Mundipharma International Corporation Limited (MICL) and Purdue Pharmaceutical Products L.P. (Purdue). Once Infinity has fully reimbursed MICL and Purdue, the royalty obligations will be reduced to 1% of net sales in the United States. These trailing MICL royalties are payable until the later to occur of the last-to-expire of specified patent rights and the expiration of non-patent regulatory exclusivities in a country. Each of the above royalty rates is reduced by 50% on a product-by-product and country-by-country basis if the applicable royalty is payable solely on the basis of non-patent regulatory exclusivity. In addition, the trailing MICL royalties are subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by the us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

In July 2012, we entered into a license agreement with Pfizer under which Pfizer granted us worldwide, exclusive rights to research, develop, manufacture and commercialize products containing certain of Pfizer's inhibitors of FAK (the FAK Products), including defactinib (VS-6063), for all therapeutic, diagnostic and prophylactic uses in humans. We have the right to grant sublicenses under the foregoing licensed rights, subject to certain restrictions. We are solely responsible, at our own expense, for the clinical development of the FAK Products, which is to be conducted in accordance with an agreed-upon development plan. We are also responsible for all manufacturing and commercialization activities at our own expense. Pfizer was required to provide us with an initial quantity of clinical supply of one of the FAK Products for an agreed upon price. We made a one-time cash payment to Pfizer in the amount of \$1.5 million and issued 192,012 shares of our common stock. Pfizer is also eligible to receive up to \$2.0 million in developmental milestones and up to an additional \$125.0 million based on the successful attainment of regulatory and commercial sales milestones. Pfizer is also eligible to receive high single to mid double digit royalties on future net sales of the FAK Products. Our royalty obligations with respect to each of the FAK Product in each country begin on the date of first commercial sale of the FAK Product in that country, and end on the later of 10 years after the date of first commercial sale of the FAK Product in that country or the date of expiration or abandonment of the last claim contained in any issued patent or patent application licensed by Pfizer to us that covers the Product in that country.

Under our license agreement with Poniard that we entered into in November 2011 relating to VS-4718 and certain other compounds, we paid an upfront license fee and agreed to pay Poniard milestone payments upon the achievement of specified development and regulatory milestones. In February 2014, we purchased the assets which were the subject of our license agreement with Poniard from Encarta, Inc. (Encarta), who had previously purchased those assets in 2013. In consideration for the assets, we issued 97,500 shares of common stock, a warrant to purchase 142,857 shares of common stock with an exercise price equal to \$17.16 per share and paid \$25,000. All existing obligations under the license agreement, including an achieved development milestone and an obligation to issue a warrant, were settled as part of this transaction. In connection with the asset purchase agreement, we also assumed the rights and obligations under the Scripps License Agreement. Pursuant to the Scripps License Agreement, we are obligated to pay Scripps potential product development milestone payments of up to an aggregate of \$3.0 million upon the achievement of specified development and regulatory milestones. In addition, we are obligated to pay Scripps low single-digit royalties as a percentage of net sales of licensed products, subject to adjustments in certain circumstances. Our obligation to pay royalties on net sales is on a country-by-country basis.

OFF-BALANCE SHEET ARRANGEMENTS

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under Securities and Exchange Commission rules.

TAX LOSS CARRYFORWARDS

As of December 31, 2016, we had federal and state net operating loss carryforwards of \$184.2 million and \$182.8 million, respectively, which are available to reduce future taxable income. We also had federal and state tax credits of \$7.4 million and \$1.4 million, respectively, which may be used to offset future tax liabilities. The net operating loss and tax credit carryforwards will expire at various dates through 2035. Net operating loss and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities and may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50%, as defined under Sections 382 and 383 of the Internal Revenue Code, as well as similar state provisions. This could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of our company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. At December 31, 2016, we recorded a 100% valuation allowance against our net operating loss and tax credit carryforwards of \$85.9 million, as we believe it is more likely than not that the tax benefits will not be fully realized. In the future, if we determine that a portion or all of the tax benefits associated with our tax carryforwards will be realized, net income would increase in the period of determination.

RECENTLY ADOPTED ACCOUNTING STANDARDS

In January 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*. ASU 2017-01 clarifies the definition of a business, provides a screen to determine when a set of assets is not a business and narrows the definition of the term output. ASU 2017-01 is effective for the interim and annual periods after December 15, 2016. Early adoption is permitted. We have elected to early adopt ASU 2017-01 and to apply it to any transactions which occurred prior to the issuance date that have not been reported in financial statements that have been issued or made available for issuance.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements - Going Concern: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* (Subtopic 205-40). ASU 2014-15 requires management to assess an entity's ability to continue as a going concern every reporting period, and provide certain disclosures if management has substantial doubt about the entity's ability to operate as a going concern, or an express statement if not, by incorporating and expanding upon certain principles that are currently in U.S. auditing standards. ASU 2014-15 is effective for the interim and annual periods after December 15, 2016. Early adoption is permitted. The Company adopted ASU 2014-15 effective October 1, 2016. We have evaluated the impact of the adoption of ASU 2014-15 on our year ended December 31, 2016 consolidated financial statements and determined that there is not substantial doubt about our ability to continue as a going concern for at least one year from the issuance of the December 31, 2016 consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk related to changes in interest rates. We had cash, cash equivalents and investments of \$80.9 million and \$110.3 million as of December 31, 2016 and 2015, respectively, consisting of cash, U.S. Government money market funds, overnight repurchase agreements collateralized by government agency securities or U.S. Treasury securities, corporate bonds and commercial paper of publicly traded companies. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because most of our investments are interest bearing. Our available for sale securities are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration most of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

We contract with CROs and contract manufacturers globally which may be denominated in foreign currencies. We may be subject to fluctuations in foreign currency rates in connection with these agreements. Transactions denominated in currencies other than the functional currency are recorded based on exchange rates at the time such transactions arise. As of December 31, 2016, an immaterial amount of our total liabilities was denominated in currencies other than the functional currency.

Item 8. Consolidated Financial Statements and Supplementary Data

Our consolidated financial statements, together with the report of our independent registered public accounting firm, appear on pages F-1 through F-25 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and our principal financial and accounting officer evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and our principal financial and accounting officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act as the process designed by, or under the supervision of, our Chief Executive Officer and our principal financial and accounting officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with GAAP, and 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 assets;
- (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures are being made only in accordance with the authorizations of management and directors; and
- (3) provide reasonable assurance regarding the prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our principal financial and accounting officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework provided in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2016.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting occurred during the fiscal quarter ended December 31, 2016 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

On March 21, 2017 (Closing Date), Verastem, Inc. (Borrower) entered into a term loan facility of up to \$25.0 million (Term Loan) with Hercules Capital, Inc., a Maryland corporation (Hercules), the proceeds of which will be used for its ongoing research and development programs and for general corporate purposes. The Term Loan is governed by a loan and security agreement, dated March 21, 2017 (Loan Agreement), which provides for up to four separate advances. The first tranche of \$2.5 million was drawn on the Closing Date. The second tranche of \$2.5 million and the third tranche of \$5.0 million may be drawn, at the Borrower's option but subject to the Borrower receiving favorable data from its ongoing Phase III clinical study evaluating the safety and efficacy of duvelisib in patients with relapsed/refractory chronic leukemia or small lymphocytic lymphoma on or prior to September 20, 2017 (Milestone Event), during the period beginning on the Closing Date and ending on the earliest to occur of the date that is 90 days after the Milestone Event and December 20, 2017. The fourth tranche of \$15.0 million may be drawn, at the Borrower's option and at the sole discretion of Hercules, on or prior to June 30, 2018.

The Term Loan will mature on December 1, 2020 (the Loan Maturity Date). Each advance accrues interest at a floating per annum rate equal to the greater of either (a) 10.5% or (b) the lesser of (i) 12.75% and (ii) the sum of (x) 10.5% plus (y) (A) the prime rate minus (B) 4.5%. The Term Loan provides for interest-only payments until November 1, 2018. The interest-only period may be extended to May 1, 2019 if the Borrower obtains minimum cash proceeds of \$20.0 million from a sale of equity securities or subordinated debt and/or ongoing commercial partnerships. Thereafter, amortization payments will be payable monthly in twenty-six installments (or, if the period requiring interest-only payments has been extended to May 1, 2019, in twenty installments) of principal and interest (subject to recalculation upon a change in prime rates). Any advance may be prepaid in whole or in part upon seven business days' prior written notice to Hercules, subject to a prepayment charge of 3.0%, if such advance is prepaid in any of the first twelve (12) months following the Closing Date, 2.0%, if such advance is prepaid after twelve (12) months following the Closing Date but on or prior to twenty-four (24) months following the Closing Date, and 1.0% thereafter. In addition, a final payment equal to 4.5% of the greater of (a) \$5.0 million and (b) the total principal amount of the Term Loan extended by Hercules which is due on the Loan Maturity Date, or such earlier date specified in the Loan Agreement. Amounts outstanding during an event of default shall be payable on demand and shall accrue interest at an additional rate of 5.0% per annum of the past due amount outstanding.

The Term Loan is secured by a lien on substantially all of the assets of the Borrower, other than intellectual property and contains customary covenants and representations, including a liquidity covenant, financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions, taxes, corporate changes, deposit accounts, and subsidiaries.

The events of default under the Loan Agreement include, without limitation, and subject to customary grace periods, (1) the Borrower's failure to make any payments of principal or interest under the Loan Agreement, promissory notes or other loan documents, (2) the Borrower's breach or default in the performance of any covenant under the Loan Agreement, (3) the Borrower making a false or misleading representation or warranty in any material respect, (4) the Borrower's insolvency or bankruptcy, (5) certain attachments or judgments on the Borrower's assets, (6) the occurrence of any material default under certain agreements or obligations of the Borrower involving indebtedness, or (7) the occurrence of a material adverse effect. If an event of default occurs, Hercules is entitled to take enforcement action, including acceleration of amounts due under the Loan Agreement.

The Loan Agreement also contains other customary provisions, such as expense reimbursement and confidentiality. Hercules has indemnification rights and the right to assign the Term Loan.

The foregoing description of the Term Loan does not purport to be complete and is qualified in its entirety by reference to the Loan Agreement, a copy of which is filed as Exhibit 10.26 to this Annual Report on Form 10-K and is incorporated herein by reference.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE****DIRECTORS AND EXECUTIVE OFFICERS**

The following table sets forth the name, age and position of each of our directors and executive officers as of March 15, 2017.

Name	Age	Position
Robert Forrester	53	President, Chief Executive Officer and Director
Michael Kauffman, M.D., Ph.D.	53	Lead Director
Timothy Barberich	69	Director
Paul A. Friedman, M.D.	74	Director
Alison Lawton	55	Director
S. Louise Phanstiel	58	Director
Bruce Wendel	63	Director
Daniel Paterson	56	Chief Operating Officer

Robert Forrester, age 53, is a Class III director who has served as a member of our Board of Directors since July 2013. Mr. Forrester has served as our Chief Executive Officer since July 2013, as our Chief Operating Officer from March 2011 until July 2013 and as our President since January 2013. Mr. Forrester has previously held executive level positions at both private and public life sciences companies. Prior to joining us, Mr. Forrester served as Chief Operating Officer of Forma Therapeutics, Inc. from 2010 until 2011. Previously, he served as Interim President and Chief Executive Officer of CombinatoRx, Inc. from 2009 until 2010 and as its Executive Vice President and Chief Financial Officer from 2004 to 2009. Mr. Forrester served as Senior Vice President, Finance and Corporate Development at Coley Pharmaceuticals Group, Inc. from 2000 to 2003. Prior to his operating roles, Mr. Forrester was a managing director of the Proprietary Investment Group at MeesPierson, part of the Fortis Group, investing in life science companies. Prior to MeesPierson, Mr. Forrester worked for the investment banks, BZW (now Barclays Capital) and UBS, in the corporate finance groups undertaking mergers and acquisitions and public and private financing transactions. Mr. Forrester started his career as a lawyer with Clifford Chance in London and Singapore. He earned his LL.B. from Bristol University in England. The Board of Directors believes that Mr. Forrester's qualifications to sit on the Board include his previous experience serving in leadership positions within the biopharmaceutical industry and his position as our President and Chief Executive Officer.

Michael Kauffman M.D., age 53, is a Class I director who has served as a member of our Board of Directors since November 2012. Dr. Kauffman has been the President and Chief Executive Officer of Karyopharm Therapeutics Inc., a publicly traded biotechnology company, since January 2011 and was a Science Advisor to Bessemer Venture Partners from 2008 to 2011. Dr. Kauffman was the Chief Medical Officer of Onyx Pharmaceuticals, Inc., a publicly traded biotechnology company, from November 2009 until December 2010. Dr. Kauffman was the Chief Medical Officer of Proteolix, Inc., a privately held pharmaceutical company, from April 2009 until November 2009, when it was acquired by Onyx. From September 2002 until July 2008, Dr. Kauffman was the President and Chief Executive Officer of EPIX Pharmaceuticals, Inc., a publicly traded biotechnology company that underwent liquidation proceedings in 2009. Dr. Kauffman joined Predix Pharmaceuticals, Inc., the predecessor to EPIX, in September 2002, as President and Chief Executive Officer. From 1997 to 2002, he held a number of senior medical and program leadership positions at Millennium Pharmaceuticals, Inc., then a publicly traded biotechnology company, including Vice President, Medicine and VELCADE Program Leader as well as co-founder and Vice President of Medicine at Millennium Predictive Medicine, a wholly-owned subsidiary of Millennium. Dr. Kauffman also served as Medical Director at Biogen Corporation (now Biogen Inc., a publicly traded biotechnology company). Dr. Kauffman has served on the board of directors of Zalicus, Inc., on the board of directors of Karyopharm since January 2011, and on the board of directors of Kezar Life Sciences Inc. In the past five years, Dr. Kauffman has also served on the board of directors of EPIX. Dr. Kauffman received an M.D. and Ph.D. in molecular biology and biochemistry from Johns Hopkins University and holds a B.A. in biochemistry from Amherst College. Dr. Kauffman trained in Internal Medicine at Beth Israel Deaconess and Massachusetts General Hospitals. He is board certified in internal medicine. The Board of Directors believes that Dr. Kauffman's

qualifications to sit on the Board include the combination of his significant business and leadership experience at public life sciences companies and his medical and scientific background.

Timothy Barberich, age 69, is a Class II director who has served as a member of our Board of Directors since March 2014. Mr. Barberich is founder and former Chairman and Chief Executive Officer of Sepracor Inc., a publicly traded, research-based, pharmaceutical company based in Marlborough, Massachusetts, which was acquired by Dainippon Sumitomo Pharma Co., Ltd. in 2009. He founded Sepracor in 1984 and served as Chief Executive Officer from 1984 to May 2007 and as Chairman of the Board from 1990 to 2009. Mr. Barberich has been Chairman of BioNevia Pharmaceuticals since June 2008 and Chief Executive Officer since 2014. He currently serves on the boards of directors of publicly traded GI Dynamics, Inotek Pharmaceuticals Corporation and Verastem, and on the boards of directors of the privately held companies Neurovance Inc. and Frequency, Inc. He has also served on the boards of directors of HeartWare, International, Inc., Tokai Pharmaceuticals, BioSphere Medical, Inc. and GeminX Pharmaceuticals. Mr. Barberich has also served on the board of trustees of Boston Medical Center and the board of the Pharmaceutical Research and Manufacturers' Association (PhRMA). Prior to founding Sepracor, Mr. Barberich spent 10 years as a senior executive at Bedford, Massachusetts-based Millipore Corporation. Mr. Barberich is a graduate of Kings College and holds a Bachelors of Science degree in Chemistry. The Board of Directors believes that Mr. Barberich's qualifications to sit on the Board include his significant experience in the development and commercialization of pharmaceutical products, his leadership experience at other pharmaceutical companies and his service on other boards of directors.

Paul A. Friedman M.D., age 74, is a Class I director who has served as a member of our Board of Directors since May 2014. Dr. Friedman was the Chief Executive Officer of Incyte Corporation from November 2001 until his retirement in January 2014 and oversaw the development and commercialization of Jakafi®. Dr. Friedman joined Incyte from DuPont Pharmaceuticals Research Laboratories where he served as President. Previously, he served as President of Research and Development of The DuPont Merck Pharmaceutical Company and Senior Vice President at Merck Research Laboratories. During his career, Dr. Friedman was involved in the discovery and/or development of a number of successful pharmaceutical products, including Jakafi®, Aggrastat®, Trusopt®, Crixivan®, Sustiva®, Pedvax®, Pneumovax®, Vaqta®, Varivax® Cozaar®/Hyzaar® and Fosamax®. Dr. Friedman earned his M.D. from Harvard Medical School where he subsequently became an Associate Professor of Medicine and Pharmacology and was a practicing physician at New York-Presbyterian Hospital, College of Physicians and Surgeons. Dr. Friedman currently serves as Chairman and Chief Executive Officer of Madrigal Pharmaceuticals and also serves on the boards of directors of two other publicly traded companies, Incyte and Cerulean Pharma, Inc., and on the boards of directors of two privately held companies, Gliknik, Inc. and Navitor Pharmaceuticals, Inc. Dr. Friedman also currently serves as a diplomat of the American Board of Internal Medicine and a Member of the American Society of Clinical Investigation. He has authored or co-authored over 100 scientific publications. The Board of Directors believes that Dr. Friedman's qualifications to sit on the Board include his medical background, his significant experience in the development and commercialization of pharmaceutical products and his leadership experience at other pharmaceutical companies.

Alison Lawton, age 55, is a Class II director who has served as a member of our Board of Directors since November 2012. Ms. Lawton has been Chief Operating Officer at Aura Biosciences since January 2015 and prior to this was Chief Operating Officer of OvaScience, Inc., a publicly traded life sciences company, from January 2013 until December 2013. From 1991 to 2012, Ms. Lawton worked at various positions of increasing responsibility at Genzyme Corporation (Genzyme) and subsequently at Sanofi-Aventis, following its 2011 acquisition of Genzyme, each a global biopharmaceutical company. Ms. Lawton served as head of Genzyme Biosurgery, where she was responsible for Genzyme's global orthopedics, surgical and cell therapy and regenerative medicine businesses. Prior to that, Ms. Lawton oversaw Global Market Access at Genzyme, which included Global Regulatory Affairs, Global Health Outcomes and Strategic Pricing, Global Public Policy, and Global Product Safety & Risk Management. Before joining Genzyme, Ms. Lawton worked for seven years in the United Kingdom at Parke-Davis, a pharmaceutical company. Ms. Lawton serves on the boards of directors of ProQR Therapeutics and CoLucid Pharmaceuticals, Inc., both publicly traded biopharmaceutical companies. She also served on the board of directors of Cubist Pharmaceuticals for three years until its acquisition by Merck & Co., Inc. in 2015. Ms. Lawton also serves on the board of a private biotechnology company, Follica, the Scientific Advisory Board of the private biotechnology company X4 Pharmaceuticals and is a corporate advisor to PIC Therapeutics Inc. She is a former President and Chair of the Board of Regulatory Affairs Professional Society and former FDA Advisory Committee member for Cell and Gene Therapy Committee. The Board of Directors believes that Ms. Lawton's qualifications to

sit on the Board include significant operational, international, regulatory and senior management experience within the pharmaceutical and biotechnology industries and her experience serving on boards of directors within the industry.

S. Louise Phanstiel, age 58, is a Class I director who has served as a member of our Board of Directors since September 2012. Ms. Phanstiel held several important positions at WellPoint, Inc. from 1996 to 2007, including President, Specialty Products (2003 to 2007), Senior Vice President, Chief of Staff and Corporate Planning in the Office of the Chairman (2000 to 2003), and Senior Vice President, Chief Accounting Officer, Controller, and Chief Financial Officer for all WellPoint, Inc. subsidiaries, including Blue Cross of California (1996 to 2000). Previously, Ms. Phanstiel was a partner at the international services firm of Coopers & Lybrand, where she served clients in life and property/casualty insurance, high technology, and higher education. Ms. Phanstiel has served on the board of directors of Myriad Genetics since September 2009, and formerly served on the boards of directors of Inveresk Research Group, Inc. and Charles River Laboratories, Inc. Ms. Phanstiel received a B.A. degree in Accounting from Golden Gate University and is a Certified Public Accountant. The Board of Directors believes that Ms. Phanstiel's qualifications to sit on the Board include her significant financial, investment, and management expertise, and her experience managing and serving as a director of publicly traded companies.

Bruce Wendel, age 63, is a Class III director who has served as a member of our Board of Directors since June 2016. Mr. Wendel has been Chief Strategic Officer of Hepalink USA, the U.S. subsidiary of Shenzhen Hepalink Pharmaceutical Company, since June 2012. Prior to this, Mr. Wendel served as Vice Chairman and Chief Executive Officer of Abraxis BioScience, LLC, from January 2010 to December 2010, where he oversaw the development and commercialization of Abraxane®. He also led the negotiations that culminated in the acquisition of Abraxis by Celgene in a deal valued at over \$2.9 billion. Prior to Abraxis, Mr. Wendel served in business and corporate development roles of increasing responsibility at American Pharmaceutical Partners, IVAX Corporation and Bristol-Myers Squibb. Mr. Wendel currently serves on the board of directors of ProMetic Life Sciences, Inc., a publically traded biopharmaceutical company. Mr. Wendel earned a juris doctorate degree from Georgetown University Law School, and a B.S. from Cornell University. The Board of Directors believes that Mr. Wendel's qualifications to sit on the Board include his experience building companies and bringing oncology drugs to the market, his oversight of the development and commercialization of Abraxane®, and his life sciences industry experience and knowledge.

Dan Paterson, age 56, has served as our Chief Operating Officer since December 2014, our Chief Business Officer from July 2013 to December 2014 and as our Vice President, Head of Corporate Development and Diagnostics from March 2012 until July 2013. Prior to joining us in March 2012, Mr. Paterson was a consultant in 2011. From 2009 through 2010, Mr. Paterson was the Chief Operating Officer of On-Q-ity. Mr. Paterson was the President and Chief Executive Officer of The DNA Repair Company from 2006 until 2009, when it was acquired by On-Q-ity. Previously, he held senior level positions at IMS Health, CareTools, OnCare, and Axion.

Section 16(a) Beneficial Ownership Reporting Compliance

Our directors, executive officers and beneficial owners of more than 10% of our common stock are required under Section 16(a) of the Securities Exchange Act of 1934, as amended, to file reports of ownership and changes in ownership of our securities with the Securities and Exchange Commission (SEC). We believe that, during the year ended December 31, 2016, our directors, executive officers and beneficial owners of more than 10% of the Company's common stock complied with all Section 16(a) filing requirements.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the code is posted on the "Investors — Corporate Governance" section of our website, which is located at www.verastem.com. In addition, we intend to post on our website all disclosures that are required by law, the rules of the SEC or NASDAQ stock market listing standards concerning any amendments to, or waivers from, any provision of the code.

Board Committees

Our board of directors has established an audit committee, a nominating and corporate governance committee, and a compensation committee, each of which operates under a charter that has been approved by our board. Our board of directors has determined that all of the members of the audit committee, the compensation committee and the nominating and corporate governance committee are independent as defined under NASDAQ Marketplace Rules, including, in the case of all the members of our audit committee, the independence requirements contemplated by Rule 10A-3 under the Securities Exchange Act of 1934. No changes have been made to the procedures by which our stockholders may recommend nominees to our board of directors.

Audit committee

The members of our audit committee are Louise Phanstiel, Timothy Barberich, and Michael Kauffman. Our board of directors has determined that Louise Phanstiel is an “audit committee financial expert” as defined in the applicable SEC rules.

Nominating and corporate governance committee

The members of our nominating and corporate governance committee are Paul A. Friedman, Timothy Barberich, and Bruce Wendel.

Compensation committee

The members of our compensation committee are Alison Lawton, Michael Kauffman, and Bruce Wendel.

ITEM 11. EXECUTIVE COMPENSATION

NAMED EXECUTIVE OFFICER COMPENSATION, COMPENSATION DISCUSSION AND ANALYSIS

Our named executive officers for the fiscal year ended December 31, 2016 were:

- Robert Forrester, our President and Chief Executive Officer;
- Daniel Paterson, our Chief Operating Officer; and
- Gregory Berk, M.D., our former Chief Medical Officer.

2016 Summary Compensation Table

The following table provides information regarding the total compensation for services rendered in all capacities that was earned during the fiscal year indicated by our named executive officers for 2016.

Name and Principal Position	Year	Salary (\$)	Option Awards (\$)(1)	Non-Equity Incentive Plans (\$)(2)	All Other Compensation (\$)(3)	Total (\$)
Robert Forrester	2016	525,000	245,844	321,000	12,690	1,104,534
Chief Executive Officer	2015	524,385	1,972,828	—	12,504	2,509,717
Daniel Paterson	2016	377,000	167,412	151,000	13,290	708,702
Chief Operating Officer	2015	376,169	1,042,812	—	12,504	1,431,485
Gregory Berk	2016	270,769	452,472	106,667	187,893	1,017,801
Chief Medical Officer (4)						

- (1) The amounts reflect the aggregate grant date fair value of option awards granted during the year computed in accordance with the provisions of Financial Accounting Standards Board Accounting Standard Codification Topic 718 (FASB ASC Topic 718), excluding the effect of estimated forfeitures. For information regarding assumptions underlying the value of stock awards, see Note 7 to our financial statements and the discussion under Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies—Stock-Based Compensation,” of this Annual Report on Form 10-K for the year ended December 31, 2016.
- (2) The amounts shown for non-equity incentive plan compensation represent amounts earned for the fiscal years ended December 31, 2016 and 2015. No bonuses were granted to our executives, including our named executive officers, for 2015. Amounts earned for 2016 were paid in 2017.
- (3) The amounts shown represent the sum of 401(k) contributions, Health Savings Account contributions, and the dollar value of life insurance premiums paid by the Company for the applicable named executive officer. The amount for Dr. Berk also includes \$175,000 of fees paid in connection with consulting services provided prior to joining us in April 2016.
- (4) Dr. Berk served as our Chief Medical Officer from April 15, 2016 to January 19, 2017.

Narrative Discussion of Summary Compensation Table**Employment Agreements**

We have entered into an employment agreement with each of our named executive officers. Each of the employment agreements provides that employment will continue for an indefinite period until either the Company or the employee provides written notice of termination in accordance with the terms of the agreement.

Robert Forrester

Pursuant to his amended and restated employment agreement, as of July 1, 2013, Mr. Forrester was entitled to an initial base salary of \$490,000, subject to increase from time to time by the Board of Directors. As of January 1, 2017, Mr. Forrester’s annual base salary is \$535,000. Mr. Forrester is eligible to receive a bonus of 60% of his current annual base salary. Subject to Mr. Forrester’s execution of an effective release of claims, Mr. Forrester would be entitled to the severance payments described below if we terminate his employment without cause, as defined in his employment agreement, or if Mr. Forrester terminates his employment for good reason, as defined in his employment agreement.

If Mr. Forrester’s employment is terminated by us without cause or by Mr. Forrester for good reason, absent a change in control, as defined in his employment agreement, we would be obligated, (1) to pay Mr. Forrester his base salary for a period of 12 months following the termination of his employment, (2) to accelerate the vesting

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of the portion of any equity awards granted prior to the date of his amended and restated employment agreement that would have vested during the 12-month period following the termination of his employment and (3) to the extent allowed by applicable law and the applicable plan documents, to continue to provide Mr. Forrester with all health and dental benefits that he was receiving at the time of the termination of his employment for a period of 12 months following termination (or, if earlier, until the time when Mr. Forrester becomes eligible to enroll in the health or dental plan of a new employer).

If Mr. Forrester's employment is terminated by us without cause or by Mr. Forrester for good reason, in each case within 90 days prior to, or within one year following, a change in control, we would be obligated (1) to pay Mr. Forrester a lump sum amount equal to two times the sum of his then current annual base salary plus an amount equal to his target bonus, (2) to accelerate the vesting of all outstanding equity awards and (3) to the extent allowed by applicable law and the applicable plan documents, continue to provide Mr. Forrester with all health and dental benefits that he was receiving at the time of the termination of his employment for a period of 24 months following such termination (provided that such benefits shall end when Mr. Forrester becomes eligible to enroll in the health or dental plan of a new employer).

To the extent that any severance or compensation payable to Mr. Forrester pursuant to his employment agreement or otherwise in connection with a change in control of the Company would be subject to the excise tax imposed under Section 4999 of the Internal Revenue Code, Mr. Forrester would be entitled to an additional cash payment equal to an amount calculated by multiplying the grossed-up amount of such payments (i.e., an amount such that net amount retained by Mr. Forrester after payment of all applicable taxes, interest and penalties thereon is equal to the total payments payable to him) by a fraction, the numerator of which is the portion of such payments related to equity awards granted prior to the execution of his employment agreement and the denominator of which is the portion of such payments related to all equity awards granted to him. However, if it would result in a greater amount payable to Mr. Forrester, Mr. Forrester would instead be entitled to either the full amount of the total payments payable in connection with a change in control or a reduced amount of the total payments payable in connection with a change in control, whichever results in the greater economic benefit for Mr. Forrester.

Daniel Paterson

Pursuant to his employment agreement, Mr. Paterson was entitled to an initial base salary of \$300,000, subject to increase from time to time by the Board of Directors. As of January 1, 2017, Mr. Paterson's annual base salary is \$390,000. Mr. Paterson is also eligible to receive a bonus of 40% of his current annual base salary. Subject to Mr. Paterson's execution of an effective release of claims, Mr. Paterson would be entitled to the severance payments described below if we terminate his employment without cause, as defined in his employment agreement, or if Mr. Paterson terminates his employment for good reason, as defined in his employment agreement.

If Mr. Paterson's employment is terminated by us without cause or by Mr. Paterson for good reason, absent a change in control, as defined in his employment agreement, we would be obligated (1) to pay Mr. Paterson his base salary for a period of nine months following such termination of employment, (2) to accelerate the vesting of the portion of any equity awards granted prior to the Company's initial public offering that would have vested during the nine-month period following such termination and (3) to the extent allowed by applicable law and the applicable plan documents, to continue to provide Mr. Paterson with all health and dental benefits that he was receiving at the time of the termination of his employment for a period of nine months following such termination (provided that such benefits shall end when Mr. Paterson becomes eligible to enroll in the health or dental plan of a new employer).

If Mr. Paterson's employment is terminated by us without cause or by Mr. Paterson for good reason, in each case within 90 days prior to, or within 18 months following, a change in control, we would be obligated (1) to pay Mr. Paterson a lump sum amount equal to his then current annual base salary, (2) to accelerate the vesting of all outstanding equity awards and (3) to the extent allowed by applicable law and the applicable plan documents, to continue to provide Mr. Paterson with all health and dental benefits that he was receiving at the time of the termination of his employment for a period of 12 months following such termination (provided that such benefits shall end when Mr. Paterson becomes eligible to enroll in the health or dental plan of a new employer).

Gregory Berk, M.D.

Pursuant to his employment agreement, Dr. Berk was entitled to a base salary of \$400,000 per year, subject to increase from time to time by the Board of Directors. He was eligible to receive a bonus of 40% of his annual base salary. Pursuant to the terms of his employment agreement, Dr. Berk was entitled to be granted a stock option to purchase 370,000 shares of our common stock and an additional performance-based stock option to purchase 92,500 shares of our common stock (which was increased to 100,000 shares of our common stock at the discretion of our Board of Directors).

Subject to Dr. Berk's execution of an effective release of claims, Dr. Berk's employment agreement entitled him to the severance payments and benefits described below if we had terminated his employment without cause, as defined in his employment agreement, or if Dr. Berk terminated his employment for good reason, as defined in his employment agreement.

If Dr. Berk's employment had been terminated by us without cause or by Dr. Berk for good reason, absent a change in control, as defined in his employment agreement, he would have been entitled to payment of (1) a lump sum amount equal to 75% of his annual base salary, (2) a lump sum amount equal to nine times the full monthly premium cost of Dr. Berk's participation in our group health and/or dental plans, (3) any base salary earned but not paid through the date of termination, and (4) any bonus awarded but not yet paid on the date of termination, paid at such time when bonuses are paid to our executives generally.

If Dr. Berk's employment had been terminated by us without cause or by Dr. Berk for good reason, in each case within 90 days prior to, or within 18 months following, a change in control, he would have been entitled to (in lieu of the payments described above) (1) payment of a lump sum amount equal to his then-current annual base salary, (2) accelerated vesting of all outstanding unvested equity awards that vest only based on the passage of time, (3) payment of a lump sum amount equal to twelve times the full monthly premium cost of Dr. Berk's participation in our group health and/or dental plans, (4) payment of any base salary earned but not paid through the date of termination, and (5) payment of any bonus awarded but not yet paid on the date of termination, paid at such time when bonuses are paid to our executives generally.

Dr. Berk resigned from the Company and entered into a separation agreement with us, effective as of January 19, 2017. Pursuant to the separation agreement, Dr. Berk is entitled to (1) payment of cash severance in the amount of \$303,750 (with 50% of such amount paid as a lump sum and 50% paid over the six-month period following January 19, 2017), (2) payment of his 2016 bonus in the amount of approximately \$106,667, (3) payment of an amount equal to the full monthly premium cost of Dr. Berk's participation in our group health and/or dental plans for a period of up to nine months, and (4) continued vesting of the equity awards previously granted to Dr. Berk in April and June 2016, during such time when Dr. Berk serves as a consultant to the Company pursuant to a consulting agreement entered into contemporaneously with the separation agreement.

Pension Benefits and Deferred Compensation

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(a) of the Code. Employee contributions may be made on a pre-tax basis or after-tax (Roth) basis. The 401(k) plan provides for employer matching contributions equal to (1) 100% of employee deferral contributions up to a deferral rate of 3% of eligible compensation plus (2) 50% of employee deferral contributions up to a deferral rate of an additional 2% of eligible compensation.

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- (6) This option was granted on November 9, 2015. The option vests as to 50% of the shares underlying the option on the first anniversary of the grant date and, thereafter, as to the remaining 50% of the shares underlying the option on the second anniversary of the grant date.
- (7) This option was granted on January 1, 2016. The option vests as to 50% of the shares underlying the option on November 9, 2016 and, thereafter, as to the remaining 50% of the shares underlying the option on November 9, 2017.
- (8) This option was granted on June 14, 2016. The option vests as to 50% of the shares underlying the option upon satisfaction of a certain performance milestone by June 2017, and, thereafter, as to the remaining 50% of the shares underlying the option upon satisfaction of a certain performance milestone by June 2018.
- (9) This option was granted on April 15, 2016. The option vests as to 25% of the shares underlying the option on the first anniversary of the grant date and, thereafter, as to 6.25% of the shares underlying the option at the end of each successive three-month period following the first anniversary of the grant date until the fourth anniversary of the grant date.

DIRECTOR COMPENSATION

2016 Director Compensation

The following table summarizes the compensation paid to or earned by our directors during the year ended December 31, 2016:

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)(2)	Total (\$)
Timothy Barberich	53,000	22,794	75,794
Paul Friedman, M.D.	47,738	22,794	70,532
Michael Kauffman, M.D., Ph.D.	67,688	22,794	90,482
Alison Lawton	50,928	22,794	73,722
S. Louise Phanstiel	60,000	22,794	82,794
Stephen Sherwin, M.D., Ph.D. (3)	37,414	—	37,414
Henri Termeer	33,938	—	33,938
Bruce Wendel	27,923	45,589	73,512
Christopher Westphal	18,100	—	18,100

- (1) Amounts shown represent the aggregate grant date fair value of stock option awards granted to the director and calculated in accordance with FASB ASC Topic 718, disregarding adjustments for forfeiture assumptions. For information regarding assumptions underlying the value of stock awards, see Note 7 to our financial statements and the discussion under Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies—Stock-Based Compensation,” of this Annual Report on Form 10-K for the year ended December 31, 2016.
- (2) The number of stock options awarded to any non-employee director who received a grant during 2016 was 25,000, with the exception of Mr. Wendel who received 50,000 stock options as a result of his new appointment to our Board of Directors.
- (3) Fees earned by Dr. Sherwin consist of \$24,887 earned as a director and \$12,527 earned as an advisor to the Company after his resignation from our Board of Directors on June 14, 2016.

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The following table sets forth, as of December 31, 2016, the aggregate number of exercisable and unexercisable stock option awards held by our directors:

Name	Option Awards		Total (#)
	Exercisable (#)	Unexercisable (#)	
Timothy Barberich	85,099	12,498	97,597
Paul Friedman, M.D.	81,997	12,498	94,495
Michael Kauffman, M.D., Ph.D.	99,478	12,498	111,976
Alison Lawton	99,478	12,498	111,976
S. Louise Phanstiel	101,841	12,498	114,339
Stephen Sherwin, M.D., Ph.D.	83,585	—	83,585
Henri Termeer	—	—	—
Bruce Wendel	25,002	24,998	50,000
Christopher Westphal	—	—	—

Non-Employee Director Compensation

Under our non-employee director compensation policy, each non-employee director receives an annual base retainer of \$40,000. In addition, our non-employee directors receive the following cash compensation for Board services, as applicable:

- the non-executive Lead Director of the Board of Directors receives an additional annual retainer of \$25,000;
- each chairperson of our Audit, Compensation and Nominating and Corporate Governance Committees receives an additional annual retainer of \$20,000, \$15,000 and \$10,000, respectively; and
- each member of our Audit, Compensation and Nominating and Corporate Governance Committees receives an additional retainer of \$8,000, \$6,000 and \$5,000, respectively.

All amounts are paid in quarterly installments.

In addition, our non-employee directors receive stock options as compensation for their service on our Board of Directors. Newly appointed non-employee directors receive a one-time initial award of options to purchase 50,000 shares of our common stock, which vest monthly over a one-year period subject to the director's continued service on the Board of Directors. Thereafter, each non-employee director who was serving on the Board of Directors as of the prior year's annual meeting of the Company's shareholders, receives an annual award of options to purchase shares of our common stock, which vest monthly over a one-year period, subject to the director's continued service on the Board of Directors (Annual Grant). Additionally, each non-employee director who has served 12 months on the Board of Directors as of the date of the annual meeting of the Company's shareholders, but has not yet received an Annual Grant also receives a pro-rated grant (based on the Annual Grant for such year) to reflect the time such director has served on the Board of Directors since the 12-month anniversary of the commencement of such director's service, which vests monthly over a one-year period, subject to the director's continued service on the Board of Directors. In 2016, the Annual Grant consisted of options to purchase 25,000 shares of our common stock.

Mr. Forrester, our President and Chief Executive Officer, does not receive compensation for his service as a director. Mr. Forrester's compensation is described under the heading "Executive Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

The following table contains information about our equity compensation plans as of December 31, 2016.

Plan category	Number of securities to be issued upon exercise of outstanding stock options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders(1)	5,343,470	\$ 6.67	1,845,158 (3)
Equity compensation plans not approved by security holders(2)	505,000	\$ 3.04	750,000

(1) Includes information regarding our 2010 Equity Incentive Plan and 2012 Incentive Plan.

(2) In December 2014, the Board of Directors has authorized and reserved 750,000 shares of common stock that may be issued pursuant to stock options granted or to be granted to new employees in accordance with NASDAQ Listing Rule 5635(c)(4), as an inducement material to such employees entering into employment with the Company. The terms of these stock options are consistent with stock options granted under the Company's 2012 Incentive Plan. As of December 31, 2016, 580,000 shares had been granted and 75,000 shares had been cancelled under this program. In December 2016, the Board of Directors authorized and reserved 580,000 additional shares of common stock that may be issued pursuant to stock options granted or to be granted to new employees in accordance with NASDAQ Listing Rule 5635(c)(4), as an inducement material to such employees entering into employment with the Company.

(3) Does not include 1,285,714 shares added to the 2012 Incentive Plan under the evergreen provision on January 1, 2017.

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- (6) Consists of 3,000 shares of common stock held by Dr. Friedman and 92,412 shares of common stock issuable upon the exercise of stock options within 60 days of March 15, 2017.
- (7) Consists of 109,893 shares of common stock issuable upon the exercise of stock options within 60 days of March 15, 2017.
- (8) Consists of 2,500 shares of common stock held by Ms. Lawton and 109,893 shares of common stock issuable upon the exercise of stock options within 60 days of March 15, 2017.
- (9) Consists of 26,500 shares of common stock held by The Phanstiel Trust and 112,256 shares of common stock issuable upon the exercise of stock options within 60 days of March 15, 2017.
- (10) Consists of 45,834 shares of common stock issuable upon the exercise of stock options within 60 days of March 15, 2017.
- (11) Includes shares of common stock issuable upon exercise of stock options within 60 days of March 15, 2017.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Policies and Procedures for Related Person Transactions

Our Board of Directors has adopted written policies and procedures for the review of any transaction, arrangement or relationship in which the Company is a participant, the amount involved exceeds \$120,000 and one of our executive officers, directors, director nominees or 5% stockholders, or their immediate family members, each of whom we refer to as a “related person,” has a direct or indirect material interest.

Transactions with related persons

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a “related person transaction,” the related person must report the proposed related person transaction to our principal financial officer. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our Audit Committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the Audit Committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the Audit Committee to review and, if deemed appropriate, approve proposed related person transactions that arise between Audit Committee meetings, subject to ratification by the Audit Committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the Audit Committee after full disclosure of the related person’s interest in the transaction. As appropriate for the circumstances, the Audit Committee will review and consider:

- the related person’s interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person’s interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;

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- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

The Audit Committee may approve or ratify the transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in our best interests. The Audit Committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our Board of Directors has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity (whether or not the person is also a director of such entity) that is a participant in the transaction, where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, (b) the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction and (c) the amount involved in the transaction is less than the greater of \$200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction; and
- a transaction that is specifically contemplated by provisions of our charter or bylaws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the Compensation Committee in the manner specified in its charter.

Director Independence

As required by the listing standards of the NASDAQ Global Market (NASDAQ), the Board of Directors has affirmatively determined, upon the recommendation of the Nominating and Corporate Governance Committee, that each of our directors and nominees for director other than Robert Forrester, our President and Chief Executive Officer, is independent. To make this determination, our Board of Directors reviews all relevant transactions or relationships between each director and Verastem, its senior management and its independent registered public accounting firm. During this review, the Board considers whether there are any transactions or relationships between directors or any member of their immediate family (or any entity of which a director or an immediate family member is an executive officer, general partner or significant equity holder) and members of our senior management or their affiliates. The Board consults with Verastem's outside corporate counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent Nasdaq listing standards, as in effect from time to time.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Principal Accountant Fees and Services

We regularly review the services and fees of our independent accountants. These services and fees are also reviewed by the Audit Committee on an annual basis. The aggregate fees billed and accrued for the fiscal years ended December 31, 2016 and 2015 for each of the following categories of services are as follows:

Fee Category	2016 (\$)	2015 (\$)
Audit Fees	357,500	291,691
Audit-Related Fees	50,000	—
Tax Fees	—	—
All Other Fees	—	—
Total Fees	407,500	291,691

Audit Fees. Consist of fees billed and accrued for professional services rendered for the audit of our annual financial statements, the review of interim financial statements and services provided in connection with our registration statements.

Audit-Related Fees. Consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under “Audit Fees.”

Tax Fees. Consist of fees billed for tax compliance, tax advice and tax planning and includes fees for tax return preparation.

All Other Fees. Consist of fees billed for products and services, other than those described above under Audit Fees, Audit-Related Fees and Tax Fees.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Consolidated Financial Statements

See Part II, Item 8 for the Financial Statements required to be included in this Annual Report on Form 10-K.

Consolidated Financial Statement Schedules

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

Exhibits

Those exhibits required to be filed by Item 601 of Regulation S-K are listed in the Exhibit Index immediately preceding the exhibits hereto and such listing is incorporated herein by reference.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 23rd day of March 2017.

VERASTEM, INC.
By: /s/ Robert Forrester

Robert Forrester
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Robert Forrester Robert Forrester	Chief Executive Officer and Director (Principal executive officer)	March 23, 2017
/s/ Joseph Chiapponi Joseph Chiapponi	Vice President, Finance (Principal financial and accounting officer)	March 23, 2017
/s/ Timothy Barberich Timothy Barberich	Director	March 23, 2017
/s/ Paul A. Friedman, M.D. Paul A. Friedman, M.D.	Director	March 23, 2017
/s/ Michael Kauffman, M.D., Ph.D. Michael Kauffman, M.D., Ph.D.	Director	March 23, 2017
/s/ Alison Lawton Alison Lawton	Director	March 23, 2017
/s/ S. Louise Phanstiel S. Louise Phanstiel	Director	March 23, 2017
/s/ Bruce Wendel Bruce Wendel	Director	March 23, 2017

Verastem, Inc.

CONSOLIDATED FINANCIAL STATEMENTS

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Verastem, Inc.
Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
Verastem, Inc.

We have audited the accompanying consolidated balance sheets of Verastem, Inc. as of December 31, 2016 and 2015, and 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, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Verastem, Inc. as of December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016 in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 23, 2017

Verastem, Inc.

CONSOLIDATED BALANCE SHEETS

(in thousands, except per share amounts)

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 32,349	\$ 24,870
Short-term investments	48,548	85,388
Prepaid expenses and other current assets	398	585
Total current assets	81,295	110,843
Property and equipment, net	1,417	2,048
Restricted cash	162	203
Other assets	755	—
Total assets	<u>\$ 83,629</u>	<u>\$ 113,094</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 4,095	\$ 3,942
Accrued expenses	6,896	6,098
Liability classified stock-based compensation awards	—	69
Total current liabilities	10,991	10,109
Other liabilities	341	516
Stockholders' equity:		
Preferred stock, \$0.0001 par value; 5,000 shares authorized, no shares issued and outstanding at December 31, 2016 and 2015, respectively	—	—
Common stock, \$0.0001 par value; 100,000 shares authorized, 36,992 and 36,941 shares issued and outstanding at December 31, 2016 and 2015, respectively	4	4
Additional paid-in capital	307,587	301,305
Accumulated other comprehensive income	29	43
Accumulated deficit	(235,323)	(198,883)
Total stockholders' equity	72,297	102,469
Total liabilities and stockholders' equity	<u>\$ 83,629</u>	<u>\$ 113,094</u>

See accompanying notes to the consolidated financial statements.

Verastem, Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(in thousands, except per share amounts)

	Year Ended December 31,		
	2016	2015	2014
Operating expenses:			
Research and development	\$ 19,779	\$ 40,565	\$ 35,448
General and administrative	17,223	17,634	18,159
Total operating expenses	<u>37,002</u>	<u>58,199</u>	<u>53,607</u>
Loss from operations	(37,002)	(58,199)	(53,607)
Interest income	562	334	242
Net loss	<u>\$ (36,440)</u>	<u>\$ (57,865)</u>	<u>\$ (53,365)</u>
Net loss per share—basic and diluted	<u>\$ (0.99)</u>	<u>\$ (1.61)</u>	<u>\$ (2.07)</u>
Weighted-average number of common shares used in net loss per share—basic and diluted	<u>36,988</u>	<u>35,932</u>	<u>25,804</u>
Net loss	\$ (36,440)	\$ (57,865)	\$ (53,365)
Unrealized (loss) gain on available-for-sale securities	(14)	32	(17)
Comprehensive loss	<u>\$ (36,454)</u>	<u>\$ (57,833)</u>	<u>\$ (53,382)</u>

See accompanying notes to the consolidated financial statements.

Verastem, Inc.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common stock		Additional paid-in capital	Accumulated other comprehensive (loss) income	Accumulated deficit	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2013	25,328,450	\$ 3	\$ 205,068	\$ 28	\$ (87,653)	\$ 117,446
Net loss	—	—	—	—	(53,365)	(53,365)
Unrealized loss on available-for-sale marketable securities	—	—	—	(17)	—	(17)
Issuance of common stock, net of issuance costs of \$43	1,346,676	—	11,646	—	—	11,646
Vesting of restricted stock	321,287	—	9	—	—	9
Issuance of common stock resulting from exercise of stock options	30,451	—	20	—	—	20
Issuance of common stock resulting from vesting of restricted stock units and payment of tax withholdings	135,008	—	(780)	—	—	(780)
Shares issued for technology rights	97,500	—	1,447	—	—	1,447
Stock-based compensation expense	—	—	12,360	—	—	12,360
Balance at December 31, 2014	27,259,372	\$ 3	\$ 229,770	\$ 11	\$ (141,018)	\$ 88,766
Net loss	—	—	—	—	(57,865)	(57,865)
Unrealized gain on available-for-sale marketable securities	—	—	—	32	—	32
Issuance of common stock resulting from follow-on offering	8,337,500	1	50,941	—	—	50,942
Issuance of common stock resulting from at-the-market transactions, net of issuance costs of \$53	1,189,479	—	10,911	—	—	10,911
Vesting of restricted stock	7,995	—	2	—	—	2
Issuance of common stock resulting from exercise of stock options	33,658	—	13	—	—	13
Issuance of common stock resulting from vesting of restricted stock units and payment of tax withholdings	113,257	—	(417)	—	—	(417)
Stock-based compensation expense	—	—	10,085	—	—	10,085
Balance at December 31, 2015	36,941,261	\$ 4	\$ 301,305	\$ 43	\$ (198,883)	\$ 102,469
Net loss	—	—	—	—	(36,440)	(36,440)
Unrealized loss on available-for-sale marketable securities	—	—	—	(14)	—	(14)
Issuance of common stock resulting from exercise of stock options	1,605	—	—	—	—	—
Issuance of common stock resulting from vesting of restricted stock units and payment of tax withholdings	49,552	—	(5)	—	—	(5)
Stock-based compensation expense	—	—	6,287	—	—	6,287
Balance at December 31, 2016	36,992,418	\$ 4	\$ 307,587	\$ 29	\$ (235,323)	\$ 72,297

See accompanying notes to the consolidated financial statements.

Verastem, Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Operating activities			
Net loss	\$ (36,440)	\$ (57,865)	\$ (53,365)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	670	754	427
Stock-based compensation expense	6,287	10,085	12,360
Amortization of premiums and discounts on available-for-sale marketable securities	(140)	264	290
Non-cash expense related to the purchase of technology rights	—	—	1,197
Loss on disposal of fixed assets	—	46	4
Changes in operating assets and liabilities:			
Prepaid expenses, other current assets and other assets	(568)	276	27
Accounts payable	153	863	287
Accrued expenses and other liabilities	623	418	2,119
Liability classified stock-based compensation awards	(69)	(400)	(248)
Net cash used in operating activities	(29,484)	(45,559)	(36,902)
Investing activities			
Purchases of property and equipment	(39)	(211)	(2,429)
Purchases of investments	(82,101)	(199,851)	(39,361)
Maturities of investments	119,067	173,005	85,047
Decrease (increase) in restricted cash	41	—	(117)
Net cash provided by (used in) investing activities	36,968	(27,057)	43,140
Financing activities			
Proceeds from the exercise of stock options	—	13	20
Net proceeds from the issuance of common stock and restricted common stock	—	63,989	9,534
Cash used to settle restricted stock liability	(5)	(417)	(780)
Net cash (used in) provided by financing activities	(5)	63,585	8,774
Increase (decrease) in cash and cash equivalents	7,479	(9,031)	15,012
Cash and cash equivalents at beginning of period	24,870	33,901	18,889
Cash and cash equivalents at end of period	\$ 32,349	\$ 24,870	\$ 33,901
Supplemental disclosure of non-cash investing and financing activities			
Proceeds from the issuance of common stock included in prepaid expenses and other current assets	\$ —	\$ —	\$ 2,085
Purchases of property and equipment in accounts payable	\$ —	\$ —	\$ 196

See accompanying notes to the consolidated financial statements.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of business

Verastem, Inc. (the Company) is a biopharmaceutical company focused on discovering and developing drugs to improve outcomes for patients with cancer. The Company's operations to date have been limited to organizing and staffing the Company, business planning, raising capital, acquiring and developing its technology, identifying potential product candidates and undertaking preclinical and clinical studies of its product candidates.

The Company is subject to a number of risks similar to other life science companies, including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical testing or clinical trials, inability to obtain marketing approval of product candidates, competitors developing new technological innovations, market acceptance of the Company's products and protection of proprietary technology. If the Company does not successfully commercialize any of its product candidates, it will be unable to generate product revenue or achieve profitability.

As of December 31, 2016, the Company had cash, cash equivalents and investments of \$80.9 million and accumulated deficit of \$235.3 million. Although the Company has incurred recurring losses and expects to continue to incur losses for the foreseeable future, the Company expects its cash, cash equivalents and investments to be sufficient to fund its current operating plan for at least the next twelve months from the date of issuance of these consolidated financial statements and into 2018.

2. Significant accounting policies

Basis of consolidation

The consolidated financial statements include the accounts of Verastem Securities Company, a wholly owned subsidiary of the Company. All financial information presented has been consolidated and includes the accounts of the Company and its wholly owned subsidiary. All intercompany balances and transactions have been eliminated in consolidation.

Use of estimates

The preparation of the Company's financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, management evaluates its estimates, including estimates related to accruals and stock-based compensation expense. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable. Actual results could differ from such estimates.

Segment and geographic information

Operating segments are defined as components of an enterprise about which separate discrete information is available and regularly reviewed by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment, which is the business of developing drugs for the treatment of cancer. All material long-lived assets of the Company reside in the United States.

Cash and cash equivalents

The Company considers all highly liquid investments with an original or remaining maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents consist of a U.S. Government money market fund, overnight repurchase agreements collateralized by government agency securities or U.S. Treasury securities, corporate bonds and commercial paper of publicly traded companies. Cash equivalents are reported at fair value.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Fair value of financial instruments

The Company determines the fair value of its financial instruments based upon the fair value hierarchy, which prioritizes valuation inputs based on the observable nature of those inputs. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1 inputs	Quoted prices in active markets for identical assets or liabilities that the Company can access at the measurement date.
Level 2 inputs	Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3 inputs	Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

The following table presents information about the Company's financial instruments that are measured at fair value on a recurring basis (in thousands):

Description	December 31, 2016			
	Total	Level 1	Level 2	Level 3
Financial assets				
Cash equivalents	\$ 30,540	\$ 20,540	\$ 10,000	\$ —
Short-term investments	48,548	—	48,548	—
Total financial assets	\$ 79,088	\$ 20,540	\$ 58,548	\$ —

Description	December 31, 2015			
	Total	Level 1	Level 2	Level 3
Financial assets				
Cash equivalents	\$ 23,036	\$ 11,464	\$ 11,572	\$ —
Short-term investments	85,388	—	85,388	—
Total financial assets	\$ 108,424	\$ 11,464	\$ 96,960	\$ —
Financial liabilities				
Liability classified stock-based compensation awards	\$ 69	\$ 69	\$ —	\$ —
Total financial liabilities	\$ 69	\$ 69	\$ —	\$ —

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

These investments and cash equivalents 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 pricing services utilize industry standard valuation models, including both income and market based approaches and observable market inputs to determine value. These observable market inputs include reportable trades, benchmark yields, credit spreads, broker/dealer quotes, bids, offers, current spot rates and other industry and economic events. The Company validates the prices provided by third party pricing services by reviewing their pricing methods and matrices, obtaining market values from other pricing sources, analyzing pricing data in certain instances and confirming that the relevant markets are active. After completing its validation procedures, the Company did not adjust or override any fair value measurements provided by the pricing services as of December 31, 2016 and 2015.

The Company's liability classified stock-based compensation awards were comprised of restricted stock units (RSUs) that allowed for greater than minimum statutory tax withholdings. These awards were valued based on the fair value of the Company's common stock underlying the awards, which is traded on an active market. During the first quarter of 2013, the Company amended the terms of certain RSUs to allow for cash tax withholdings greater than the minimum required statutory withholding amount. As a result of this change in the terms of the awards, the outstanding RSUs were considered to be liability instruments. As a result of this modification, the Company recorded a liability for the fair value of the awards as of each reporting date with the change in fair value recorded through the statement of operations. The Company recorded stock-based compensation expense equal to the greater of the original grant date fair value of the awards or the settlement date fair value. All such RSUs were fully vested as of February 1, 2016. During the years ended December 31, 2016 and 2015, the Company made approximate deposits to the taxing authorities of \$5,000 and \$417,000, respectively, to settle the tax liability for awards that settled during such periods.

Investments

Investments and cash equivalents consist of investments in a U.S. Government money market fund, overnight repurchase agreements collateralized by government agency securities or U.S. Treasury securities, corporate bonds and commercial paper of publicly traded companies that are classified as available-for-sale pursuant to Accounting Standards Codification (ASC) Topic 320, *Investments—Debt and Equity Securities*. The Company classifies investments available to fund current operations as current assets on its consolidated balance sheets. Investments are classified as long-term assets on the consolidated balance sheets if (i) the Company has the intent and ability to hold the investments for a period of at least one year and (ii) the contractual maturity date of the investments is greater than one year. Investments are carried at fair value with unrealized gains and losses included as a component of accumulated other comprehensive income (loss), which is a separate component of stockholders' equity (deficit), until such gains and losses are realized. The fair value of these securities is based on quoted prices for identical or similar assets. If a decline in the fair value is considered other-than-temporary, based on available evidence, the unrealized loss is transferred from other comprehensive loss to the consolidated statements of operations and comprehensive loss.

The Company reviews investments for other-than-temporary impairment whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, the Company considers the intent to sell, or whether it is more likely than not that the Company will be required to sell, the investment before recovery of the investment's amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with the Company's investment policy, the severity and the duration of the impairment and changes in value subsequent to year end. As of December 31, 2016 and 2015, there were no investments with a fair value that was significantly lower than the amortized cost basis or any investments that had been in an unrealized loss position for a significant period. There were no other-than-temporary declines in fair value of short-term investments for the years ended December 31, 2016, 2015 and 2014. Realized gains and losses are determined using the specific identification method and are included in interest income in the consolidated statements of operations and comprehensive loss. There were no realized gains or losses recognized for the years ended December 31, 2016, 2015 and 2014.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Cash, cash equivalents and investments consist of the following (in thousands):

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash and money market accounts	\$ 22,349	\$ —	\$ —	\$ 22,349
Overnight repurchase agreements	10,000	\$ —	\$ —	10,000
Total cash and cash equivalents	\$ 32,349	\$ —	\$ —	\$ 32,349
Investments:				
Corporate bonds and commercial paper (due within 1 year)	48,519	53	(24)	48,548
Total investments	\$ 48,519	\$ 53	\$ (24)	\$ 48,548
Total cash, cash equivalents, and investments	\$ 80,868	\$ 53	\$ (24)	\$ 80,897

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash and money market accounts	\$ 13,298	\$ —	\$ —	\$ 13,298
Government-sponsored enterprise securities (original maturities within 90 days)	2,000	—	—	2,000
Corporate bonds and commercial paper (original maturities within 90 days)	9,572	—	—	9,572
Total cash and cash equivalents	\$ 24,870	\$ —	\$ —	\$ 24,870
Investments:				
Government-sponsored enterprise securities (due within 1 year)	\$ 11,932	\$ 5	\$ —	\$ 11,937
Treasury securities (due within 1 year)	1,005	—	—	1,005
Corporate bonds and commercial paper (due within 1 year)	72,408	57	(19)	72,446
Total investments	\$ 85,345	\$ 62	\$ (19)	\$ 85,388
Total cash, cash equivalents, and investments	\$ 110,215	\$ 62	\$ (19)	\$ 110,258

Concentrations of credit risk and off-balance sheet risk

Cash and cash equivalents and investments are financial instruments that potentially subject the Company to concentrations of credit risk. The Company mitigates this risk by maintaining its cash and cash equivalents and investments with high quality, accredited financial institutions. The management of the Company's investments is not discretionary on the part of these financial institutions. As of December 31, 2016, the Company's cash, cash equivalents and investments were deposited at two financial institutions and it has no significant off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts or other hedging arrangements.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Property and equipment

Property and equipment consists of laboratory equipment, office furniture, computer equipment and leasehold improvements. Expenditures for repairs and maintenance are recorded to expense as incurred, whereas major betterments are capitalized as additions to property and equipment. Depreciation and amortization is calculated using the straight-line method over the following estimated useful lives of the assets:

Laboratory equipment	5 years
Furniture	5 years
Computer equipment	3 years
Leasehold Improvements	Lesser of useful life or life of lease

Upon retirement or sale, the cost of the disposed asset and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized.

The Company reviews its long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying value of assets may not be recoverable. Recoverability is measured by comparison of the asset's book value to future net undiscounted cash flows that the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the book value of the assets exceed their fair value, which is measured based on the projected discounted future net cash flows arising from the assets. No material impairment losses have been recorded through December 31, 2016.

Other assets

Pursuant to the license agreement between the Company and Infinity Pharmaceuticals, Inc. (Infinity) amended and restated on November 1, 2016, effective as of October 29, 2016 (the License Agreement), the Company assumed the rights to the remaining balance of certain prepaid amounts as of December 31, 2016 on contracts with contract research organizations (CROs). The License Agreement also requires the Company to reimburse Infinity for these prepaid CRO expenses. The prepaid CRO expenses and corresponding liability of approximately \$755,000 are recorded as other assets and accrued expenses on the consolidated balance sheets as of December 31, 2016.

Research and development costs

The Company expenses research and development costs to operations as incurred. Research and development expenses consist of:

- employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;
- external research and development expenses incurred under arrangements with third parties, such as CROs, clinical trial sites, manufacturing organizations and consultants, including the scientific advisory board;
- license fees; and
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation of equipment, and laboratory supplies.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company accounts for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the services have been performed or when the goods have been received rather than when the payment is made.

Stock-based compensation

The Company expenses the fair value of employee stock-based awards over the requisite service period, which typically is the vesting period. Compensation expense is measured using the fair value of the award at the grant date, net of estimated forfeitures, and is adjusted annually to reflect actual forfeitures. Awards subject to performance based vesting requirements are expensed utilizing an accelerated attribution model if achievement of the performance criteria is determined to be probable.

The grant date fair value of employee stock options is estimated using the Black-Scholes option pricing model that takes into account the fair value of its common stock, the exercise price, the expected life of the option, the expected volatility of its common stock, expected dividends on its common stock, and the risk-free interest rate over the expected life of the option. The Company uses the simplified method described in the Securities and Exchange Commission Staff Accounting Bulletin Topic 14.D.2 to calculate the expected term as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term for options granted to employees. The expected term is applied to the stock option grant group as a whole, as the Company does not expect substantially different exercise or post-vesting termination behavior among its employee population. The computation of expected volatility is based on the historical volatility of five companies equally weighted, including the Company and a representative group of four public biotechnology and life sciences companies with similar characteristics to the Company, including similar stage of product development and therapeutic focus. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected term of the stock options. Management assesses expected forfeitures based on the experience of the Company coupled with comparison to data from the representative group of companies and recognizes compensation costs only for those equity awards expected to vest.

Stock-based awards issued to nonemployees, including directors for non-board related services, are accounted for based on the fair value of such services received or of the equity instruments issued, whichever is more reliably measured. Stock option awards to non-employees are revalued at each reporting date and upon vesting using the Black-Scholes option pricing model and are expensed on a straight-line basis over the vesting period.

Stock-based compensation awards which allowed for greater than the minimum statutory tax withholdings were classified as liabilities. These awards were revalued at each reporting date and were expensed on a straight-line basis over the vesting period. Upon settlement, the awards were revalued and the amounts were reclassified to additional paid-in capital. Shares were withheld to cover the tax withholding and amounts paid to settle the tax liability were recorded as a reduction of additional paid-in capital.

Income taxes

The Company accounts for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Tax benefits are recognized when it is more likely than not that a tax position will be sustained during an audit. Deferred tax assets are reduced by a valuation allowance if current evidence indicates that it is considered more likely than not that these benefits will not be realized.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Net loss per share

Basic and diluted net loss per common share is calculated by dividing net loss applicable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration for common stock equivalents. The Company's potentially dilutive shares, which include outstanding stock options, restricted stock units, unvested restricted stock and the warrant issued in 2014 are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive. All potentially dilutive securities were excluded from the calculation of diluted net loss per share as the securities were anti-dilutive for all periods presented.

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share due to their anti-dilutive effect:

	Year Ended December 31,		
	2016	2015	2014
Outstanding stock options	5,848,470	5,390,130	4,206,440
Outstanding warrants	142,857	142,857	142,857
Unvested restricted stock units	—	53,751	293,747
Unvested restricted stock	—	—	7,995
	<u>5,991,327</u>	<u>5,586,738</u>	<u>4,651,039</u>

Recently Issued Accounting Standards Updates

In November 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company has not chosen to early adopt this standard and is currently evaluating the impact the adoption will have on its consolidated financial statements and related disclosures.

In October 2016, the FASB issued ASU 2016-17, *Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control*. ASU 2016-17 updates ASU 2015-02. Under the amendments, a single decision maker is not required to consider indirect interests held through related parties that are under common control with the single decision maker to be the equivalent of direct interests in their entirety. Instead, a single decision maker is required to include those interests on a proportionate basis consistent with indirect interests held through other related parties. ASU 2016-17 is effective for annual and interim periods beginning after December 15, 2016, with early adoption permitted. The Company has not chosen to early adopt this standard and is currently evaluating the impact the adoption will have on its consolidated financial statements and related disclosures.

In August 2016, FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. ASU 2016-15 adds or clarifies guidance on the classification of certain cash receipts and payments in the statement of cash flows. The standard is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company has not chosen to early adopt this standard and is currently evaluating the impact the adoption will have on its consolidated financial statements and related disclosures.

Verastem, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In March 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. ASU 2016-09 simplifies the accounting for share-based compensation arrangements, including the income tax impact and classification on the statement of cash flows. The standard is effective for annual and interim periods beginning after December 15, 2016 with early adoption permitted. The Company has not chosen to early adopt this standard and is currently evaluating the impact the adoption will have on its consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which supersedes the guidance under FASB ASC Topic 840, *Leases*, resulting in the creation of FASB ASC Topic 842, *Leases*. ASU 2016-02 requires lessees to recognize in the statement of financial position a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term for both finance and operating leases. The guidance also eliminates the current real estate-specific provisions for all entities. ASU 2016-02 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018 with early adoption permitted. The Company has not chosen to early adopt this standard and is currently evaluating the impact the adoption will have on its consolidated financial statements and related disclosures.

Recently Adopted Accounting Standards Updates

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*. ASU 2017-01 clarifies the definition of a business, provides a screen to determine when a set of assets is not a business and narrows the definition of the term output. ASU 2017-01 is effective for the interim and annual periods after December 15, 2016. Early adoption is permitted. The Company has elected to early adopt ASU 2017-01 and to apply it to the November 2016 amended and restated license agreement with Infinity, under which it acquired an exclusive worldwide license for the research, development, commercialization, and manufacture of products in oncology indications containing duvelisib.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements - Going Concern: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* (Subtopic 205-40). ASU 2014-15 requires management to assess an entity's ability to continue as a going concern every reporting period, and provide certain disclosures if management has substantial doubt about the entity's ability to operate as a going concern, or an express statement if not, by incorporating and expanding upon certain principles that are currently in U.S. auditing standards. ASU 2014-15 is effective for the interim and annual periods after December 15, 2016. Early adoption is permitted. The Company adopted ASU 2014-15 effective October 1, 2016. The Company has evaluated the impact of the adoption of ASU 2014-15 on its year ended December 31, 2016 consolidated financial statements and determined that there is not substantial doubt about the Company's ability to continue as a going concern for at least one year from the issuance of the December 31, 2016 consolidated financial statements.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Property and equipment, net

Property and equipment and related accumulated depreciation are as follows (in thousands):

	December 31, 2016	December 31, 2015
Leasehold improvements	\$ 2,104	\$ 2,104
Laboratory equipment	908	908
Furniture and fixtures	325	325
Computer equipment	279	240
	<u>3,616</u>	<u>3,577</u>
Less: accumulated depreciation	(2,199)	(1,529)
	<u>\$ 1,417</u>	<u>\$ 2,048</u>

Approximate total depreciation and amortization expenses amounted to \$670,000, \$754,000, and \$427,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

4. Prepaid expenses and other current assets

Prepaid expenses and other current assets consist of the following (in thousands):

	December 31, 2016	December 31, 2015
Interest receivable	\$ 204	\$ 154
Prepaid contract research organization costs	96	404
Prepaid insurance	65	25
Prepaid other	33	2
	<u>\$ 398</u>	<u>\$ 585</u>

5. Accrued expenses

Accrued expenses consist of the following (in thousands):

	December 31, 2016	December 31, 2015
Contract research organization costs	\$ 3,258	\$ 3,782
Compensation and related benefits	2,505	1,802
Consulting fees	527	—
Professional fees	403	260
Deferred rent	175	160
Other	28	94
	<u>\$ 6,896</u>	<u>\$ 6,098</u>

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Common stock

As of December 31, 2016 and 2015, the Company had reserved the following shares of common stock for the issuance of common stock for vested restricted stock units, the exercise of stock options, and an outstanding warrant (in thousands):

	December 31, 2016	December 31, 2015
Shares reserved under equity compensation plans	7,189	5,958
Shares reserved for inducement grants	1,255	750
Shares reserved for outstanding warrants	143	143
	<u>8,587</u>	<u>6,851</u>

Each share of common stock is entitled to one vote. The holders of the common stock are also entitled to receive dividends whenever funds are legally available and when declared by the board of directors.

At-the-market equity offering program

In December 2013, the Company established an at-the-market equity offering program pursuant to which it was able to offer and sell up to \$35.0 million of its common stock at then current market prices from time to time. In November 2014, the Company commenced sales under this program. During the year ended December 31, 2015, the Company sold 1,189,479 shares of common stock under this program with net proceeds (after deducting commissions and other offering expenses) of \$12.9 million. No additional sales of the Company's common stock were made under this program and no proceeds were received during the year ended December 31, 2016.

Warrant

In February 2014, in connection with the acquisition of intellectual property rights from Encarta, Inc. (Encarta), the Company issued a warrant to purchase 142,857 shares of common stock exercisable at a price of \$17.16 per share that expires 3 years from the issuance date. The warrant expired unexercised in February 2017.

7. Stock-based compensation

Stock-based compensation expense as reflected in the Company's consolidated statements of operations and comprehensive loss was as follows (in thousands):

	<u>Year Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Research and development	\$ 1,073	\$ 2,411	\$ 3,727
General and administrative	5,145	7,273	8,385
Total stock-based compensation expense	<u>\$ 6,218</u>	<u>\$ 9,684</u>	<u>\$ 12,112</u>

Of the \$6.2 million of stock-based compensation expense recorded during the year ended December 31, 2016, \$6.3 million was recorded to additional paid-in capital and approximately \$69,000 was recorded as a decrease in liability classified awards. Of the \$9.7 million of stock-based compensation expense recorded during the year ended December 31, 2015, \$10.1 million was recorded to additional paid-in capital and approximately \$400,000 was recorded as a decrease in liability classified awards. Of the \$12.1 million of stock-based compensation expense recorded during the year ended December 31, 2014, approximately \$12.3 million was recorded to additional paid-in capital and approximately \$248,000 was recorded as a decrease in liability classified awards.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company has awards outstanding under two equity compensation plans, the 2012 Incentive Plan (the 2012 Plan) and the 2010 Equity Incentive Plan (the 2010 Plan), as well as the inducement award program. Terms of stock award agreements, including vesting requirements, are determined by the board of directors, subject to the provisions of the individual plans. To date, most options granted by the Company vest twenty-five percent (25%) one year from vesting start date and six and a quarter percent (6.25%) for each successive three-month period, thereafter (subject to acceleration of vesting in the event of certain change of control transactions) and are exercisable for a period of ten years from the date of grant.

2012 Incentive Plan

The 2012 Plan became effective immediately upon the closing of the Company's IPO in February 2012. Upon effectiveness of the 2012 Plan, the Company ceased making awards under the 2010 Plan. The 2012 Plan initially allowed the Company to grant awards for up to 3,428,571 shares of common stock, plus the number of shares of common stock available for grant under the 2010 Plan as of the effectiveness of the 2012 Plan (which was an additional 30,101 shares), plus that number of shares of common stock related to awards outstanding under the 2010 Plan which terminate by expiration, forfeiture, cancellation or otherwise. The 2012 Plan includes an "evergreen provision" that allows for an annual increase in the number of shares of common stock available for issuance under the 2012 Plan. The annual increase is added on the first day of each year beginning in 2013 and each subsequent anniversary until the expiration of the 2012 Plan, and is equal to the lower of 1,285,714 shares of common stock, 4.0% of the number of shares of common stock outstanding and an amount determined by the board of directors. On January 1, 2016 and 2015, the number of shares available for issuance under the 2012 Plan increased by 1,285,714 and 1,081,045, respectively, under this provision. Subsequently, on January 1, 2017, the number of shares available for issuance under the 2012 Plan increased by 1,285,714 under this provision.

Awards under the 2012 Plan may include the following award types: incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock awards, restricted stock units (RSUs), other stock-based or cash-based awards and any combination of the foregoing. As of December 31, 2016, under the 2012 Plan, the Company has granted stock options for 7,874,773 shares of common stock, of which 2,672,751 have been forfeited and restricted stock units for 909,918 shares of common stock, of which 150,101 have been forfeited. The exercise price of each option has been equal to the closing price of a share of our common stock on the grant date.

Inducement Award Program

In December 2014, the Company established an inducement award program (in accordance with NASDAQ Listing Rule 5635(c)(4)) under which it may grant non-statutory stock options to purchase up to an aggregate of 750,000 shares of common stock to new or prospective employees as inducement to enter into employment with the Company. In December 2016, the Board of Directors authorized and reserved 580,000 additional shares of common stock under this program. The program is governed by the terms of the 2012 Plan but does not fall under the 2012 Plan. As of December 31, 2016 and 2015, the Company had granted 580,000 and 210,000 shares of common stock under the program, respectively. As of December 31, 2016 and 2015, 75,000 of the options issued under this program had been cancelled and 750,000 remain available for future issuance.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Stock Options

A summary of the Company's stock option activity and related information for the year ended December 31, 2016 is as follows:

	Shares	Weighted-average exercise price per share	Weighted- average remaining contractual term (years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2015	5,390,130	\$ 8.71	8.1	\$ 175
Granted	1,913,280	\$ 1.53		
Exercised	(1,605)	\$ 0.28		
Forfeited/cancelled	(1,453,335)	\$ 8.73		
Outstanding at December 31, 2016	5,848,470	\$ 6.35	8.0	\$ 62
Vested at December 31, 2016	3,444,586	\$ 7.94	7.5	\$ 61
Vested and expected to vest at December 31, 2016(1)	5,415,064	\$ 6.70	7.9	\$ 62

- (1) This represents the number of vested options as of December 31, 2016, plus the number of unvested options expected to vest as of December 31, 2016, based on the unvested options at December 31, 2016, adjusted for the estimated forfeiture rate.

The fair value of each employee stock option was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,		
	2016	2015	2014
Risk-free interest rate	1.48 %	1.75 %	1.99 %
Volatility	75 %	73 %	81 %
Dividend yield	—	—	—
Expected term (years)	5.9	6.0	6.0

The Company recorded stock-based compensation expense associated with employee stock options of \$6.1 million, \$7.9 million, and \$7.8 million for the years ended December 31, 2016, 2015 and 2014, respectively. The weighted-average grant date fair value of options granted in the years ended December 31, 2016, 2015 and 2014 was \$0.99, \$3.80, and \$8.61 per share, respectively. The fair value of options that vested during the years ended December 31, 2016, 2015 and 2014 was \$6.9 million, \$9.5 million, and \$6.6 million, respectively.

In June 2016, the Company granted stock options to purchase a total of 500,000 shares of common stock to certain employees that vest only upon the achievement of specified performance conditions. The grant date fair value of these options was approximately \$445,000. The Company determined that 50% of performance conditions had been achieved during the year ended December 31, 2016. As a result, 250,000 shares vested in October 2016 and the Company recognized stock-based compensation expense related to these awards of approximately \$222,000 for the year ended December 31, 2016. The Company determined that the remaining 50% of the performance conditions were not considered probable of achievement as of December 31, 2016 and as a result, has not recognized any stock-based compensation expense related to the remaining unvested awards.

At December 31, 2016, there was \$4.9 million of total unrecognized compensation cost related to unvested stock options and the Company expects to recognize this cost over a remaining weighted-average period of 1.5 years.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Restricted Stock Units

A summary of the Company's RSU activity and related information for the year ended December 31, 2016 is as follows:

	Shares	Weighted- average grant date fair value per share
Unvested at December 31, 2015	53,751	\$ 11.00
Vested	(53,751)	\$ 11.00
Unvested at December 31, 2016	—	\$ —

No restricted stock units were granted during the years ended December 31, 2016, 2015 and 2014. The total fair value of restricted stock units vested during the years ended December 31, 2016, 2015 and 2014 was approximately \$65,000, \$1.6 million and \$2.2 million, respectively. As of December 31, 2016, there was no unrecognized stock-based compensation expense related to unvested RSUs granted under the 2012 Plan.

During 2012, the Company issued a restricted stock unit for 103,306 shares to an employee. The award vests up to 25% per year based on the achievement of stated objectives. The objectives related to 2015 were established on January 8, 2015. In December 2015, the Board of Directors elected not to approve any payment under this award for the year ended December 31, 2015. The Company did not record any stock-based compensation expense for this award during the year ended December 31, 2015. The objectives related to 2014 were established on January 7, 2014 and the objectives were determined to be met on January 8, 2015. The Company recorded \$158,000 of stock-based compensation expense for this award during the year ended December 31, 2014 based on the achievement of the stated objectives.

During the first quarter of 2013, the Company amended the terms of certain RSUs related to a total of 697,060 shares of common stock to allow for tax withholdings greater than the minimum required statutory withholding amount. As a result of this change in the terms of the awards, the outstanding RSUs were considered to be liability instruments. As a result of this modification, the Company recorded a liability for the fair value of the awards as of each reporting date with the change in fair value recorded through the consolidated statements of operations and comprehensive loss. The Company recorded stock-based compensation expense equal to the greater of the original grant date fair value of the awards or the settlement date fair value. All RSUs were fully vested as of February 1, 2016. During the year ended December 31, 2016, 2015 and 2014, the Company deposited approximately \$5,000, \$417,000, and \$780,000, respectively, with tax authorities to settle the tax liability for awards that settled during the respective periods. There was no liability related to these awards as of December 31, 2016. The liability related to these awards of approximately \$69,000 was recorded as liability classified stock-based compensation awards on the consolidated balance sheets as of December 31, 2015.

Restricted Common Stock

In connection with the Company's formation, the founders purchased an aggregate of 2,857,138 shares of Company's common stock at fair value on the date of issuance. The shares were issued subject to restricted stock agreements between the Company and each founder, which allow the Company, at its discretion, to repurchase unvested shares if the founder's relationship with the Company is terminated. Under these agreements, twenty-five percent (25%) of the shares vested immediately and the remaining seventy-five percent (75%) of shares vest ratably in quarterly installments over the subsequent four years.

The Company records stock-based compensation expense for the common stock subject to repurchase, or restricted common stock grants, based on the grant date fair value for employees and the reporting date and upon vesting fair value for non-employees. The fair value of the award is considered the intrinsic value as of each

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

measurement date. All of the restricted shares were issued at a purchase price equal to the fair value of the common stock on the date of issuance. The Company recorded stock-based compensation expense associated with restricted common stock grants of \$1.7 million for the year ended December 31, 2014. The Company did not record any stock-based compensation expense related to restricted common stock grants in the years ended December 31, 2016 and 2015.

No restricted common stock was granted during the years ended December 31, 2016, 2015 and 2014. The total fair value of shares vested during the years ended December 31, 2015 and 2014 was approximately \$59,000 and \$2.2 million, respectively. All restricted common stock grants were fully vested as of December 31, 2015.

8. Income Taxes

As of December 31, 2016, the Company had federal and state net operating loss carryforwards of approximately \$184.2 million and \$182.8 million, respectively, which are available to reduce future taxable income. The Company also had federal and state tax credits of \$7.4 million and \$1.4 million, respectively, which may be used to offset future tax liabilities. The net operating loss (NOL) and tax credit carryforwards will expire at various dates through 2035. NOL and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities and may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50%, as defined under Sections 382 and 383 of the Internal Revenue Code, as well as similar state provisions. This could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years.

A reconciliation of income taxes computed using the U.S. federal statutory rate to that reflected in operations follows:

	Year Ended December 31,	
	2016	2015
Income tax benefit using U.S. federal statutory rate	34.00 %	34.00 %
State tax benefit, net of federal benefit	3.43 %	5.91 %
Research and development tax credits	4.42 %	1.49 %
Permanent items	(3.88)%	(3.02)%
Change in the valuation allowance	(36.71)%	(41.90)%
Other	(1.26)%	3.52 %
	<u>— %</u>	<u>— %</u>

The principal components of the Company's deferred tax assets are as follows (in thousands):

	December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards	\$ 72,285	\$ 61,606
Capitalized research and development	1,836	1,984
Research and development credits	8,298	4,087
Stock-based compensation	3,083	4,401
Other	429	478
Gross deferred tax assets	<u>85,931</u>	<u>72,556</u>
Valuation allowance	(85,931)	(72,556)
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company has recorded a valuation allowance against its deferred tax assets at December 31, 2016 and 2015 because the Company's management believes that it is more likely than not that these assets will not be fully realized. The increase in the valuation allowance of \$13.4 million and \$24.2 million in the years ended December 31, 2016 and 2015, respectively, primarily relates to the net loss incurred by the Company.

The Company's reserves related to taxes are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. From inception and through December 31, 2016, the Company had no unrecognized tax benefits or related interest and penalties accrued. The Company has not conducted a study of research and development (R&D) credit carryforwards. This study may result in an adjustment to the Company's R&D credit carryforwards; however, until a study is completed and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's R&D credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the consolidated balance sheet or statement of operations if an adjustment were required. The Company would recognize both accrued interest and penalties related to unrecognized benefits in income tax expense. The Company's uncertain tax positions are related to years that remain subject to examination by relevant tax authorities. 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.

9. Commitments and contingencies

On April 15, 2014, the Company entered into a lease agreement for approximately 15,197 square feet of office and laboratory space in Needham, Massachusetts. The lease term commenced on April 15, 2014 and expires on September 30, 2019. The Company began using the leased premises as its corporate headquarters and commenced rent payments effective September 22, 2014. The Company agreed to pay an initial annual base rent of approximately \$493,000, which base rent increases after every twelve-month period during the lease term to approximately \$554,000 for the last twelve-month period. The Company is recording rent expense on a straight-line basis, beginning in April 2014. The Company also received a tenant improvement allowance of approximately \$684,000 in connection with the lease. The Company has accounted for the allowance as a lease incentive, which is being recorded as a reduction to rent expense over the lease term. Deferred rent and the lease incentive obligation are included in accrued expenses (current portion) and other liabilities (noncurrent portion) in the consolidated balance sheets. The Company has also agreed to pay its proportionate share of increases in operating expenses and property taxes for the building in which the leased space is located. The Company has provided a security deposit in the form of a letter of credit in the amount of approximately \$203,000, which was reduced to approximately \$162,000 on April 15, 2016. The amount is included in long term restricted cash on the consolidated balance sheets as of December 31, 2016.

The minimum aggregate future lease commitments are as follows (in thousands):

2017	\$ 527
2018	542
2019	415
2020	—
2021	—
Thereafter	—
Total	<u>\$ 1,484</u>

The Company recorded rent expense of approximately \$352,000, \$352,000 and \$541,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Pursuant to the terms of various agreements, the Company may be required to pay various development, regulatory and commercial milestones. In addition, if any products related to these agreements are approved for sale, the Company may be required to pay significant royalties on future sales. The payment of these amounts, however, is contingent upon the occurrence of various future events, which have a high degree of uncertainty of occurring.

10. License agreements

In November 2016, the Company entered into an amended and restated license agreement with Infinity, under which it acquired an exclusive worldwide license for the research, development, commercialization, and manufacture of products in oncology indications containing duvelisib. In connection with the license agreement, the Company assumed operational and financial responsibility for certain activities that were part of Infinity's duvelisib program, including the DUO study for patients with relapsed/refractory CLL, and Infinity assumed financial responsibility for the shutdown of certain other clinical studies up to a maximum of \$4.5 million. The Company is obligated to use diligent efforts to develop and commercialize a product in an oncology indication containing duvelisib. During the term of the license agreement, Infinity has agreed not to research, develop, manufacture or commercialize duvelisib in any other indication in humans or animals.

Pursuant to the terms of the license agreement, the Company is required to make the following payments to Infinity in cash or, at our election, in whole or in part, in shares of our common stock: (i) \$6.0 million upon the completion of the DUO study if the results of the DUO study meet certain pre-specified criteria and (ii) \$22.0 million upon the approval of a new drug application in the United States or an application for marketing authorization with a regulatory authority outside of the United States for a product in an oncology indication containing duvelisib. For any portion of any of the foregoing payments that it elects to issue in shares of our common stock in lieu of cash, the number of shares of common stock to be issued will be determined by multiplying (1) 1.025 by (2) the number of shares of common stock equal to (a) the amount of the payment to be paid in shares of common stock divided by (b) the average closing price of a share of common stock as quoted on NASDAQ for a twenty day period following the public announcement of the applicable milestone event. The shares of common stock will be issued as unregistered securities, and the Company will have an obligation to promptly file a registration statement with the SEC to register such shares for resale. Any issuance of shares will be subject to the satisfaction of closing conditions, including that all material authorizations, consents, approvals and the like necessary for such issuance shall have been obtained.

The Company is also obligated to pay Infinity royalties on worldwide net sales of any products in an oncology indication containing duvelisib ranging from the mid-single digits to the high single-digits. The royalties will expire on a product-by-product and country-by-country basis until the latest to occur of (i) the last-to-expire patent right covering the applicable product in the applicable country, (ii) the last-to-expire patent right covering the manufacture of the applicable product in the country of manufacture of such product, (iii) the expiration of non-patent regulatory exclusivity in such country and (iv) ten years following the first commercial sale of a product in a country, provided that if royalties on net sales for a product in the United States are payable solely on the basis of non-patent regulatory exclusivity, the applicable royalty on net sales for such product in the United States will be reduced by 50%. The royalties are also subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

In addition to the foregoing, the Company is obligated to pay Infinity an additional royalty of 4% on worldwide net sales of any products in an oncology indication containing duvelisib to cover the reimbursement of research and development costs owed by Infinity to Mundipharma International Corporation Limited (MICL) and Purdue Pharmaceutical Products L.P. (Purdue). Once Infinity has fully reimbursed MICL and Purdue, the royalty obligations will be reduced to 1% of net sales in the United States. These trailing MICL royalties are payable until the later to occur of the last-to-expire of specified patent rights and the expiration of non-patent regulatory exclusivities in a country. Each of the above royalty rates is reduced by 50% on a product-by-product and country-by-country basis if the applicable royalty is payable solely on the basis of non-patent regulatory exclusivity. In

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

addition, the trailing MICAL royalties are subject to reduction by 50% of certain third-party royalty payments or patent litigation damages or settlements which might be required to be paid by the us if litigation were to arise, with any such reductions capped at 50% of the amounts otherwise payable during the applicable royalty payment period.

The Company evaluated the license agreement with Infinity under ASC Topic 805, *Business Combinations* and ASU 2017-01 and concluded that as substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets, the transaction did not meet the requirements to be accounted for as a business combination and therefore was accounted for as an asset acquisition. All consideration to be paid under the License Agreement is contingent in nature and will be recognized when the respective contingency is resolved.

On July 11, 2012, the Company entered into a license agreement with Pfizer Inc. (Pfizer), under which Pfizer granted the Company worldwide, exclusive rights to research, develop, manufacture and commercialize products containing certain of Pfizer's inhibitors of focal adhesion kinase (the FAK Products) for all therapeutic, diagnostic and prophylactic uses in humans. The Company is solely responsible, at its expense, for the clinical development of the FAK Products, which is to be conducted in accordance with an agreed upon development plan. The Company is also responsible for all manufacturing and commercialization activities at its own expense. Pfizer is required to provide the Company with an initial quantity of clinical supply of one of the FAK Products for an agreed upon price. Under the agreement, the Company made a one-time cash payment to Pfizer in the amount of \$1.5 million and issued 192,012 shares of its common stock. Pfizer is also eligible to receive up to \$2.0 million in developmental milestones and up to an additional \$125.0 million based on the successful attainment of regulatory and commercial sales milestones. Pfizer is also eligible to receive high single to mid-double digit royalties on future net sales of the FAK Products. The Company's royalty obligations with respect to each FAK Product in each country begin on the date of first commercial sale of the FAK Product in that country, and end on the later of 10 years after the date of first commercial sale of the FAK Product in that country or the date of expiration or abandonment of the last claim contained in any issued patent or patent application licensed by Pfizer to the Company that covers the FAK Product in that country. The Company accounted for the license agreement as the licensing of in process research and development with no alternative future use.

Under the license agreement with Poniard that the Company entered into in November 2011 relating to VS-4718 and certain other compounds, the Company paid an upfront license fee and agreed to pay Poniard milestone payments upon the achievement of specified development and regulatory milestones. In February 2014, the Company purchased the assets which were the subject of the license agreement with Poniard from Encarta, who had previously purchased these assets in 2013. In consideration for these assets, the Company issued 97,500 shares of common stock, a warrant to purchase 142,857 shares of common stock with an exercise price equal to \$17.16 per share and paid \$25,000. All existing obligations under the license agreement, including an achieved development milestone and an obligation to issue a warrant, were settled as part of this transaction. The Company incurred \$1.2 million of research and development expense in 2014 as a result of this transaction. In connection with the asset purchase agreement, the Company also assumed the rights and obligations under the Scripps License Agreement. Pursuant to the Scripps License Agreement, the Company is obligated to pay Scripps potential product development milestone payments of up to an aggregate of \$3.0 million upon the achievement of specified development and regulatory milestones. In addition, the Company is obligated to pay Scripps low-single digit royalties as a percentage of net sales of licensed products, subject to adjustments in certain circumstances. The Company's obligation to pay royalties on net sales is on a country-by-country basis.

11. Employee benefit plan

In June 2011, the Company adopted a 401(k) retirement and savings plan (the 401(k) Plan) covering all employees. The 401(k) Plan allows employees to make pre-tax or post-tax contributions up to the maximum allowable amount set by the Internal Revenue Service. Under the 401(k) Plan, the Company may make discretionary contributions as approved by the board of directors. The Company made approximate contributions to the 401(k) Plan of \$162,000, \$295,000 and \$219,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. Reduction in force

In October 2015, the Company announced a reduction of workforce by approximately 50% to 20 full time employees. All affected employees received severance pay and outplacement assistance. As a result of the reduction in force and associated costs, the Company paid one-time severance and related costs of \$1.1 million. Of these one-time severance and related costs, approximately \$713,000 and approximately \$349,000 was paid during the years ended December 31, 2016 and 2015, respectively.

13. Quarterly financial information (unaudited, in thousands, except per share data)

	First Quarter Ended March 31, 2016	Second Quarter Ended June 30, 2016	Third Quarter Ended September 30, 2016	Fourth Quarter Ended December 31, 2016
Operating expenses:				
Research and development	\$ 4,179	\$ 4,492	\$ 4,216	\$ 6,892
General and administrative	4,255	4,217	3,843	4,908
Total operating expenses	8,434	8,709	8,059	11,800
Loss from operations	(8,434)	(8,709)	(8,059)	(11,800)
Interest income	140	140	137	145
Net loss	\$ (8,294)	\$ (8,569)	\$ (7,922)	\$ (11,655)
Net loss per share —basic and diluted	\$ (0.22)	\$ (0.23)	\$ (0.21)	\$ (0.32)
Weighted-average number of common shares used in net loss per share —basic and diluted	36,975	36,992	36,992	36,992

	First Quarter Ended March 31, 2015	Second Quarter Ended June 30, 2015	Third Quarter Ended September 30, 2015	Fourth Quarter Ended December 31, 2015
Operating expenses:				
Research and development	\$ 10,528	\$ 11,045	\$ 11,304	\$ 7,688
General and administrative	4,714	4,417	4,230	4,273
Total operating expenses	15,242	15,462	15,534	11,961
Loss from operations	(15,242)	(15,462)	(15,534)	(11,961)
Interest income	62	85	89	98
Net loss	\$ (15,180)	\$ (15,377)	\$ (15,445)	\$ (11,863)
Net loss per share —basic and diluted	\$ (0.46)	\$ (0.42)	\$ (0.42)	\$ (0.32)
Weighted-average number of common shares used in net loss per share —basic and diluted	33,323 (a)(b)	36,522 (b)	36,898 (b)	36,935

- (a) In January 2015, the Company closed a public offering in which it sold 8,337,500 shares of its common stock at a price of \$6.50 per share, including 1,087,500 shares issued pursuant to the exercise of the underwriters' option to purchase additional shares, which resulted in net proceeds of \$50.9 million.
- (b) In the first, second and third quarters of 2015, the Company sold 470,309, 690,370 and 28,800 shares of its common stock under the Company's at-the-market equity offering program, which resulted in net proceeds of \$4.4 million, \$6.2 million and approximately \$250,000, respectively

Verastem, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Subsequent events

The Company reviews all activity subsequent to year end but prior to the issuance of the consolidated financial statements for events that could require disclosure or that could impact the carrying value of assets or liabilities as of the consolidated balance sheets date. The Company is not aware of any material subsequent events other than the following:

On March 21, 2017 (Closing Date), Verastem, Inc. (Borrower) entered into a term loan facility of up to \$25.0 million (Term Loan) with Hercules Capital, Inc., a Maryland corporation (Hercules), the proceeds of which will be used for its ongoing research and development programs and for general corporate purposes. The Term Loan is governed by a loan and security agreement, dated March 21, 2017 (Loan Agreement), which provides for up to four separate advances. The first tranche of \$2.5 million was drawn on the Closing Date. The second tranche of \$2.5 million and the third tranche of \$5.0 million may be drawn, at the Borrower's option but subject to the Borrower receiving favorable data from its ongoing Phase III clinical study evaluating the safety and efficacy of duvelisib in patients with relapsed/refractory chronic leukemia or small lymphocytic lymphoma on or prior to September 20, 2017 (Milestone Event), during the period beginning on the Closing Date and ending on the earliest to occur of the date that is 90 days after the Milestone Event and December 20, 2017. The fourth tranche of \$15.0 million may be drawn, at the Borrower's option and at the sole discretion of Hercules, on or prior to June 30, 2018.

The Term Loan will mature on December 1, 2020 (Loan Maturity Date). Each advance accrues interest at a floating per annum rate equal to the greater of either (a) 10.5% or (b) the lesser of (i) 12.75% and (ii) the sum of (x) 10.5% plus (y) (A) the prime rate minus (B) 4.5%. The Term Loan provides for interest-only payments until November 1, 2018. The interest-only period may be extended to May 1, 2019 if the Borrower obtains minimum cash proceeds of \$20.0 million from a sale of equity securities or subordinated debt and/or ongoing commercial partnerships. Thereafter, amortization payments will be payable monthly in twenty-six installments (or, if the period requiring interest-only payments has been extended to May 1, 2019, in twenty installments) of principal and interest (subject to recalculation upon a change in prime rates). Any advance may be prepaid in whole or in part upon seven business days' prior written notice to Hercules, subject to a prepayment charge of 3.0%, if such advance is prepaid in any of the first twelve (12) months following the Closing Date, 2.0%, if such advance is prepaid after twelve (12) months following the Closing Date but on or prior to twenty-four (24) months following the Closing Date, and 1.0% thereafter. In addition, a final payment equal to 4.5% of the greater of (a) \$5.0 million and (b) the total principal amount of the Term Loan extended by Hercules which is due on the Loan Maturity Date, or such earlier date specified in the Loan Agreement. Amounts outstanding during an event of default shall be payable on demand and shall accrue interest at an additional rate of 5.0% per annum of the past due amount outstanding.

The Term Loan is secured by a lien on substantially all of the assets of the Borrower, other than intellectual property and contains customary covenants and representations, including a liquidity covenant, financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions, taxes, corporate changes, deposit accounts, and subsidiaries.

The events of default under the Loan Agreement include, without limitation, and subject to customary grace periods, (1) the Borrower's failure to make any payments of principal or interest under the Loan Agreement, promissory notes or other loan documents, (2) the Borrower's breach or default in the performance of any covenant under the Loan Agreement, (3) the Borrower making a false or misleading representation or warranty in any material respect, (4) the Borrower's insolvency or bankruptcy, (5) certain attachments or judgments on the Borrower's assets, or (6) the occurrence of any material default under certain agreements or obligations of the Borrower involving indebtedness, or (7) the occurrence of a material adverse effect. If an event of default occurs, Hercules is entitled to take enforcement action, including acceleration of amounts due under the Loan Agreement.

EXHIBIT INDEX

Exhibit number	Description of exhibit
3.1	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to Annual Report on Form 10-K (File No. 001-35403) filed by the Registrant on March 30, 2012)
3.2	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.4 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
4.1	Specimen certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
4.2	Common Stock Warrant Agreement between the Registrant and Encarta, Inc. dated February 21, 2014 (incorporated by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on May 8, 2014)
10.1#	2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on November 3, 2011)
10.2#	2012 Incentive Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.3#	Form of Incentive Stock Option Agreement under 2012 Incentive Plan (incorporated by reference to Exhibit 10.3 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.4#	Form of Nonqualified Stock Option Agreement under 2012 Incentive Plan (incorporated by reference to Exhibit 10.4 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.5#	Form of Restricted Stock Unit Agreement under 2012 Incentive Plan (incorporated by reference to Exhibit 10.16 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.6#	Amended and Restated Employment Agreement between the Registrant and Robert Forrester (incorporated by reference to Exhibit 10.5 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.7#	Amended and Restated Employment Agreement between the Registrant and Jonathan Pachter (incorporated by reference to Exhibit 10.6 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on January 13, 2012)
10.8#	Form of Indemnification Agreement between the Registrant and each director (incorporated by reference to Exhibit 10.7 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on December 7, 2011)
10.9	Lease Agreement, dated April 15, 2014, between the Registrant and Intercontinental Fund III 117 Kendrick Street LLC (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (File No. 001-35403, filed by the Registrant on April 18, 2014)

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- 10.10† License Agreement dated May 5, 2008 by and between The Scripps Research Institute and Poniard Pharmaceuticals, Inc. (Registrant assumed the rights and obligations of Encarta, Inc., which previously assumed the rights and obligations from Poniard Pharmaceuticals, Inc., on February 21, 2014) (incorporated by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on May 8, 2014)
- 10.11† Letter Agreement, dated October 1, 2010, between the Registrant and the Broad Institute (incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on November 3, 2011)
- 10.12# Letter Agreement, dated August 20, 2010, between the Registrant and Eric Lander, Ph.D. (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on November 3, 2011)
- 10.13# Letter Agreement, dated July 30, 2010, as amended October 18, 2010, between the Registrant and Robert Weinberg, Ph.D. (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 (File No. 333-177677) filed by the Registrant on November 3, 2011)
- 10.14# Employment Agreement, dated March 1, 2012, between the Registrant and Daniel Paterson (incorporated by reference to Exhibit 10.18 to Annual Report on Form 10-K (File No. 001-35403) filed by the Registrant on March 26, 2013)
- 10.15† Asset Purchase Agreement, dated May 10, 2012, by and between the Registrant and S*Bio Pte Ltd. (incorporated by reference to Exhibit 10.1 to Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on August 13, 2012)
- 10.16† License Agreement, dated July 11, 2012, by and between the Registrant and Pfizer Inc. (incorporated by reference to Exhibit 10.2 to Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on August 13, 2012)
- 10.17# Amendment to Form of Restricted Stock Unit Agreement under 2012 Incentive Plan (incorporated by reference to Exhibit 10.25 to Annual Report on Form 10-K (File No. 001-35403) filed by the Registrant on March 26, 2013)
- 10.18# Letter Agreement, dated June 6, 2013, by and between the Registrant and Robert Forrester (incorporated by reference to Exhibit 10.2 to Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on August 13, 2013)
- 10.19† Letter Agreement, dated December 7, 2012, by and between the Registrant and Pfizer Inc. (incorporated by reference to Exhibit 10.31 to Annual Report on Form 10-K (File No. 001-35403) filed by the Registrant on March 6, 2014)
- 10.20# Amended and Restated Employment Agreement, dated November 22, 2013, by and between the Registrant and Robert Forrester (incorporated by reference to Exhibit 10.32 to Annual Report on Form 10-K (File No. 001-35403) filed by the Registrant on March 6, 2014)
- 10.21# Letter Agreement with Robert Forrester, dated June 6, 2013 (incorporated by reference to Exhibit 10.2 to Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on August 13, 2013)
- 10.22# Employment Agreement between the Registrant and Gregory Berk (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q (File No. 001-35403) filed by the Registrant on May 9, 2016)
- 10.23*# Separation Agreement between the Registrant and Gregory Berk, effective January 19, 2017

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10.24*#	Consulting Agreement between the Registrant and Gregory Berk, effective January 20, 2017
10.25*‡	Amended and Restated License Agreement, dated November 1, 2016, by and between the Registrant and Infinity Pharmaceuticals, Inc.
10.26*	Loan and Security Agreement, dated March 21, 2017, by and between the Registrant and Hercules Capital, Inc.
21.1*	Subsidiaries of the Registrant
23.1*	Consent of Ernst & Young LLP
31.1*	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)
31.2*	Certification of the Vice President, Finance pursuant to Exchange Act Rule 13a-14(a)
32.1*	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of the Vice President, Finance pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1*	Press Release issued by Verastem, Inc. on March 23, 2017
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

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

‡ Confidential treatment requested under 17 C.F.R. §200.80(b)(4) and Rule 24b-2. The confidential portions of this exhibit have been omitted and are marked accordingly. The confidential portions have been provided separately to the SEC pursuant to the confidential treatment request.

Management contract or compensatory plan, contract or agreement.

January 19, 2017

Gregory Berk, M.D.
133 Claybrook Road
Dover, MA 02030

Dear Greg:

As we have discussed, your employment with Verastem, Inc. (the Company) has terminated, effective January 19, 2017 (the "Separation Date"). The purpose of this letter (the "Agreement") is to confirm the terms concerning your separation from employment, as follows:

1. Final Salary and Vacation Pay. In signing this Agreement, you acknowledge that you have received pay for all work you have performed for the Company through the Separation Date, to the extent not previously paid. Since, in accordance with Company policy, you have no accrued vacation days as of the Separation Date, you will not receive any pay for such vacation time. You will receive the payments described in this Section 1 regardless of whether or not you elect to sign this Agreement.

2. Severance Benefits. In consideration of your acceptance of this Agreement and subject to your meeting in full your obligations hereunder and under the Employee Agreement (as defined below), and in full satisfaction of any rights that you have under the Employment Agreement between you and the Company, dated as of April 15, 2016 (the "Employment Agreement"), the Company will provide you with the following severance benefits:

a. The Company will pay you the gross amount of One Hundred Fifty-One Thousand Eight Hundred Seventy-Five Dollars (\$151,875) on the Company's next regular payday for executives that follows the Effective Date.

b. The Company will also pay you the aggregate gross amount of One Hundred Fifty-One Thousand Eight Hundred Seventy-Five Dollars (\$151,875) in substantially equal payments over a period of six (6) months following the Separation Date. Payments will be made through the Company's payroll system and on the Company's regular payroll schedule, and will begin on the Company's next regular payday for executives that follows the Effective Date. The first payment made will be retroactive to the day immediately following the Separation Date.

c. For the avoidance of doubt, to the extent it has not already been paid as of the Separation Date, the Company will pay you your bonus for 2016 in the gross amount of One Hundred Six Thousand Six Hundred Sixty-Six Dollars and Sixty-Seven Cents (\$106,666.67) promptly following the Effective Date (as defined below).

d. If you are enrolled in the Company's group medical and/or dental plans on the Separation Date, you may elect to continue your participation and that of your eligible dependents in those plans for a period of time under the federal law known as "COBRA." You may make such an election whether or not you accept this Agreement. However, if you accept this Agreement and you timely elect to continue your participation and that of your eligible dependents in the plans, the Company will add to the payments described in Section 2(b) hereof

amounts equal to the premium cost of that participation until the earlier of the conclusion of nine months following the Separation Date or the date that you become eligible to enroll in the health (or, if applicable, dental) plan of a new employer. Payments will begin on the Company's next regular payday for executives that follows the expiration of sixty (60) calendar days from the Separation Date. The first payment will be retroactive to the day immediately following the Separation Date. If the Company's contributions end before your entitlement to coverage under COBRA concludes, you may continue such coverage by paying the full premium cost yourself. Notwithstanding the foregoing, in the event that the Company's payment of the COBRA premium contributions, as described under this Section 2(b), would subject the Company to any tax or penalty under the Patient Protection and Affordable Care Act (as amended from time to time, the "ACA") or Section 105(h) of the Internal Revenue Code of 1986, as amended ("Section 105(h)"), or applicable regulations or guidance issued under the ACA or Section 105(h), you and the Company agree to work together in good faith and enter into a substitute arrangement pursuant to which the Company will not be subjected or exposed to taxes or penalties and you will be provided with payments or benefits with an economic value that is no less than the economic value of the premium costs described herein.

3. Acknowledgement of Full Payment and Withholding.

a. You acknowledge and agree that the payments provided under Section 1, 2, and 4 of this Agreement are in complete satisfaction of any and all compensation and benefits due to you from the Company, whether for services provided to the Company or otherwise, through the Separation Date and that, except as expressly provided under this Agreement, no further compensation or benefits are owed or will be paid or provided to you.

b. All payments made by the Company under this Agreement shall be reduced by any tax or other amounts required to be withheld by the Company under applicable law and all other lawful deductions authorized by you.

4. Status of Employee Benefits, Paid Time Off, Expenses and Equity.

a. Except as otherwise provided in Section 2 or required by applicable law, your participation in all employee benefit plans of the Company will end as of the Separation Date, in accordance with the terms of those plans. You will not continue to earn vacation, paid time off or other similar benefits after the Separation Date or be reimbursed for any expenses incurred after the Separation Date that have not otherwise been approved in writing by the Company. You will receive information about your COBRA continuation rights under separate cover.

b. You agree that, within two (2) weeks of the effective date of this Agreement, you will submit your final expense reimbursement statement reflecting all business expenses you incurred through the Separation Date, if any, for which you seek reimbursement, and, in accordance with Company policy, reasonable substantiation and documentation for the same. The Company will reimburse you for your authorized and documented expenses pursuant to its regular business practice. For avoidance of doubt, for expenses incurred before the Separation Date in connection with business travel or events scheduled to take place after the Separation Date, you will be reimbursed for only those expenses listed in the attached Exhibit A, provided that you provide proof of cancellation for each flight and hotel reservation, and only to the extent

that you (i) are not reimbursed for such expenses by the applicable airline or hotel and (ii) do not make use of such airline tickets or hotel reservation. In the event you are reimbursed for any portion of such expenses by the applicable airline or hotel, you agree to promptly pay over to the Company the amounts reimbursed. In the event that you make use of any airline tickets or hotel reservation, you agree to promptly pay over to the Company the full amount reimbursed by the Company for such tickets or reservation.

c. You and the Company are contemporaneously entering into a separate consulting agreement, setting forth the terms of your continued service to the Company as an independent contractor immediately following the Separation Date (the "Consulting Agreement"). In accordance with the provisions of the Company's 2012 Incentive Plan and the terms of the Stock Option Agreement between you and the Company dated April 15, 2016 and the Stock Option Agreement between you and the Company dated June 14, 2016 (each, an "Award Agreement"), the stock options granted to you under each Award Agreement will continue to vest during your service to the Company under the Consulting Agreement.

5. Confidentiality, Non-Disparagement, and Continuing Obligations.

a. You acknowledge and agree that you will continue to comply your obligations under the Employee Non-Solicitation, Non-Competition, Confidential Information and Inventions Assignment Agreement between you and the Company dated as of April 15, 2016 (the "Employee Agreement") that survive the termination of your employment by necessary implication or the terms thereof.

b. Subject to Section 7(b) of this Agreement, you agree that you will not disclose this Agreement or any of its terms or provisions, directly or by implication, except to members of your immediate family and your legal and tax advisors, and then only on condition that they agree not to further disclose this Agreement or any of its terms or provisions to others.

c. Subject to Section 7(b) of this Agreement and except as may be required by applicable law or legal process, you agree that you will never disparage or criticize the Company, its Affiliates (as defined in the Employment Agreement), their business, their management or their products or services, specifically including without limitation duvelisib, and that you will not otherwise do or say anything that could reasonably be expected to disrupt the good morale of employees of the Company. The Company agrees to instruct its directors and officers not to disparage or criticize you, except as may be required by applicable law or legal process.

d. You agree that you will not make any written or oral statement about your employment with the Company or the termination thereof except for the statement attached hereto as Exhibit B.

6. Return of Company Documents and Other Property. In signing this Agreement you represent and warrant that you have complied with Section 5 of the Employee Agreement. You also agree that if you should later discover any document or other property of the Company or any of its Affiliates in your possession, you will immediately return it to the Company. You agree that you will not, following the Separation Date, for any purpose, attempt to access or use

any computer or computer network or system of the Company or any of its Affiliates, including without limitation the electronic mail system. Further, you acknowledge that you have disclosed to the Company all passwords necessary or desirable to obtain access to, or that would assist in obtaining access to, all information which you have password-protected on any computer equipment, network or system of the Company or any of its Affiliates. It is, however, understood and agreed that you may retain possession of and access to certain Company property, equipment, and documents as expressly directed by the Company in order to fulfill your obligations under the Consulting Agreement.

7. General Release and Waiver of Claims.

a. For and in consideration of the special severance pay and other benefits provided to you under this Agreement, which are conditioned on your signing of this Agreement and to which you would not otherwise be entitled, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, on your own behalf and that of your heirs, executors, administrators, beneficiaries, representatives and assigns, and all others connected with or claiming through you, hereby release and forever discharge the Company and its subsidiaries and other affiliates and all of their respective past, present and future officers, directors, trustees, shareholders, employees, agents, employee benefit plans, general and limited partners, members, managers, investors, joint venturers, representatives, successors and assigns, and all others connected with any of them, both individually and in their official capacities, from any and all causes of action, rights and claims of any type or description, known or unknown, which you have had in the past, now have, or might now have, through the date of your signing of this Agreement, in any way related to, connected with or arising out of your employment or its termination (including without limitation any claims under Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, as amended by the Older Workers Benefit Protection Act, the Employee Retirement Income Security Act of 1974 ("ERISA"), the Americans with Disabilities Act, and/or the wage and hour, wage payment and fair employment practices statute of the state or states in which you were previously employed by the Company or otherwise had a relationship with the Company or any of its subsidiaries or other affiliates, each as amended from time to time). This Agreement shall not apply to (a) any claim that arises after you sign this Agreement, (b) any claim that may not be waived pursuant to applicable law, (c) claims for indemnification in your capacity as an officer or director of the Company under the Company's Certificate of Incorporation, By-laws or agreement, if any, providing for director or officer indemnification, (d) rights to receive insurance coverage and payments under any insurance policy maintained by the Company and (e) rights to equity compensation or to receive retirement benefits that are accrued and fully vested as of the Separation Date and rights under any plans protected by ERISA.

b. Notwithstanding the foregoing, nothing contained in this Agreement shall be construed to prohibit you from filing a charge with or participating in any investigation or proceeding conducted by the federal Equal Employment Opportunity Commission or a comparable state or local agency, except that you hereby agree to waive your right to recover monetary damages or other individual relief in any such charge, investigation or proceeding, or any related complaint or lawsuit filed by you or anyone else on your behalf. Further, nothing contained in this Agreement or the Employee Agreement limits, restricts or in any other way affects your communicating with any governmental agency or entity, or communicating with any

official or staff person of a governmental agency or entity, concerning matters relevant to the governmental agency or entity.

c. In signing this Agreement, you acknowledge your understanding that you may consider the terms of this Agreement for up to twenty-one (21) days from the date you receive it. You also acknowledge that you are hereby advised by the Company to seek the advice of an attorney prior to signing this Agreement; that you have had sufficient time to consider this Agreement and to consult with an attorney, if you wished to do so, or to consult with any other person of your choosing before signing; and that you are signing this Agreement voluntarily and with a full understanding of its terms.

d. You further acknowledge that, in signing this Agreement, you have not relied on any promises or representations, express or implied, that are not set forth expressly in this Agreement. You understand that you may revoke this Agreement at any time within seven (7) days of the date of your signing by written notice to the Chairman of the Company's Board of Directors and that this Agreement will take effect only upon the expiration of such seven-day revocation period and only if you have not timely revoked it (the "Effective Date").

8. Miscellaneous.

a. This Agreement, together with the Consulting Agreement and your Award Agreements, constitutes the entire agreement between you and the Company and its Affiliates and supersedes all prior and contemporaneous communications, agreements and understandings, whether written or oral, with respect to your employment, its termination and all related matters, excluding only the Employee Agreement, which shall remain in full force and effect in accordance with its terms, and your rights and obligations with respect to your vested options.

b. This Agreement may not be modified or amended, and no breach shall be deemed to be waived, unless agreed to in writing by you and an authorized representative of the Company. The captions and headings in this Agreement are for convenience only, and in no way define or describe the scope or content of any provision of this Agreement.

c. The obligation of the Company to make payments to you or on your behalf under this Agreement, and your right to retain the same, is expressly conditioned upon your continued full performance of your obligations under this Agreement and the Employee Agreement.

d. This is a Massachusetts contract and shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts, without regard to any conflict of laws principles that would result in the application of the laws of another jurisdiction. You agree to submit to the exclusive jurisdiction of the courts of and in the Commonwealth of Massachusetts in connection with any dispute arising out of this Agreement.

If the terms of this Agreement are acceptable to you, please sign, date and return it to Cathy Carew within twenty-one (21) days of the date you receive it. You may revoke this Agreement at any time during the seven-day period immediately following the date of your signing by notifying the Chairman of the Company's Board of Directors in writing of your revocation within that period. If you do not revoke this Agreement, then, on the eighth day following the date that you signed it, this Agreement shall take effect as a legally binding agreement between you and the Company on the basis set forth above. The enclosed copy of this letter, which you should also sign and date, is for your records.

Sincerely,
Verastem, Inc.

By: /s/ Robert Forrester
Robert Forrester
President and Chief Executive Officer

Accepted and agreed:

Signature: /s/ Gregory Berk, M.D.
Gregory Berk

Date: 19 JAN 2017

Exhibit A

1. Deposit to Intercontinental, San Francisco for room rental/dinner T-cell advisory board \$2647.40 + \$39.00 ticketing fee (Charged to Berk's AMEX on 1/10/2017)...expense report has been submitted
 2. Airfare to EHA conference 6/20/2017...Iberia airlines Boston > Madrid \$2447.96 (Charged to Berk's AMEX on 11/9/2016)...expense report submitted in December, awaiting reimbursement.
 3. Airfare to ESMO World GI Congress, 6/26/2017...Iberia airlines \$2967.40 + \$39.00 ticketing fee (Charged to Berk's AMEX on 12/17/2016)...expense report submitted.
 4. Hotel for ESMO GI congress (Hotel Arts) ... discounted advanced purchase rate which is nonrefundable \$2013.56 (Charged to Berk's AMEX 12/27/2016)...expense report submitted.
 5. Airfare to T-cell lymphoma advisory board, San Fran, Jet Blue \$1196.20 (Charged to Berk's AMEX 12/20/2016)...expense report submitted.
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Exhibit B

I am transitioning from being a full-time employee of Verastem back to being a consultant, focused on helping Verastem to progress duvelisib and the rest of its portfolio of drugs. I have also joined Verastem's clinical and scientific advisory board. I enjoyed working with the Verastem team and I look forward to continuing the relationship in my new capacity. I wish them every success with duvelisib and defactinib, and hope together we can bring some new therapies to patients.

CONSULTANT:
VERASTEM, INC. CONTACT:
EFFECTIVE DATE:

■ Greg Berk., M.D.
■ Robert C. Forrester
■ January 20 2017



CONSULTING AGREEMENT

This Consulting Agreement (together with its attachments, this “Agreement”) made as of the date written above (the “Effective Date”) is between **Verastem, Inc.** a Delaware corporation having an address at 117 Kendrick Street, Suite 500, Needham, MA 02494 (the “Company”), and Greg Berk, residing at 133 Claybrook Road, Dover, MA 02030, (“Consultant”). The Company desires to have the benefit of Consultant's knowledge and experience, and Consultant desires to provide Consulting Services (defined below) to the Company, all as provided in this Agreement.

1. Consulting Services. The Company hereby retains Consultant and Consultant agrees to provide Consulting Services to the Company (the “Consulting Services”) as it may from time to time reasonably request and as specified in the Business Terms attached to this Agreement as Exhibit A (“Business Terms”). Any changes to the Consulting Services or Business Terms (and any related compensation adjustments) must be agreed upon in writing between Consultant and the Company prior to implementation of such changes.

- 1.1 Performance.** Consultant agrees to render the Consulting Services to the Company, or to its designee, (a) at such reasonably convenient times and places as the Company may direct, and (b) on a best efforts basis. Consultant will comply with all rules, procedures and standards promulgated from time to time by the Company with regard to Consultant's access to and use of the Company's property, information, equipment and facilities. Consultant agrees to furnish the Company with written reports with respect to the Consulting Services if and when requested by the Company.
 - 1.2 Third Party Confidential Information.** Consultant agrees not to use or disclose any trade secrets or other confidential information of any other person, firm, corporation, institution or other entity in connection with any of the Consulting Services without such third party's express written consent.
 - 1.3 Compliance with Policies.** If Consultant is a faculty member at or employee of a university or hospital (“Institution”) or of another company, Consultant represents and warrants that, pursuant to Institution's or company's policies concerning professional consulting and additional workload, Consultant is permitted to enter into this Agreement. If Consultant is required by Consultant's Institution to disclose to it any proposed agreements with industry, Consultant has made such disclosure. If Institution's prior approval of this Agreement is required by Institution policies, Consultant has obtained or will obtain and deliver to the Company, Institution's consent on the form attached to this Agreement prior to commencing the Consulting Services.
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1.4 Consultant Personnel. In the event that others are, or may hereafter become, associated with Consultant or are used by Consultant in connection with the Consulting Services (“Consultant Personnel”), Consultant agrees to procure from them agreements containing obligations substantially identical in form and content to those contained in this Agreement, and Consultant agrees to cooperate with the Company in procuring execution by them of such assignments and other papers as may be required by the terms of this Agreement.

2. Compensation. In consideration for the Consulting Services rendered by Consultant to the Company, the Company agrees to pay Consultant the fees set forth in the Business Terms attached hereto. Unless otherwise specified in the Business Terms, undisputed payments will be made by the Company within thirty (30) days from the Company’s receipt of Consultant’s invoice. Invoices will contain such detail as the Company may reasonably require, and will be payable in U.S. Dollars in accordance with the terms and provisions of the Business Terms. The Company will reimburse Consultant for reasonable and pre-approved business expenses incurred by Consultant in the performance of the Consulting Services as specified in the Business Terms.

3. Inventions.

3.1 Definition. “Inventions” means all inventions, discoveries, improvements, ideas, designs, processes, products, computer programs, works of authorship, databases, gene sequences, cell lines, samples, chemical compounds, assays, biological materials, mask works, trade secrets, know-how, research and creations (whether or not patentable or subject to copyright or trade secret protection) that Consultant makes, conceives or reduces to practice, either alone or jointly with others, and that (a) result from the performance of the Consulting Services, and/or (b) result from use of facilities, equipment, supplies, Research Materials (defined below), or Confidential Information (defined below) of the Company.

3.2 Ownership. Consultant will promptly disclose all Inventions in confidence to the Company. Consultant agrees to irrevocably transfer and assign and hereby does irrevocably transfer and assign to the Company or its successors or designees the entire right, title and interest now existing or that may exist in the future in and to all right, title and interest in and to all Inventions and any and all related patents, patent applications, copyrights, copyright applications, trademarks, trade names, trade secrets and other proprietary and moral rights in the United States and throughout the world (“Work Product”). All Work Product will be the exclusive property of the Company. For purposes of the copyright laws of the United States, all Work Product will constitute “works made for hire”, except to the extent such Inventions cannot by law be “works made for hire”. Consultant agrees to execute, at the Company’s request and expense, all documents and other instruments necessary or desirable to confirm such assignment. In the event that Consultant does not, for any reason, execute such documents within a reasonable time of the Company’s request, Consultant hereby irrevocably appoints the Company as Consultant’s attorney-in-fact for the purpose of executing such documents on Consultant’s behalf, which appointment is coupled with an interest. Consultant shall not attempt to register any works created by Consultant pursuant to this Agreement at the U.S. Copyright Office, the U.S. Patent & Trademark Office, or any foreign copyright, patent, or trademark registry. Consultant retains no rights in the Work Product and agrees not to challenge the Company’s ownership of the rights embodied in the Work Product. Consultant further agrees to assist the Company in every proper way to enforce the Company’s rights relating to the Work Product in any and all countries, including, but

not limited to, executing, verifying and delivering such documents and performing such other acts (including appearing as a witness) as the Company may reasonably request for use in obtaining, perfecting, evidencing, sustaining and enforcing the Company's rights relating to the Work Product.

- 3.3 Moral Rights.** If Consultant has any rights, including without limitation "artist's rights" or "moral rights" in the Work Product which cannot be assigned (the "Non-Assignable Rights"), Consultant agrees to waive enforcement worldwide of such rights against the Company. In the event that Consultant has any such rights that cannot be assigned or waived, Consultant hereby grants to the Company a royalty-free, paid-up, exclusive, worldwide, irrevocable, perpetual license under the Non-Assignable Rights to (i) use, make, sell, offer to sell, have made, commercialize, and further sublicense the Work Product, and (ii) reproduce, distribute, create derivative works of, publicly perform and publicly display the Work Product in any medium or format, whether now known or later developed.
- 3.4 Research Materials.** For Consulting Services which involve laboratory work or experiments, "Research Materials" means all materials (a) furnished by the Company, (b) developed by Consultant in connection with the Consulting Services, or (c) the cost of which are reimbursed to Consultant by the Company. Research Materials include, in the case of biological materials, all progeny and unmodified derivatives of those materials, and in the case of chemical materials, all analogs, formulations, mixtures and compositions of those materials. Research Materials are the sole property of the Company. Consultant agrees not to use or evaluate Research Materials for any purpose other than as directed by the Company, and not to transfer the Research Materials to any third party without the prior written consent of the Company. Consultant will use the Research Materials in strict compliance with all laws and regulations.
- 3.5 Records.** Consultant shall make and maintain adequate and current written records of all Inventions, which records shall be available to and remain the property of the Company at all times.
- 3.6 Agreement with Institution.** This Agreement is made subject to the understanding that Consultant, if affiliated with an Institution, may be required to fulfill certain obligations, including teaching, directing laboratory operations, conducting research, and publishing work. It is further understood that Consultant may have signed an agreement concerning inventions with Institution, under which Consultant may be obligated to assign to Institution certain inventions which arise out of or otherwise relate to Consultant's work at or for Institution or from Consultant's use of certain of its facilities or intellectual property. In performing the Consulting Services, Consultant agrees not to utilize Institution facilities or intellectual property if the result of such use is that any Inventions will not be assignable solely to the Company. Use of Institution's telephone, fax machines or computers for communication purposes, however, will not constitute use of Institution's facilities under this Agreement.
- 3.7 Work at Third Party Facilities.** Consultant agrees not to make use of any funds, space, personnel, facilities, equipment or other resources of a third party in performing the Consulting Services, and further agrees not to take any other action that would result in a third party owning or having a right in any Inventions, unless agreed upon in writing in advance by the Company.
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4. Confidential Information.

- 4.1 **Definition.** “Confidential Information” means information with respect to the facilities and methods of the Company, Research Materials, trade secrets, Inventions, systems, patents and patent applications, procedures, manuals, confidential reports, financial or legal information, business plans, prospects, or opportunities, personnel information, lists of customers and suppliers, and information of third parties provided by the Company to Consultant. Confidential Information does not include information which (i) is in the public domain or which becomes part of the public domain through no wrongful act on Consultant’s part but only after it becomes so publicly known, (ii) is already in Consultant’s possession at the time of disclosure by the Company, other than by previous disclosure by the Company, as evidenced by written or electronic records, or (iii) that becomes known to Consultant through disclosure by a third party having the right to disclose the information, as evidenced by written or electronic records.
- 4.2 **Obligations of Confidentiality.** Consultant will not directly or indirectly publish, disseminate or otherwise disclose, use for Consultant’s own benefit or for the benefit of a third party, deliver or make available to any third party, any Confidential Information, other than in furtherance of the purposes of this Agreement, and only then with the prior written consent of the Company, and it is agreed and understood that all Confidential Information shall remain the sole property of the Company. Without the Company’s prior written approval, Consultant will not directly or indirectly disclose to anyone the existence or terms of this Agreement or the fact that Consultant has this arrangement with the Company. If required, Consultant may disclose the Confidential Information to a governmental authority or by order of a court of competent jurisdiction, provided that such disclosure is subject to all applicable governmental or judicial protection available for like material and reasonable advance notice of such compulsory disclosure is given to the Company. Consultant will exercise all reasonable precautions to protect the physical integrity and confidentiality of the Confidential Information, and will not remove any Confidential Information or copies or derivations thereof from the Company’s premises except to the extent necessary to fulfill the Consulting Services, and then only with the Company’s prior consent. Consultant may disseminate or permit access to Confidential Information only to Consultant Personnel who have a need to know such Confidential Information in the course of the performance of their duties under this Agreement and who are bound to protect the confidentiality of the Confidential Information consistent with the terms of this Agreement. Consultant agrees to be responsible for any breach of this Agreement by any of the Consultant Personnel. The Company will be entitled to injunctive relief as a remedy for any breach of the terms of this Section 4. Consultant cannot be held criminally or civilly liable under any federal or state trade secret law for disclosing a trade secret (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, solely for the purpose of reporting or investigating a suspected violation of law, or (ii) in a complaint or other document filed under seal in a lawsuit or other proceeding. Notwithstanding this immunity from liability, Consultant may be held liable if he unlawfully accesses trade secrets by unauthorized means.
- 4.3 **Third Party Confidential Information.** Consultant recognizes that the Company has received and in the future will receive from third parties confidential and proprietary information (“Third Party Information”) subject to a duty on the Company’s part to maintain the confidentiality of such information and to use it only for certain limited purposes. Consultant agrees that Consultant owes the Company and such third parties,
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during the term of this Agreement and thereafter, a duty to hold Third Party Information in the strictest confidence in accordance with the Company's obligations to such third party, and agrees not to disclose it to any person, firm or corporation or use it except in carrying out the Consulting Services for the Company consistent with the Company's agreement with such third party.

5. Restrictions.

5 . 1 While Consultant is engaged by the Company and for a period of twelve (12) months after the termination or cessation of such engagement for any reason, Consultant will not:

(i) within the United States or any other geographic region in which the Company conducts its business, and in any capacity, whether individually or as an employee, consultant, director, officer, agent, advisor or otherwise, for or on behalf of any entity (a "Competing Organization"), engage in any business activities that are competitive with any of the material business activities of the Company, including without limitation the research, development, sale or marketing of any competitive product of the Company, unless Consultant's duties at such Competing Organization do not include duties relating to any product, process, service or business activity that competes or is reasonably expected to compete with a material product, process, service or business activity in existence or being conducted, provided or developed by the Company, and provided that Consultant has delivered to the Company a written statement, confirmed by Consultant's prospective employer or consulting client, as the case may be, describing Consultant's duties and stating that such duties are consistent with Consultant's obligations under this Agreement; or,

(ii) whether directly or indirectly, solicit, attempt to solicit or in any manner assist any other party to solicit any employee, independent contractor, or consultant of the Company to terminate or diminish his, her or its relationship with the Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5 . 2 As used in this Section 5, "competitive" activities means discovering, developing or commercializing drugs that selectively target cancer stem cells, "competitive" products means drugs that selectively target cancer stem cells, and an "employee," "independent contractor" or "consultant" of the Company is any person who holds or at any time during the six-month period prior to the termination of Consultant's engagement by Company held such status with Company.

6. Representations and Warranties.

6.1 No Conflicts. Consultant is under no contractual or other obligation or restriction which is inconsistent with Consultant's execution of this Agreement or the performance of the Consulting Services. During the Term (as defined below), Consultant will not enter into any agreement, either written or oral, in conflict with Consultant's obligations under this Agreement. Consultant will arrange to provide the Consulting Services in such manner and at such times that the Consulting Services will not conflict with Consultant's responsibilities under any other agreement, arrangement or understanding or pursuant to any employment relationship Consultant has at any time with any third party.

- 6.2 Absence of Debarment.** Consultant represents that (a) neither Consultant nor any Consultant Personnel has been debarred, and to the best of Consultant's knowledge is not under consideration to be debarred, by the U.S. Food and Drug Administration ("FDA") from working in or providing consulting services to any pharmaceutical or biotechnology company under Section 306(a) or 306(b) of the federal Food, Drug and Cosmetic Act (codified at 21 U.S.C. §§ 335a(a) and 335a(b)); (b) no debarred person will in the future be employed by Consultant to perform any services hereunder in connection with any application for approval of a drug by the FDA; and (c) neither Consultant nor any Consultant Personnel has a conviction on their record for which a person can be debarred as described in Sections 306(a) or 306(b) of the federal Food, Drug and Cosmetic Act. Consultant further represents and warrants that should Consultant or any Consultant Personnel be convicted in the future of any act for which a person can be debarred as described in Sections 306(a) or 306(b) of the federal Food, Drug and Cosmetic Act, Consultant shall immediately notify Company of such conviction in writing.
- 6.3 Assignment of Ownership in Work Product.** Consultant represents and warrants that (i) Consultant has the right and unrestricted ability to assign the Work Product to the Company as set forth in Section 3 (including without limitation the right to assign any Work Product created by Consultant's employees or contractors); (ii) the Work Product has not heretofore been published in whole or in part; and (iii) the Work Product will not infringe upon any copyright, patent, trademark, right of publicity or privacy, or any other proprietary or intellectual property right of any person, whether contractual, statutory or common law.
- 6.4 Compliance with Law.** Consultant covenants that the services to be provided hereunder shall be in compliance with all applicable laws, rules and regulations. Consultant acknowledges that Consultant is subject to the Company's insider trading policy, a copy of which can be found on the Company's website at www.verastem.com.
- 6.5 No Conflicting Agreements.** Consultant represents that Consultant's performance of all the terms of this Agreement and as a provider of services to the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by Consultant in confidence or in trust prior to or during this Agreement, and Consultant has not and will not disclose to the Company or induce the Company to use any confidential or proprietary information or material belonging to any previous employers or other third parties. When performing the Consulting Services, Consultant agrees to use only such materials and information of any kind that Consultant has rightfully obtained and that are not considered proprietary or confidential by any third party unless agreed to otherwise by the Company in writing.
- 7. Term and Termination.**
- 7.1 Term.** This Agreement will commence on the Effective Date and continue for the term specified on the Business Terms (the "Term"), unless sooner terminated pursuant to the express terms of this Section 7 or extended by mutual agreement of the parties.
- 7.2 Termination for Breach.** If either party breaches in any material respect any of its obligations under this Agreement, in addition to any other right or remedy, the non-breaching party may terminate this Agreement in the event that the breach is not cured within ten (10) days after receipt by that party of written notice of the breach.
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7.3 Termination by Either Party. Either party may terminate this Agreement (a) immediately at any time upon written notice to the other party in the event of a breach of this Agreement by non-terminating party which cannot be cured (*e.g.*, breach of the confidentiality obligation) and/or (b) at any time without cause upon not less than thirty (30) days' prior written notice to the other party. In addition, the Company may terminate this Agreement immediately at any time upon written notice to Consultant in the event Consultant revokes his acceptance of the Separation Agreement (as defined below).

7.4 Effect of Expiration/Termination. Upon expiration or termination of this Agreement, neither the Company nor Consultant will have any further obligations under this Agreement, except (a) for liabilities accrued through the date of termination, and (b) the obligations under Sections 3, 4, 5, 6, 7 and 8 hereof will survive. Upon expiration or termination, and in any case upon the Company's request, Consultant will return immediately to the Company all tangible Confidential Information and all tangible Third Party Information, including all copies, reproductions and derivations thereof, and all of the Company's property, equipment, and documents. Consultant will not copy, delete, or alter any information contained on any Company property, equipment, or documents before returning such to the Company. In addition, if Consultant has used any personal computer, server, electronic device, or e-mail system to receive, store, review, prepare or transmit any Confidential Information or Third Party Information, Consultant will provide the Company with a computer-useable copy of all such Confidential Information and Third Party Information and then will delete any such Confidential Information or Third Party Information from Consultant's computer storage or any other media (including, but not limited to, online and off-line libraries). Consultant agrees to provide the Company access to its system as reasonably requested to verify that the necessary copying and/or deletion has been completed. Consultant further agrees that any property situated on Company premises and owned by the Company will be subject to inspection by the Company's personnel at any time with or without notice. Consultant will, promptly upon expiration or termination, certify in writing that it has complied with the requirements of this section ; provided, however, that Consultants obligations under this Agreement will continue even if Consultants fails or declines to provide such written certification.

8. Miscellaneous.

8.1 Independent Contractor. All Consulting Services will be rendered by Consultant as an independent contractor, and this Agreement does not create an employer-employee, partnership, agency or joint venture relationship between the Company and Consultant. Consultant will have no rights to receive any employee benefits, such as health and accident insurance, sick leave or vacation which are accorded to regular Company employees, except as may be required by COBRA. Consultant will not in any way represent himself to be an employee, partner, joint venturer, or agent of the Company. Consultant is not authorized to make any representation, contract, or commitment on behalf of the Company or incur any liabilities or obligations of any kind in the name of or on behalf of the Company. Consultant shall work independently, without day-to-day direction from the Company, and may adopt such arrangements as Consultant desires with regard to the details of the Consulting Services performed under this Agreement, the hours during which the Consulting Services will be provided, and the place or places where the Consulting Services are to be furnished; provided that: (a) such arrangements, details, hours and location of services shall be consistent with the proper accomplishment

of the agreed objectives of the Company; and (b) such services by Consultant shall be performed in a manner calculated to obtain the most satisfactory results for the Company.

- 8.2 Taxes.** Consultant and the Company agree that the Company will treat Consultant as an independent contractor for purposes of all tax laws (local, state and federal) and file income reporting and other forms consistent with such status. Consultant agrees that, as an independent contractor, neither Consultant nor Consultant's employees are entitled to unemployment benefits in the event this Agreement terminates, or to workers' compensation benefits in the event that Consultant, or any employee of Consultant, is injured in any manner while performing obligations under this Agreement. Consultant will be solely responsible to pay any and all local, state, and/or federal income, social security and unemployment taxes for Consultant and Consultant's employees. The Company will not withhold any taxes or prepare W-2 Forms for Consultant, but will provide Consultant with a Form 1099 if and to the extent required by law. Consultant is solely responsible for, and will timely file, all tax returns and payments required to be filed with, or made to, any federal, state or local tax authority with respect to the performance of services and receipt of fees under this Agreement. Consultant is solely responsible for, and must maintain adequate records of, expenses incurred in the course of performing services under this Agreement, except as provided herein. The Company will regularly report amounts paid to Consultant with the appropriate taxing authorities, as required by law. Consultant will provide the Company with Consultant's taxpayer identification number or social security number, as applicable.
- 8.3 Use of Name.** Consultant consents to the use by the Company of Consultant's name and likeness in written materials and oral presentations to current or prospective customers, partners, investors or others, provided that such materials or presentations accurately describe the nature of Consultant's relationship with and contributions to the Company.
- 8.4 Assignability and Binding Effect.** The Consulting Services to be rendered by Consultant are personal in nature. Consultant may not assign or transfer this Agreement or any of Consultant's rights or obligations hereunder except to a corporation of which Consultant is the sole stockholder. In no event will Consultant assign or delegate responsibility for actual performance of the Consulting Services to any other natural person except to Consultant Personnel as provided for under this Agreement. This Agreement will be binding upon and inure to the benefit of the parties and their respective legal representatives, heirs, successors and permitted assigns. The Company may assign this Agreement to any other corporation or entity which acquires (whether by purchase, merger, consolidation or otherwise) all or substantially all of the business and/or assets of the Company.
- 8.5 Headings.** The section headings are included solely for convenience of reference and will not control or affect the meaning or interpretation of any of the provisions of this Agreement.
- 8.6 Notices.** Any notices or other communications from one party to the other will be in writing and will be given by addressing the same to the other at the address or facsimile number set forth in this Agreement. Notices to the Company will be marked "Attention: General Counsel". Notice will be deemed to have been duly given when (a) deposited in the United States mail with proper postage for first class Registered or Certified Mail prepaid, return receipt requested, (b) sent by any reputable commercial courier, delivery
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confirmation requested, (c) delivered personally, or (d) if promptly confirmed by mail or commercial courier as provided above, when dispatched by facsimile.

- 8.7 Amendment.** This Agreement may be amended or modified only by a writing signed by authorized representatives of both parties.
- 8.8 No Waiver.** No waiver of any term or condition of this Agreement shall be valid or binding on either party unless the same shall be mutually assented to in writing by both parties. The failure of either party to enforce at any time any of the provisions of this Agreement, or the failure to require at any time performance by the other party of any of the provisions of this Agreement, shall in no way be construed to be a present or future waiver of such provisions, nor in any way affect the right of either party to enforce each and every such provision thereafter. The express waiver by either party of any provision, condition or requirement of this Agreement shall not constitute a waiver of any future obligation to comply with such provision, condition or requirement.
- 8.9 Severability.** In the event that any one or more of the provisions contained in this Agreement is, for any reason, held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Agreement, and all other provisions will remain in full force and effect. If any provision of this Agreement is held to be excessively broad, it will be reformed and construed by limiting and reducing it so as to be enforceable to the maximum extent permitted by law.
- 8.10 Entire Agreement.** This Agreement, together with the Separation Agreement between the parties dated January 19, 2017 (the "Separation Agreement") and the surviving documents referenced therein, constitutes the entire agreement of the parties with regard to their subject matter, and supersedes all previous written or oral representations, agreements and understandings between the parties.
- 8.11 Governing Law/Jurisdiction.** All disputes related to or arising out of this Agreement shall be resolved in the state or federal courts of the Commonwealth of Massachusetts, to whose exclusive jurisdiction each party hereby consents. This Agreement will be governed by, construed and enforced in accordance with the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.
- 8.12 Remedies.** Consultant's obligations under this Agreement are of a unique character that gives them particular value; breach of any of such obligations will result in irreparable and continuing damage to the Company for which there will be no adequate remedy at law; and, in the event of such breach or threatened breach, the Company will be entitled to injunctive relief and/or a decree for specific performance, an award of its attorney's fees incurred, and such other and further relief as may be proper. Consultant and the Company further agree that no bond or other security shall be required in obtaining such equitable relief.
- 8.13 Counterparts.** This Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.
-

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement under seal as of the Effective Date.

VERASTEM, INC.

By: /s/ Daniel Paterson

Name: Dan Paterson

Title: COO
duly authorized

CONSULTANT

By: /s/ Gregory Berk, M.D.

Name: Gregory Berk, M.D.

Title: Medical Consultant
duly authorized

Address: 133 Claybrook Rd.

Dover, MA 02030

**INSTITUTION ACKNOWLEDGEMENT
AND CONSENT FORM**

Verastem, Inc. (the “Company”) is prepared to enter into the foregoing Agreement with the consultant named on the preceding signature page (“Consultant”). The Company recognizes that as a member of the institution named below (“Institution”), Consultant is responsible for ensuring that any consulting agreement Consultant enters into with a for-profit entity is not in conflict with the patent, consulting or other policies of Institution. The proposed Agreement requires Consultant, if required by Institution policies, to disclose the proposed Agreement to Institution and/or to obtain Institution’s consent to enter into the proposed Agreement.

Institution hereby acknowledges and consents to Consultant entering into the foregoing Agreement.

INSTITUTION:

By _____

Print Name

Title _____
duly authorized

Date _____

EXHIBIT A

BUSINESS TERMS

1. Consulting Services:

Consultant will render BTP-114 medical consulting services, including serving as the “24/7” medical monitor as well as medical lead on the BTP-114 program. In this role, he will be expected to participate in site initiations, site calls, CRO team calls, cohort management calls, and safety calls. He will also serve on the Placon-Verastem joint steering committee, and prepare regular updates on the trial progress to Verastem senior management. As medical lead, he will be the primary outreach contact to investigators and thought leaders involved in the program.

2. Compensation:

As full compensation for the Consulting Services rendered during the Term, the Company will pay Consultant a monthly retainer of \$15,000.

If the Company and the Consultant mutually decide that additional consulting services shall be provided, this agreement will be amended accordingly.

On the last day of each calendar month, Consultant will invoice the Company for Consulting Services rendered and expenses incurred during the preceding month. Invoices should reference this Agreement and should be submitted to the following address:

**Accounts Payable
Verastem, Inc.
117 Kendrick Street, Suite 500
Needham, MA 02494**

Or by email to: ap@verastem.com

3. Term:

This Agreement will be for an initial Term of 6 months beginning on the Effective Date, and may be extended for additional periods, at the Company’s option and with Consultant’s consent.

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AMENDED AND RESTATED LICENSE AGREEMENT

BY AND BETWEEN

INFINITY PHARMACEUTICALS, INC.

AND

VERASTEM, INC.

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LICENSE AGREEMENT

This Amended and Restated License Agreement (this "Agreement") is entered into as the 1st day of November, 2016 and made effective as of the 29th day of October, 2016 (the "Effective Date"), by and between Infinity Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware and having a principal office located at 784 Memorial Drive, Cambridge, Massachusetts 02139 ("INFI"), and Verastem, Inc., a corporation organized and existing under the laws of Delaware, having a principal office located at 117 Kendrick Street, Suite 500, Needham, Massachusetts 02494 ("Licensee"). INFI and Licensee are each referred to herein by name or as a "Party" or, collectively, as "Parties."

RECITALS

WHEREAS, Licensee and INFI are parties to that certain License Agreement, dated October 29, 2016 (the "Superseded Agreement") which Licensee and INFI wish to replace and supersede in its entirety with this Agreement;

WHEREAS, Licensee possesses expertise in the Development and Commercialization (each as defined below) of pharmaceutical products;

WHEREAS, INFI controls certain intellectual property related to the IPI-145 Product (as defined below); and

WHEREAS, Licensee is interested in obtaining a license under such intellectual property to Develop, Manufacture and Commercialize the IPI-145 Product in the Field in the Territory (each as defined below), and INFI is willing to grant Licensee such license on the terms and conditions set forth in this Agreement.

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 agree as follows:

**ARTICLE 1
DEFINITIONS**

As used in this Agreement, the following terms will have the meanings set forth in this Article 1 unless context dictates otherwise:

1.1 "Affiliate" means any entity that directly or indirectly controls or is controlled by or is under common control with a Person. For purposes of this definition, "control" or "controlled" means ownership, directly or indirectly, of more than fifty percent (50%) of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or more than fifty percent (50%) of the equity interest in the case of any other type of legal entity (or if the jurisdiction where such corporation or other entity is domiciled prohibits foreign ownership of such entity, the

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maximum foreign ownership interest permitted under such laws, provided, that such ownership interest provides actual control over such entity), status as a general partner in any partnership, or any other arrangement whereby a Person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity.

1.2 “Annual Net Sales” means aggregate Net Sales of IPI-145 Products by Licensee, its Affiliates and/or the Sublicensees during a given Calendar Year.

1.3 “Business Day” means any day other than Saturday or Sunday on which the banks in New York, New York, United States are open for business.

1.4 “Calendar Quarter” means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

1.5 “Calendar Year” means a period of time commencing on January 1 and ending on the following December 31.

1.6 “Change of Control” means, with respect to a Party, any of the following: (a) the sale or disposition of all or substantially all of the assets of such Party or its direct or indirect controlling Affiliate to a Third Party, other than to an entity of which more than fifty percent (50%) of the voting capital stock are owned after such sale or disposition by the Persons that were shareholders of such Party or its direct or indirect controlling Affiliate (in either case, whether directly or indirectly through any parent entity) immediately prior to such transaction; or (b) (i) the acquisition by a Third Party, alone or together with any of its Affiliates, other than an employee benefit plan (or related trust) sponsored or maintained by such Party or any of its Affiliates, of more than fifty percent (50%) of the outstanding shares of voting capital stock of such Party or its direct or indirect controlling Affiliate, or (ii) the acquisition, merger or consolidation of such Party or its direct or indirect controlling Affiliate with or into another Person, other than, in the case of this clause (b), an acquisition or a merger or consolidation of such Party or its controlling Affiliate in which the holders of shares of voting capital stock of such Party or its controlling Affiliate, as the case may be, immediately prior to such acquisition, merger or consolidation will beneficially own, directly or indirectly, at least fifty percent (50%) of the shares of voting capital stock of the acquiring Third Party or the surviving corporation in such acquisition, merger or consolidation, as the case may be, immediately after such acquisition, merger or consolidation.

1.7 “Combination Product” means any pharmaceutical Product which contains two or more active pharmaceutical ingredients, at least one of which is an IPI-145 Compound.

1.8 “Commercial Sale” means any sale of a Product to a Third Party in any country in the Territory after the receipt of the Marketing Authorization for that country, if such Marketing Authorization is required.

1.9 “Commercialization” or “Commercialize” means any and all activities directed to the preparation for sale of, offering for sale of, or sale of a Compound or Product, including

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activities to secure and maintain market access (including any phase IV/post-approval clinical study that is not required to obtain or maintain Regulatory Approval) market, promote, distribute, and import a Product.

1.10 “Compound” means a compound and any references to a Compound shall include all of its various chemical forms, including acids, bases, salts, metabolites, esters, isomers, enantiomers, pro-drug forms, hydrates, solvates, polymorphs and degradants thereof in crystal, powder or other form.

1.11 “Confidential Information” means (a) subject to clause (c) below, any Know-How and other proprietary scientific marketing, financial or commercial information or data, in any form (written, oral, photographic, electronic, magnetic, or otherwise) that is disclosed, supplied or made available to a Party (the “Receiving Party”) or any of its Affiliates by the other Party (the “Disclosing Party”) or any of its Affiliates or otherwise received or accessed by the Receiving Party or any of its Affiliates in the course of performing the Receiving Party’s obligations or exercising the Receiving Party’s rights under this Agreement; (b) subject to clause (c) below, any information that was disclosed by INFI to Licensee or any Affiliate of Licensee prior to the Effective Date pursuant to the Confidential Disclosure Agreement between INFI and Licensee, dated [* * *] (the “Existing Confidentiality Agreement”), which shall be treated as INFI’s Confidential Information, with INFI considered the Disclosing Party and Licensee considered the Receiving Party; (c) any Duvelisib Know-How Controlled by INFI as of the Effective Date that is solely and specifically related to the IPI-145 Compound or IPI-145 Product, which shall be treated as INFI’s and Licensee’s Confidential Information, with each of INFI and Licensee considered the Disclosing Party and each of Licensee and INFI considered the Receiving Party; (d) any Know-How with respect to which INFI is subject to any confidentiality or non-use obligations to any Third Party Grantor pursuant to an INFI Third Party Agreement, which shall be treated as INFI’s Confidential Information, with INFI considered the Disclosing Party and Licensee considered the Receiving Party; (e) any reports or other information (including any information made available in connection with any audit) delivered, disclosed or made available by Licensee, its Affiliates or its Sublicensees to INFI, its Affiliates or any Third Party Grantor in connection with this Agreement, which shall be treated as Licensee’s Confidential Information; and (f) the terms and conditions of this Agreement, which shall be treated as the Confidential information of both INFI and Licensee.

1.12 “Control” or “Controlled” means, with respect to any Know-How, Patent Right, other intellectual property right or any Compound, the legal authority or right (whether by ownership, license or otherwise, but without taking into account any rights granted by one Party to the other Party under the terms of this Agreement) of a Party or, as set forth herein, its relevant Affiliate, to grant access to, a license or a sublicense of or under such Know-How, Patent Right, intellectual property right or Compound to the other Party, or to otherwise disclose proprietary or trade secret information to the other Party, without breaching the terms of any agreement with a Third Party, or misappropriating the proprietary or trade secret information of a Third Party.

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1.13 “Counterpart” means (a) with respect to a patent, collectively, any patent applications from which such patent issued, and all patents and patent applications described in clause (b) with respect to each such patent application; and (b) with respect to a patent application (including any provisional application), the following items, collectively: (i) all divisionals, continuations and continuations-in-part of such patent application; (ii) any patents (including certificates of correction) issuing from such patent application or any patent application described in clause (i); (iii) all patents and patent applications based on, corresponding to or claiming the priority date(s) of such patent application or any of the patents and patent applications described in clauses (i) or (ii); (iv) all rights derived from any of the items described in clauses (i), (ii) or (iii) including any substitutions, extensions (including supplemental protection certificates), registrations, confirmations, reissues, re-examinations and renewals of any of the patents described in clauses (ii) or (iii); and (v) foreign counterparts of any of the foregoing.

1.14 “Development” or “Develop” means, with respect to a Compound, all development activities starting with the initiation of the first IND-enabling GLP toxicology study for such Compound, excluding Research, medicinal chemistry and Commercialization.

1.15 “Diligent Efforts” means the efforts that [* * *]; provided, however, that a Person required to use “Diligent Efforts” under this Agreement will not be thereby required to take actions that [* * *]. Without limiting the generality of the foregoing, in determining Diligent Efforts with respect to the Development and Commercialization of the IPI-145 Compound or IPI-145 Product, the Parties shall take into account the following: [* * *].

1.16 “Dollars” or “\$” means the legal tender of the United States.

1.17 “Duvelisib IP” means the Duvelisib Know-How, the Duvelisib Patent Rights and INFI’s and its Affiliates’ interest in any Joint IP.

1.18 “Duvelisib Know-How” means, subject to Section 12.6, Know-How that is (a) Controlled by INFI or any of its Affiliates on the Effective Date or thereafter during the Term (including INFI’s and its Affiliates’ interest in Joint Know-How), and (b) necessary or useful to Research, Develop, Manufacture or Commercialize any IPI-145 Compound or IPI-145 Product.

1.19 “Duvelisib Patent Rights” means, subject to Section 12.6, Patent Rights that (a) are Controlled by INFI or any of its Affiliates on the Effective Date or thereafter during the Term (including INFI’s and its Affiliates’ interest in Joint Patent Rights), and (b) claim or otherwise cover the Research, Development, Manufacture or Commercialization of any IPI-145 Compound or IPI-145 Product. Duvelisib Patent Rights include the INFI Prosecution Patent Rights, the INK Prosecution Patent Rights, the INK Non-Prosecution Patent Rights and the INFI Other Patent Rights.

1.20 “EMA” means the European Medicines Agency and any successor agency.

1.21 “FDA” means the U.S. Food and Drug Administration and any successor agency.

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1.22 “FD&C Act” means the United States Federal Food, Drug, and Cosmetic Act, as amended.

1.23 “Field” means the treatment, prevention, palliation or diagnosis of any oncology Indication in humans or animals.

1.24 “Good Clinical Practices” or “GCP” means the then-current standards, practices and procedures (a) promulgated or endorsed by the FDA as set forth in the guidelines entitled “Guidance for Industry E6 Good Clinical Practice: Consolidated Guidance,” including related regulatory requirements imposed by the FDA; (b) set forth in Directive 2001/20/EC of the European Parliament and of the Council of 4 April 2001 and Commission Directive 2005//28/EC of 8 April 2005; (c) ICH Guideline for Good Clinical Practice E6; (d) equivalent Laws of an applicable Regulatory Authority; and (e) all additional Regulatory Authority documents or regulations that replace, amend, modify, supplant or complement any of the foregoing.

1.25 “Good Laboratory Practices” or “GLP” means the then-current good laboratory practice standards promulgated or endorsed by the FDA as defined in 21 C.F.R. Part 58, as such regulations may be amended from time to time, and the equivalent regulations promulgated by the equivalent Regulatory Authority in the jurisdiction where the relevant Research or Development activities are performed.

1.26 “Good Manufacturing Practices” or “GMP” means then-current standards for the manufacture of pharmaceutical products, pursuant to (a) the FD&C Act (21 U.S.C. 321 et seq.); (b) relevant United States regulations in Title 21 of the United States Code of Federal Regulations (including Parts 11, 210, and 211); (c) European Community Directives 2003/94 and 91/356/EC; (d) the European Community Guide to Good Manufacturing Practice for Medicinal Intermediate Products; (e) ICH Q7A Good Manufacturing Practice Guidance for Active Pharmaceutical Ingredients; (f) equivalent Laws of an applicable Regulatory Authority at the time of Manufacture; and (g) all additional Regulatory Authority documents or regulations that replace, amend, modify, supplant or complement any of the foregoing.

1.27 “Governmental Authority” means any multinational, federal, state, county, local, municipal or other entity, office, commission, bureau, agency, political subdivision, instrumentality, branch, department, authority, board, court, arbitral or other tribunal, official or officer, exercising executive, judicial, legislative, police, regulatory, administrative or taxing authority or functions of any nature pertaining to government.

1.28 “Headlicense Termination Event” means the termination of the INK Agreement by INK for a material breach thereof and such material breach is the direct result of Licensee’s, its Affiliates’ or Sublicensees’ acts or omissions in breach of Licensee’s obligations under this Agreement that has not been cured in a timely manner; provided, that INFI has not received notice from INK that INFI is otherwise in material breach of the INK Agreement as of the time of such termination.

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1.29 “ICH” means the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use.

1.30 “IND” an investigational new drug application filed with the FDA or the corresponding application for the investigation of a Product in any other country or group of countries, as defined in the applicable Laws and regulations and filed with the Regulatory Authority of such country or group of countries.

1.31 “Indication” means a disease, condition, disorder or syndrome.

1.32 “INFI Indemnitees” means INFI, its Affiliates and their respective directors, officers, employees and agents.

1.33 “INFI Other Patent Rights” means, subject to Section 12.6, the Patent Rights Controlled by INFI as of the Effective Date or during the Term that are necessary or useful to Research, Develop, Manufacture or Commercialize the IPI-145 Product, but excluding the INFI Prosecution Patent Rights, INK Prosecution Patent Rights and INK Non-Prosecution Patent Rights.

1.34 “INFI Prosecution Patent Rights” means, subject to Section 12.6, the Patent Rights Controlled by INFI or any of its Affiliates that are set forth on Exhibit A, and including any Counterparts thereof.

1.35 “INFI Product Related Contracts” means (a) the agreements identified in Exhibit F-1 and (b) any agreement between INFI (or any of its Affiliates) and any Third Party that is a clinical trial site or investigator with respect to the Development of the IPI-145 Compound or IPI-145 Product (a “Clinical Site Agreement”).

1.36 “INFI Third Party Agreements” means the INK Agreement and the MICL Agreements.

1.37 “INK Agreement” means the Amended and Restated Development and License Agreement, dated December 24, 2012, as amended, by and between INFI and Intellikine LLC (“INK”), as may be amended from time to time to the extent permitted by this Agreement.

1.38 “INK Prosecution Patent Rights” means, subject to Section 12.6, the Patent Rights Controlled by INFI or any of its Affiliates that are set forth on Exhibit B, and including any Counterparts thereof.

1.39 “INK Non-Prosecution Patent Rights” means, subject to Section 12.6, the Patent Rights Controlled, but not owned, by INFI or any of its Affiliates pursuant to a license or sublicense granted to INFI pursuant to the INK Agreement, and including all Counterparts thereof, but excluding the INFI Prosecution Patent Rights and INK Prosecution Patent Rights.

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1.40 “Internal Personnel Expenses” means with respect to INFI personnel or Licensee personnel, \$[* * *] per FTE year, prorated to reflect the reasonable estimated percentage of such personnel’s time spent performing activities under this Agreement based on an 1800 hour FTE year.

1.41 “IPI-145 Compound” means the Compound known as IPI-145 or Duvelisib and described in Exhibit C, or, for clarity, any of its various chemical forms, including acids, bases, salts, metabolites, esters, isomers, enantiomers, pro-drug forms, hydrates, solvates, polymorphs and degradants thereof, in each case that has substantially the same pharmacological effect, in crystal, powder or other form.

1.42 “IPI-145 Product” means any Product which is, or which contains or comprises, the IPI-145 Compound.

1.43 “IPI-443 Product” means any Product which is, or which contains or comprises the Compound set forth in Exhibit D.

1.44 “Joint IP” means Joint Know-How and Joint Patent Rights and other intellectual property rights (other than Patent Rights) covering Joint Know-How.

1.45 “Know-How” means all technical information, know-how and data, including inventions, discoveries, trade secrets, specifications, instructions, processes, formulae, materials, expertise and other technology applicable to formulations, compositions or products or to their manufacture, development, registration, use or marketing or to methods of assaying or testing them or processes for their manufacture, formulations containing them or compositions incorporating or comprising them, and including all biological, chemical, pharmacological, biochemical, toxicological, pharmaceutical, physical and analytical, safety, quality control, manufacturing, nonclinical and clinical data, regulatory data and filings, instructions, processes, formulae, expertise and information, relevant to the research, development, manufacture, use, importation, offering for sale or sale of, or which may be useful in studying, testing, developing, producing or formulating, products, or intermediates for the synthesis thereof. Know-How excludes the Patent Rights covering any inventions.

1.46 “Knowledge” means the actual knowledge, without any duty to investigate, of the INFI employee with the specified title as of the Effective Date.

1.47 “Law” means any provision of any then-current multinational, federal, national, state, county, local, municipal or foreign law, statute, ordinance, order, writ, code, rule or regulation, promulgated or issued by any Governmental Authority, as well as with respect to either Party any binding judgments, decrees, stipulations, injunctions, determinations, awards or agreements issued by or entered into by such Party with any Governmental Authority.

1.48 “Licensee Indemnitees” means Licensee, its Affiliates and their respective directors, officers, employees and agents.

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1.49 “Licensee IP” means the Licensee Know-How and the Licensee Patent Rights, in each case, solely to the extent arising from the Research, Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product using any Duvelisib IP.

1.50 “Licensee Know-How” means, subject to Section 12.6, Know-How that is (a) Controlled by Licensee or any of its Affiliates during the Term but not on the Effective Date; and (b) necessary or useful to Research, Develop, Manufacture or Commercialize any Compound that is a Target Inhibitor, or any Product containing such a Compound, in the Territory. Licensee Know-How includes Licensee’s and its Affiliates’ rights in Joint Know-How.

1.51 “Licensee Patent Rights” means, subject to Section 12.6, Patent Rights Controlled by Licensee during the Term but not on the Effective Date (and not prior to the Effective Date) and claiming Licensee Know-How. Licensee Patent Rights includes Licensee’s and its Affiliates’ interest in any Joint Patent Rights.

1.52 “MAA” means an application for the authorization for marketing of a Product in any country or group of countries outside the United States, and all supplements, including all documents, data and other information concerning the Product, as defined in the applicable laws and regulations and filed with the Regulatory Authority of a given country or group of countries.

1.53 “Manufacture” or “Manufacturing” means any activities directed to producing, manufacturing, scaling up, processing, filling, finishing, packaging, labeling, quality assurance testing and release, shipping and storage of a Compound or Product or component thereof (including production of drug substance and drug product, in bulk form, for preclinical and clinical studies and for Commercialization).

1.54 “Marketing Authorization” means the grant of all necessary permits, registrations, authorizations, licenses and approvals (or waivers) required for the manufacture, promotion, marketing, storage, import, export, transport, distribution, use, offer for sale, sale or other commercialization of a Product in any country.

1.55 “MHLW” means the Japanese Ministry of Health, Labour and Welfare and any successor agency.

1.56 “MICL Agreements” means (a) the Termination and Revised Relationship Agreement by and between INFI and Mundipharma International Corporation Limited (“MICL”), entered into as of July 17, 2012; and (b) the Termination and Revised Relationship Agreement by and between INFI and Purdue Pharmaceutical Products L.P. (“Purdue”), entered into as of July 17, 2012; each ((a) and (b)) as may be amended from time to time to the extent permitted by this Agreement.

1.57 “NDA” means with respect to a Product, a new drug application and all supplements filed with the FDA with respect to such Product, including all documents, data and

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other information concerning such Product which are necessary for, or included in, a Marketing Authorization to use, sell, supply or market such Product in the United States.

1.58 “Net Sales” means (I) with respect to an IPI-145 Product (subject to clause (II) below, for a Combination Product) in a particular period, the gross amount invoiced by Licensee, its Affiliates and/or the Sublicensees on sales or other dispositions (excluding sales or dispositions for use in clinical trials or other scientific testing, in either case for which Licensees, its Affiliates and/or the Sublicensees receive no revenue) of such IPI-145 Product to unrelated Third Parties during such period, less the following deductions (to the extent included in the gross amount invoiced or otherwise directly paid or incurred by Licensee, its Affiliates and/or its Sublicensees):

(a) trade, cash and quantity discounts actually allowed and taken directly with respect to such sales or other dispositions;

(b) tariffs, duties, excises, sales taxes or other taxes imposed upon and paid directly with respect to the delivery, sale or use of the IPI-145 Product and included and separately stated in the applicable invoice (excluding national, state or local taxes based on income);

(c) allowances for amounts repaid or credited by reason of rejections, defects, recalls or returns or because of reasonable and customary chargebacks, refunds, coupons, patient co-pay savings cards, rebates (including related administration fees), wholesaler fee for service, reasonable amounts of physician samples, reasonable amounts of free products given to indigent patients, retroactive price reductions or any other items substantially similar in character and substance to the foregoing, with equitable adjustments to be made from time to time for any differences between these allowances and actual amounts;

(d) amounts previously included in Net Sales of IPI-145 Products that are written-off by Licensee as uncollectible in accordance with Licensee’s standard practices for writing off uncollectible amounts consistently applied; and

(e) freight, insurance and other transportation charges incurred in shipping an IPI-145 Product to Third Parties, included and separately stated in the applicable invoice;

and (II) with respect to an IPI-145 Product that is a Combination Product in a particular period, Net Sales of such Combination Product during such period (as determined in accordance with clause (I)) multiplied by (a) the fraction, $A/(A+B)$, where A is the average sale price of the IPI-145 Product when sold separately in finished form and B is the average sale price of the other active pharmaceutical ingredients included in the Combination Product when sold separately in finished form or (b) where the average sale price cannot be determined for both the IPI-145 Product and all other active pharmaceutical ingredients included in such Combination Product, the fraction, $C/(C+D)$, where C is the fair market value of the IPI-145 Product and D is the fair market value of all other active pharmaceutical ingredients included in the Combination Product (and in such event, Licensee will in good faith make a determination of the respective fair market values of the

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IPI-145 Product and all other active pharmaceutical ingredients included in the Combination Product).

There shall be no double-counting in determining the foregoing deductions.

Such amounts shall be determined from the books and records of Licensee, its Affiliates and/or the Sublicensees, maintained in accordance with applicable accounting principles (such as U.S. generally accepted accounting principles (“U.S. GAAP”) and/or International Financial Reporting Standards), consistently applied.

1.59 “Out-of-Pocket Expenses” means, with respect to a Party or any of its Affiliates, direct expenses paid or payable by such Party or its Affiliates to any Third Party.

1.60 “Patent Expenses” means reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses (including attorney’s fees, disbursements to agents in foreign jurisdictions, and government filing fees and annuity fees) incurred by or invoiced to a Party at any time on or after November 1, 2016 in connection with the Prosecution and Maintenance, enforcement or defense of, or seeking Patent Term Extension with respect to, any of the Prosecution Patent Rights.

1.61 “Patent Right” means all patents and patent applications (including provisional applications), including all divisionals, continuations, substitutions, continuations-in-part, re-examinations, re-issues, additions, renewals, extensions, confirmations, registrations, any confirmation patent or registration patent or patent of addition based on any such patent, patent term extensions, and supplemental protection certificates or requests for continued examinations, foreign counterparts, and the like of any of the foregoing.

1.62 “Person” means any natural person, corporation, general partnership, limited partnership, joint venture, proprietorship or other business organization or a governmental agency or a political subdivision thereto.

1.63 “Product” means a preparation, kit, article of manufacture, composition of matter, material, compound, component or product which is, or which contains or comprises a Compound, including all formulations, modes of administration and dosage forms thereof.

1.64 “Prosecution and Maintenance” or “Prosecute and Maintain” means, with regard to a Patent Right, the preparation, filing, prosecution and maintenance of such Patent Right, as well as re-examinations, reissues, appeals, together with the initiation or defense of interferences, the initiation or defense of oppositions and other similar proceedings with respect to such Patent Right, and any appeals therefrom, including any nullity or revocation proceeding, or any of the foregoing, as applicable; provided, however, that “Prosecution and Maintenance” or “Prosecute and Maintain” shall not include any request for Patent Term Extension, any post-grant review or any other defense or enforcement action taken with respect to a Patent Right.

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1.65 “Regulatory Approval” means, with respect to a Product, the approval of the applicable Regulatory Authority necessary for the marketing and sale of such Product for a particular indication in a country. Regulatory Approval shall also include any “orphan drug” or similar designation.

1.66 “Regulatory Authority” means a federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the testing, manufacture, use, storage, import, promotion, marketing or sale of a pharmaceutical product in a country or territory, including the FDA, EMA and MHLW.

1.67 “Regulatory Documentation” means, with respect to any Compound or Product, all INDs, NDAs, and other regulatory applications submitted to any Regulatory Authority, copies of Regulatory Approvals, regulatory materials, drug dossiers, master files (including Drug Master Files, as defined in 21 C.F.R. §314.420 and any non-United States equivalents), and any other reports, records, regulatory correspondence, meeting minutes, telephone logs, and other materials relating to Regulatory Approval of such Compound or Product (including any underlying safety and effectiveness data whether or not submitted to any Regulatory Authority), or required to Research, Develop, Manufacture or Commercialize such Compound or Product, including any information that relates to pharmacology, toxicology, chemistry, manufacturing and controls data, batch records, safety and efficacy, and any safety database required to be maintained for Regulatory Authorities.

1.68 “Regulatory Exclusivity” means the ability to exclude Third Parties from Manufacturing or Commercializing a product that could compete with a Product in a country, either through data exclusivity rights, orphan drug designation, or such other rights conferred by a Regulatory Authority in such country other than through Patent Rights.

1.69 “Reimbursement Event” means the DUO Reimbursement Event or the Approval Reimbursement Event.

1.70 “Reimbursement Payment” means a payment to be made pursuant to Section 3.1.2(c)(i) upon achievement of the DUO Reimbursement Event or the Approval Reimbursement Event, as applicable.

1.71 “Research” means, with respect to a Compound, any activities prior to the initiation of the first IND-enabling GLP toxicology study for such Compound, excluding any medicinal chemistry activities.

1.72 “Royalty Term” means, with respect to an IPI-145 Product in a particular country, the period of time commencing on the first Commercial Sale of such IPI-145 Product in such country and ending on the last to occur of (a) the date on which all Duvelisib Patent Rights containing a Valid Claim covering the composition, formulation, preparation, Manufacture, Commercialization or other use of such IPI-145 Product in the country of sale have expired, (b) the date on which all Duvelisib Patent Rights containing a Valid Claim covering the Manufacture

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in the country of actual Manufacture of such IPI-145 Product have expired, or (c) the expiration of any Regulatory Exclusivity with respect to such IPI-145 Product in such country.

1.73 “Senior Executive” means, in the case of INFI, the Chief Executive Officer of INFI (or a senior executive officer designated by the Chief Executive Officer of INFI), and in the case of Licensee, the Chief Executive Officer of Licensee (or a senior executive officer designated by the Chief Executive Officer of Licensee).

1.74 “Sublicensee” means a Third Party to whom Licensee, or any of its Affiliates or any other Sublicensee, grants a sublicense as permitted under this Agreement, under any of the Duvelisib IP.

1.75 “Target Inhibitor” means any Compound which meets the criteria set forth in Exhibit I.

1.76 “Territory” means worldwide.

1.77 “Third Party” means any Person other than INFI, Licensee or any Affiliate of INFI or Licensee.

1.78 “Third Party Grantor” means INK, MICL or Purdue.

1.79 “United States” or “U.S.” means the United States of America and all of its territories and possessions.

1.80 “U.S. Bankruptcy Code” means of Title 11 of the United States Code, as amended.

1.81 “Valid Claim” means a claim of any issued, unexpired patent that has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise.

1.82 Additional Definitions. Each of the following definitions is set forth in the section of this Agreement indicated below:

<u>Definition:</u>	<u>Section:</u>
AAA	12.2.3
Agreement	Preamble
Arbitration Request	12.2.1
Approval Reimbursement Event	3.1.2.(c)(i)(2)
Audit Opinion	6.6
Audited Financial Statements	6.6
Breaching Party	11.2
Clinical Site Agreement	1.3.6
Development Plan	3.1.1
Disclosing Party	1.10
DUO Reimbursement Event	3.1.2.(c)(i)(1)
Effective Date	Preamble
Existing Confidentiality Agreement	1.10
Existing IPI-145 Product	6.1.1(d)

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<u>Definition:</u>	<u>Section:</u>
Existing Patents	9.2.4
Headlicense Breach	2.5.5
Holdback Payment	3.1.2(b)
Indemnified Party	10.3
Indemnifying Party	10.3
Independent Auditor	6.6
INFI	Preamble
INFI Acquirer	12.6.1
INFI Pre-Existing Affiliates	12.6.1
Initiating Party	7.6
INK	1.37
INK Mark	7.8.1
Infringed Patent Right	6.1.1(d)
Insurance Period	10.6.1
Joint Know-How	7.2
Joint Patent Rights	7.2
Licensee	Preamble
Licensee Common Stock	3.1.2(c)(ii)
Licensee Acquirer	12.6.2
Licensee Pre-Existing Affiliates	12.6.2
Losses	10.1
MICL	1.56
MICL Repayment Amount	6.1.3(b)(i)
MICL Royalty Payment	6.1.3(b)(i)
MICL Trailing Royalty Payment	6.1.3(c)
Non-Breaching Party	11.2
Paragraph IV Certification	7.4
Party or Parties	Preamble
Patent Term Extensions	7.9.1
Product Mark	2.5.1
Prosecution Patent Rights	7.3.1(a)
Purdue	1.56
Purdue Repayment Amount	6.1.3(b)(ii)
Purdue Royalty Payment	6.1.3(b)(ii)
Receiving Party	1.11
Registration Statement	3.1.2(c)(iv)
Reimbursable Amount	3.1.2(c)(i)
Reimbursement Announcement Date	3.1.2(c)(i)
Reimbursement Notice	3.1.2(c)(i)
Representatives	8.2.1
Reviewing Party	8.5
Royalty Termination Date	6.1.1(b)
SEC	3.1.2(c)(iv)
SEC Financial Statements	6.6
Securities Act	3.1.2(c)(ii)

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Definition:

Section:

Superseded Agreement
Term
Third Party Infringement
Transition Plan
Transition Period
Unaudited Financial Statements
U.S. GAAP

Preamble
11.1
7.4
3.2.1
3.2.1
6.6
1.58

**ARTICLE 2
GRANT OF RIGHTS**

2.1 License Grant to Licensee. During the Term, subject to the terms and conditions of this Agreement, INFI hereby grants Licensee an exclusive (exclusive even with respect to INFI), royalty-bearing, non-transferable (except in accordance with Section 12.5) license, with the right to sublicense (subject to Section 2.2), under the Duvelisib IP to Research, Develop, Manufacture, Commercialize and import the IPI-145 Compound and IPI-145 Products in the Territory in the Field. For the avoidance of doubt, the license set forth in this Section 2.1 includes exclusive rights with respect to IPI-145 Products that are Combination Products; provided, however, that nothing set forth in this this Agreement shall grant Licensee the right to Research, perform medicinal chemistry on, Develop, Manufacture, Commercialize or import any Compound (other than the IPI-145 Compound) that is claimed or covered by, or embodies, any Patent Right or Know-How owned by or licensed to INFI or any of its Affiliates. With respect to any exclusive license granted to Licensee under this Agreement, “exclusive” means exclusive to Licensee (even with respect to INFI and its Affiliates), except for (a) non-exclusive licenses granted by INFI to Third Parties under INFI Product Related Contracts that will not adversely affect Licensee’s ability to Research, Develop, Manufacture and Commercialize the IPI-145 Product in accordance with this Agreement, and (b) any limitations on the rights granted to INFI by any applicable Third Party Grantor in the INFI Third Party Agreements as of the Effective Date (or as amended thereafter to the extent permitted by this Agreement).

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2.2 Sublicenses.

2.2.1 Licensee shall have the right to grant sublicenses within the scope of the license under Section 2.1; provided, that any sublicense agreement shall be in writing and shall be consistent with the relevant restrictions and limitations set forth in this Agreement.

2.2.2 Licensee shall be liable for the failure of any of the Sublicensees to comply with the relevant obligations under this Agreement and shall, at its own cost, use Diligent Efforts to enforce compliance by the Sublicensees with the terms of the sublicense agreement.

2.3 License Grant to INFI. Subject to the terms and conditions of this Agreement, Licensee hereby grants to INFI a non-exclusive, perpetual, sublicensable (through multiple tiers), fully-paid up, worldwide, royalty-free license under the Licensee IP to Research (including to perform medicinal chemistry), Develop, Manufacture and Commercialize Compounds that are Target Inhibitors and Products that contain one or more of such Compounds, except that, (a) such license does not extend to any Compound or Product that is Controlled by Licensee, its Affiliates, licensees or Sublicensees as of the Effective Date, and (b) during the Term, such license does not extend to the IPI-145 Compound or IPI-145 Products.

2.4 INFI Third Party Agreements.

2.4.1 Licensee acknowledges and agrees, subject to the accuracy of the representations and warranties contained in Section 9.2.9, that (a) it has received a copy of the INFI Third Party Agreements existing as of the Effective Date and (b) all rights granted to and obligations of Licensee hereunder are subject to the terms and conditions of the INFI Third Party Agreements. Licensee acknowledges that the Third Party Grantors retain, and the activities conducted by Licensee, its Affiliates and the Sublicensees pursuant to this Agreement shall not limit, the Third Party Grantors' rights with respect to the Know-How and Patent Rights as set forth in the INFI Third Party Agreements.

2.4.2 Licensee shall, and shall cause its Affiliates and Sublicensees to, comply in all material respects with the INFI Third Party Agreements and take any action reasonably requested by INFI to prevent any potential material breach by Licensee, its Affiliates or Sublicensees of any applicable term of any INFI Third Party Agreements.

2.4.3 INFI shall not, without Licensee's prior written consent (which shall not be unreasonably withheld), terminate, or enter into any amendment to, any INFI Third Party Agreement which termination or amendment would have an adverse effect, in any material respect, on Licensee's rights or obligations under this Agreement or on the Research, Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Products as contemplated hereunder. To the extent permitted under the relevant INFI Third Party Agreement, INFI shall provide Licensee with a copy of all modifications to or amendments of the INFI Third Party Agreements, regardless of whether Licensee's consent was required with respect thereto.

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2.4.4 Each Party shall, and shall cause its Affiliates and licensees or sublicensees to, use Diligent Efforts not to perform any acts or omissions that would constitute a breach of any of the INFI Third Party Agreements which breach would have an adverse effect, in any material respect, on the Research, Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Products as contemplated hereunder. Licensee shall and shall cause its Affiliates and licensees or sublicensees to use Diligent Efforts not to perform any acts or omissions that would constitute a breach of any of the INFI Third Party Agreements which breach would have an adverse effect, in any material respect, on the Research, Development, Manufacture or Commercialization of the Target Inhibitors as contemplated under such INFI Third Party Agreement. Each Party shall provide the other promptly with notice of the occurrence of any such breach (or receipt of notice of an allegation of any such breach).

2.4.5 If INFI receives a notice from INK alleging that INFI has materially breached its obligations under the INK Agreement and such material breach is a result of Licensee's, its Affiliates' or Sublicensees' acts or omissions in breach of Licensee's obligations under this Agreement (such alleged material breach, a "Headlicense Breach"), then INFI shall promptly forward such notice of the Headlicense Breach to Licensee. Licensee shall have an opportunity to cure such Headlicense Breach in accordance with the terms set forth in Section 11.2 (but without any extension of the cure period therein), so long as Licensee provides evidence to INFI during such cure period of its actions to cure such breach. If Licensee fails to cure its Headlicense Breach or to provide evidence of such actions in accordance with the preceding sentence, then Licensee's Headlicense Breach shall be considered a material breach of this Agreement by Licensee, which material breach shall not be subject to any further cure periods under Section 11.2 of this Agreement.

2.4.6 [* * *]

2.4.7 Licensee acknowledges and agrees that (a) INFI may provide a copy of this Agreement, and any amendment to this Agreement, to any Third Party Grantor and (b) INFI may provide to any Third Party Grantor any information required to be provided to such Third Party Grantor in accordance with the applicable INFI Third Party Agreement. INFI acknowledges and agrees that Licensee may provide to any Affiliate or Sublicensee a copy of the INFI Third Party Agreements; provided, that such Affiliate or Sublicensee is subject to confidentiality and non-use obligations no less stringent than those set forth in Article 8.

2.4.8 Termination of the INK Agreement.

(a) Subject to the terms of this Section 2.4.8, the licenses granted to Licensee hereunder with respect to the Patent Rights and Know-How licensed to INFI pursuant to the INK Agreement shall terminate upon termination of the INK Agreement (except as provided in Section 15.1(b) therein) and the provisions of Section 15.2 or Section 15.3, as applicable, of the INK Agreement shall, to the extent applicable to Licensee, apply, except that any such license to Licensee of the rights granted to INFI under Section 2.1 of the INK Agreement to Research, Develop, Manufacture or Commercialize the IPI-145 Compound or the IPI-145 Products shall not

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terminate upon termination of the INK Agreement but instead shall remain in full force and effect if Licensee is not then in material breach of this Agreement and Licensee provides to INK within thirty (30) days after termination of the INK Agreement a written agreement to be bound as the licensee under the terms and conditions of the INK Agreement as to the field and territory in which Licensee has been granted rights under this Agreement.

(b) If the INK Agreement is terminated by INK solely as a direct result of Licensee's or any Affiliate's or Sublicensee's breach of this Agreement and INFI has not received notice from INK that INFI is otherwise in material breach of the INK Agreement as of the time of such termination, then Licensee and its Affiliates shall not directly or indirectly acquire or license rights from INK or any of its Affiliates permitting Licensee or any of its Affiliates to Research, perform medicinal chemistry on, Develop, Manufacture or Commercialize any Compound that is a Target Inhibitor or any Product containing such a Compound, in each case to the extent that such Compound or Product is licensed to INFI under the INK Agreement as of the date of the termination of the INK Agreement.

2.5 Trademark License.

2.5.1 Subject to the terms and conditions of this Agreement, INFI hereby grants Licensee an exclusive (even as to INFI), worldwide, royalty-free right and license to use and sublicense to its Affiliates and Sublicensees INFI's trademarks set forth on Exhibit E (each a "Product Mark"), solely during the Term, solely for the purpose of Commercializing IPI-145 Products.

2.5.2 Licensee shall ensure that the quality of the IPI-145 Product, and the Manufacture and Commercialization thereof, marketed under the Product Marks shall be consistent with the quality of any IPI-145 Product Manufactured by or on behalf of INFI prior to the Effective Date and with the standards of quality customary in the pharmaceuticals industry. Licensee shall, and shall cause its Affiliates and the Sublicensees to, at Licensee's expense, submit a sample of each proposed use of a Product Mark to INFI for approval, which approval shall not be unreasonably withheld, conditioned or delayed. If INFI reasonably objects to a proposed usage of a Product Mark, it shall give written notice of such objection to Licensee within [* * *] days of receipt of such sample, specifying the way in which such usage of the Product Mark fails to meet the quality standards, or quality control, style or usage guidelines for such Product or Product Mark. If Licensee, any of its Affiliates or any Sublicensee wishes to use the Product Mark in the manner included in such sample, it must remedy the failure and submit further samples to INFI for approval.

2.5.3 Licensee shall be responsible for all of INFI's reasonable and documented Out-of-Pocket Expenses and Internal Personnel Expenses incurred on or after November 1, 2016 associated with registering, prosecuting, maintaining and enforcing the Product Mark and shall reimburse INFI within [* * *] days of Licensee's receipt of an invoice therefor. Licensee shall have the first right to control the registration, prosecution, maintenance and enforcement of the Product Mark, in INFI's name. INFI shall, at Licensee's request, reasonably assist Licensee with

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respect thereto, and Licensee shall reimburse INFI for its reasonable and documented Out-of-Pocket Expenses and Internal Personnel Expenses related thereto.

2.5.4 If Licensee does not wish to register, prosecute, maintain or enforce a Product Mark in a country, Licensee shall notify INFI thereof.

2.5.5 If INFI determines in good faith that Licensee has not registered, prosecuted, maintained or enforced a Product Mark in a country in a timely manner, and in any event if INFI reasonably believes it is in danger of losing any rights in such Product Mark, then INFI shall have the right to register, prosecute, maintain or enforce such Product Mark in such country, at INFI's expense, and Licensee shall reasonably assist INFI with respect thereto.

2.5.6 As between the Parties and except as set forth in Section 2.5.7, and subject to the licenses set forth in this Section 2.5, INFI will own the Product Marks. Subject to Section 2.5.7, Licensee, its Affiliates and Sublicensees will not contest, oppose or challenge INFI's ownership of any Product Mark.

2.5.7 At any time following Licensee's filing of an NDA in the United States or an MAA in any other country in the Territory with respect to an IPI-145 Product, Licensee may request that INFI transfer ownership of the Product Mark and any goodwill associated therewith (but not any of the Duvelisib IP or any assets of INFI or any of its Affiliates, other than the Product Mark and the Internet domain names described hereafter) and any Internet domain names incorporating any Product Mark, or any variation or part of any Product Mark. Promptly following such request, INFI shall assign ownership of the Product Mark and any goodwill associated therewith (but not any of the Duvelisib IP or any assets of INFI or any of its Affiliates, other than the Product Mark and such Internet domain names) and any Internet domain names incorporating any Product to Licensee or its designee, and Licensee shall reimburse INFI for its reasonable and documented Out-of-Pocket Expenses and Internal Personnel Expenses related thereto.

2.6 Rights Retained by the Parties.

2.6.1 Any rights of INFI not expressly granted to Licensee pursuant to this Agreement shall be retained by INFI. Any rights of Licensee not expressly granted to INFI pursuant to this Agreement shall be retained by Licensee. Licensee agrees not to practice any Duvelisib IP except pursuant to the licenses expressly granted to Licensee in this Agreement (it being agreed that no such license grants any right to Research, perform medicinal chemistry on, Develop, have Developed, Manufacture, have Manufactured, use, sell, offer to sell, otherwise Commercialize or import any Compound, or any Product containing or comprising any Compound, other than the IPI-145 Compound, IPI-145 Product or a Combination Product to the extent set forth herein).

2.6.2 INFI shall not directly or indirectly, Research, perform medicinal chemistry on, Develop, Manufacture or Commercialize the IPI-145 Compound or any IPI-145 Product for the treatment, prevention, palliation or diagnosis of any Indication in humans or animals in the

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Territory, nor collaborate with, license, sell to or enable or otherwise authorize, permit or grant any right to any Third Party to Research, perform medicinal chemistry on, Develop, Manufacture or Commercialize the IPI-145 Compound or any IPI-145 Product for the treatment, prevention, palliation or diagnosis of any Indication in humans or animals in the Territory.

2.7 Section 365(n) of the U.S. Bankruptcy Code.

2.7.1 All rights and licenses now or hereafter granted by a Party to the other Party under or pursuant to any section of this Agreement constitute rights to “intellectual property” (as defined in the U.S. Bankruptcy Code). The Parties hereto acknowledge and agree that the payments provided for in the Agreement by Licensee to INFI hereunder, other than royalty payments pursuant to Section 6.1.1, do not constitute royalties within the meaning of Section 365(n) of the U.S. Bankruptcy Code or relate to licenses of intellectual property hereunder.

2.7.2 If (a) a case under the U.S. Bankruptcy Code is commenced by or against INFI, (b) this Agreement is rejected as provided in the U.S. Bankruptcy Code and (c) Licensee elects to retain its rights hereunder as provided in Section 365(n) of the U.S. Bankruptcy Code, then INFI (in any capacity, including debtor-in-possession) and its successors and assigns (including any trustee) shall provide to Licensee all intellectual property licensed hereunder, and agrees to grant and hereby grants to Licensee and its Affiliates a right to access and to obtain possession of and to benefit from and, in the case of any chemical or biological material or other tangible item of which there is a fixed or limited quantity, to obtain a pro rata portion of, such articles and materials which were to have been, but were not, transferred as part of the Transition Plan.

2.7.3 The Party against which a case under the U.S. Bankruptcy Code is commenced shall not interfere with the exercise by the other Party or its Affiliates of rights and licenses to intellectual property licensed hereunder and embodiments thereof in accordance with this Agreement and agrees to use Diligent Efforts to assist the other Party and its Affiliates to obtain such intellectual property and embodiments thereof in the possession or control of Third Parties as reasonably necessary or desirable for the other Party or its Affiliates or licensee or sublicensees to exercise such rights and licenses in accordance with this Agreement.

2.8 Infinity Exclusivity Covenants. During the Term, except pursuant to and in accordance with the terms of this Agreement, neither INFI nor any of its Affiliates shall directly or indirectly conduct clinical trials of the IPI-443 Product as a therapeutic, or Commercialize the IPI-443 Product, in each case in the Field in the Territory, nor collaborate with, license, sell to, or enable or otherwise authorize, permit or grant any right to, any Third Party to Commercialize or conduct such clinical trials of the IPI-443 Product in the Field in the Territory. For the purposes of this Section 2.8 only, Field shall not include (a) immunotherapy treatments that treat T-cells ex-vivo or (b) any other ex-vivo uses.

**ARTICLE 3
RESEARCH AND DEVELOPMENT**

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3.1 Diligence. Licensee (itself or through its Affiliates and the Sublicensees) shall use Diligent Efforts to Develop, Manufacture and Commercialize one IPI-145 Product in the Field in the Territory.

3.1.1 Development Plan. The initial plan for Development activities to be conducted by Licensee (itself or through its Affiliates and the Sublicensees) with respect to the IPI-145 Product during the Term is set forth in Exhibit G (the "Development Plan"). The Development Plan may be updated or amended by Licensee from time to time during the Term; provided that such updated or amended Development Plan shall be sufficient to permit INFI to comply with its obligations under this Agreement and the INK Agreement. Licensee shall provide to INFI any such updated or amended Development Plan concurrently with the delivery of Development reports pursuant to Section 3.3. To the extent that any provision of the Development Plan conflicts with or is inconsistent with the provisions of this Agreement, the provisions of this Agreement shall control.

3.1.2 Expenditures.

(a) Licensee's Diligent Efforts to Develop one IPI-145 Product will include demonstration that it, its Affiliates and the Sublicensees, [* * *].

(b) Notwithstanding anything to the contrary in this Agreement (other than the provisions of Section 3.1.4(b)), Licensee will be responsible for all reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses related to the IPI-145 Compound or IPI-145 Product in the Territory incurred by INFI on or after November 1, 2016, including all costs related to the Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product and all Patent Expenses; provided, however, that Licensee shall not have any obligation to reimburse INFI for any such costs incurred by INFI after the Effective Date except for those costs incurred in accordance with this Agreement or as directed by Licensee; provided, that Licensee shall be permitted to holdback [* * *] of all such payments incurred by INFI after the date a Key Item is to have been completed (as set forth in the Transition Plan) and such Key Item has not been completed (other than through any action or inaction of Licensee) (such payments actually withheld by Licensee, the "Holdback Payments"); further, provided, that within [* * *] days following the completion of such Key Item that entitled Licensee to holdback the Holdback Payment, Licensee shall pay the amount of such Holdback Payment to INFI. Subject to the foregoing, Licensee shall reimburse INFI for all such expenses within [* * *] days following Licensee's receipt of an invoice therefor.

(c) Reimbursement for Pre-Effective Date Costs and Expenses.

(i) The Parties agree and acknowledge that, INFI's and its Affiliates' aggregate internal costs and Out-of-Pocket Expenses related to the IPI-145 Product between July 1, 2016 and October 31, 2016, and INFI's and its Affiliates' costs related to the clinical studies described in Section 3.1.4(b), are estimated at [* * *] (the "Reimbursable").

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Amount). Subject to the terms and conditions of this Agreement, Licensee shall reimburse such costs by paying to INFI the following amounts:

(1) Six Million Dollars (\$6,000,000) upon the determination that the DUO clinical trial has met its [* * *], each as defined in the DUO clinical trial protocol, attached as Exhibit H (such event, the “DUO Reimbursement Event”) and;

(2) Twenty-Two Million Dollars (\$22,000,000) upon the approval of an NDA or MAA for an IPI-145 Product (such event, the “Approval Reimbursement Event”).

To the extent that the payments made to INFI under Sections 3.1.2(c)(1) and 3.1.2(c)(2) are less than the Reimbursable Amount, the remainder of the Reimbursable Amount shall be reimbursed to INFI through the payment of royalties pursuant to Section 6.1.1.

Licensee shall pay the amounts set forth in Section 3.1.2(c)(i)(1) and Section 3.1.2(c)(i)(2) within [* * *] days after the achievement of the relevant Reimbursement Event; provided, however, that Licensee shall have no obligation to make the relevant Reimbursement Payment upon the achievement of the applicable Reimbursement Event until INFI shall have completed the items marked as “Key Items” on the Transition Plan that were to have been completed (as set forth in the Transition Plan) prior to the date on which such Reimbursement Event is achieved. Within [* * *] calendar days after Licensee becomes aware that a Reimbursement Event has been achieved, it shall notify INFI thereof in writing (the “Reimbursement Notice”) and shall issue a public announcement of such achievement, which announcement shall have been subject to written approval by INFI, such approval not to be unreasonably withheld, conditioned or delayed. The date of such public announcement is hereinafter referred to as the “Reimbursement Announcement Date.”

(ii) Form of Payment. Within [* * *] days after the achievement of the relevant Reimbursement Event set forth in Section 3.1.2(c)(i)(1) or Section 3.1.2(c)(i)(2), Licensee shall make a Reimbursement Payment (1) in Dollars in immediately available funds, or (2) in lieu of (or as partial consideration with) making the Reimbursement Payment in Dollars, by issuing shares of its common stock, \$0.0001 par value per share (“Licensee Common Stock”), such shares constituting “restricted securities” within the meaning of Rule 144 under the Securities Act of 1933, as amended (the “Securities Act”). As part of any Reimbursement Notice, Licensee shall inform INFI of its form of payment election, whether in Dollars, shares of Licensee Common Stock or a combination of any of the foregoing.

(iii) Calculating Reimbursement Payments. For any portion of any Reimbursement Payment in which Licensee elects to issue shares of Licensee Common Stock, the number of shares of Licensee Common Stock to be so issued will be determined by multiplying (1) 1.025 by (2) the number of shares of Licensee Common Stock equal to (a) the amount of the Reimbursement Payment to be paid in shares of Licensee Common Stock, divided by (b) the

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average closing price of a share of Licensee Common Stock as quoted on NASDAQ for the twenty (20) day period following the Reimbursement Announcement Date.

(iv) Registration Rights. If Licensee issues shares of Licensee Common Stock to INFI to satisfy all or a portion of a Reimbursement Payment, Licensee shall as promptly as possible, but no later than [* * *] Business Days following the issuance of such shares, file a registration statement on Form S-3 (or such other registration statement then available to Licensee, each, a "Registration Statement") with the Securities and Exchange Commission (the "SEC") registering all such shares of Licensee Common Stock issued as consideration for all or a portion of such Reimbursement Payment. Licensee shall use commercially reasonable efforts to have the applicable Registration Statement and the related prospectuses declared effective by the SEC as soon as possible thereafter and to prepare and file with the SEC such amendments and supplements to the registration as may be necessary to keep such Registration Statement effective until the first anniversary of the effective date of such Registration Statement. The obligations of the Licensee to maintain an effective Registration Statement under this Section 3.1.2(c)(iv) for any issuance of Licensee Common Stock shall cease on the first anniversary of the effective date of such Registration Statement.

(v) Resale Limitations. In any resales within the first three months after the effective date of the applicable Registration Statement, regardless of whether conducted pursuant to the Registration Statement, INFI shall effect such sales only through [* * *] or another broker to be mutually agreed upon between INFI and Licensee.

(vi) Legends. All Licensee Common Stock issued as consideration for all or a portion of a Reimbursement Payment shall bear the following legend:

THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY.

(vii) Authorizations; Approvals; Timing. The Parties acknowledge and agree that it shall be a condition to the closing of the sale of any issuance of shares of Licensee Common Stock that: (i) all material authorizations, consents, orders or approvals of, or regulations, declarations or filings with, or expirations of applicable waiting

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periods imposed by, any Governmental Authority necessary for the consummation of the sale of such shares shall have been obtained or filed or shall have occurred (as applicable), and (ii) INFI shall have received such customary certificates, instruments or other similar closing deliverables as it may reasonably request. Notwithstanding anything herein to the contrary, in no event will Licensee issue any shares of Licensee Common Stock without first obtaining approval from its stockholders to the extent that such approval is then required as a condition to such issuance of such shares pursuant to NASDAQ Listing Rule 5635 or any successor rule. The right of Licensee to pay all or a portion of a Reimbursement Payment in shares of Licensee Common Stock shall immediately terminate if the closing of the sale of such shares shall not have taken place within [* * *] calendar days after the Reimbursement Announcement Date. In the event of such termination, Licensee shall, within a period of [* * *] Business Days thereafter, make such Reimbursement Payment to INFI in Dollars in immediately available funds.

3.1.3 Subcontractors. Licensee may perform its Development, Manufacturing or Commercialization rights or obligations under this Agreement through one or more subcontractors or consultants, provided, that: (a) Licensee shall remain responsible for the work allocated to, and payment to, such subcontractors and consultants as it selects to the same extent it would if it had done such work itself; and (b) each such subcontractor or consultant shall undertake in writing obligations of confidentiality and non-use regarding INFI's Confidential Information that are no less restrictive than those undertaken by Licensee pursuant to ARTICLE 8 hereof.

3.1.4 Continuation of Clinical Trials.

(a) Licensee shall assume all costs associated with the [* * *] clinical trials as of [* * *] (unless Licensee provides INFI with written notice prior to [* * *] that the [* * *] clinical trial will be wound down, in which case it shall be wound down under Section 3.1.4(b)).

(b) INFI shall be responsible for winding down the [* * *] clinical trials (and the [* * *] clinical trial if Licensee elects to wind down the [* * *] clinical trial pursuant to Section 3.1.4(a)) until December 31, 2016, including the costs thereof, and shall use Diligent Efforts to wind down such clinical trials in accordance with the Transition Plan. After [* * *], Licensee shall become responsible for all activities and costs to wind down such clinical trials; provided, however, that INFI shall reimburse Licensee for Licensee's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses for winding down such clinical trials (such reimbursements to be made within [* * *] days of INFI's receipt of invoice therefor from Licensee). In any event, INFI's aggregate expenditures under this Section 3.1.4(b), including INFI's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses and INFI's reimbursement of Licensee's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses, shall be capped at Four Million Five Hundred Thousand Dollars (\$4,500,000).

(c) Following Licensee's assumption of responsibility for the DUO clinical trial, Licensee shall continue the DUO clinical trial in accordance with the DUO clinical trial protocol attached as Exhibit H until it is complete; provided, however, that in the event that

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Licensee, a Regulatory Authority, an institutional review board or independent safety board determines that the DUO clinical trial would pose an unacceptable safety risk for subjects or patients participating in it, then Licensee shall not be obligated to continue the DUO clinical trial and Licensee shall provide INFI with an explanation of the safety issue concerns, including those raised by such Regulatory Authority, institutional review board or independent safety board and, if requested by INFI, reasonable documentation thereof.

3.2 Transfer of INFI Know-How.

3.2.1 Each Party shall perform its respective obligations under the transition plan attached hereto as Exhibit F (the “Transition Plan”). Except for those obligations specified in the Transition Plan or in this Agreement to endure past the end of the Transition Period, by the end of the Transition Period, (a) each Party shall have performed all of its obligations under the Transition Plan, (b) INFI shall have disclosed and transferred to Licensee the process used by INFI as of the Effective Date for the Manufacture of IPI-145 Product and such other Manufacturing specifications set forth in Exhibit F-2, (c) INFI shall have provided Licensee with copies of such other relevant material and information included in the Duvelisib Know-How with respect to the IPI-145 Product as set forth in the Transition Plan, and (d) INFI shall have transferred control and ownership to Licensee of the materials and inventory of the IPI-145 Compound and IPI-145 Product identified in the Transition Plan in such amounts as set forth in Exhibit F-3. “Transition Period” means the period beginning on the Effective Date and ending on [* * *]. Prior to the end of the Transition Period, INFI shall provide to Licensee a copy all of all Clinical Site Agreements.

3.2.2 INFI Product Related Contracts.

(a) Within thirty (30) days after the Effective Date, (A) to the extent not previously provided to Licensee, INFI will provide Licensee with electronic copies of each INFI Product Related Agreement and (B) the Parties will, in good faith, mutually determine in writing which INFI Product Related Contracts will be assigned to Licensee and which will be wound down or terminated. INFI shall use Diligent Efforts to assign to Licensee, in accordance with the schedule determined in accordance with Section 3.2.2(c), the rights and obligations under the applicable INFI Product Related Contracts (through a novation, except that if a novation cannot be secured for an INFI Product Related Contract, INFI shall use Diligent Efforts to assign such INFI Product Related Contract to Licensee and Licensee shall indemnify, defend and hold harmless the INFI Indemnitees from and against any and all Losses arising from such INFI Product Related Contract after the Effective Date except to the extent such Losses are caused by INFI’s or its Affiliate’s failure to comply with the terms of such INFI Product Related Contract, breach of any terms or conditions of this Agreement, or failure to follow Licensee’s reasonable instructions with respect to INFI’s and its Affiliates’ activities in connection therewith), and Licensee shall accept such rights and obligations and accept all liability with respect to INFI’s obligations under such INFI Product Related Contracts other than those payment obligations (i) incurred by INFI prior to November 1, 2016, or (ii) that do not relate to the IPI-145 Compound or IPI-145 Product; provided, however, that INFI shall have no obligation to incur any costs or payment obligations in

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order to effect such assignment, unless Licensee agrees to any bear all such costs and payment obligations.

(b) With respect to each applicable INFI Product Related Contract (i.e., an INFI Product Related Contract that Licensee and INFI determined should be assigned to Licensee), until the earlier of the date on which such INFI Product Related Contract (i) is so assigned to Licensee, (ii) expires or (iii) is terminated, INFI shall use Diligent Efforts to provide to Licensee the benefits of such INFI Product Related Contract to the extent that such benefits relate to the IPI-145 Compound or IPI-145 Product and enforce, at the request and expense of and for the account and benefit of Licensee, any rights of INFI arising thereunder against any counterparty to the INFI Product Related Contracts, including the right to seek any available remedies or to elect to terminate such INFI Product Related Contracts in accordance with the terms thereof upon the direction of Licensee. In connection with the foregoing, Licensee shall assume responsibility for payments incurred after the Effective Date under each such INFI Product Related Contract and Licensee shall perform the obligations of INFI under each such INFI Product Related Contract, in each case, to the extent related to the IPI-145 Compound or IPI-145 Product; provided, however, that Licensee shall reimburse INFI for any amounts pre-paid by INFI under any INFI Product Related Contract as of the Effective Date, provided that such prepayments relate to the IPI-145 Compound or the IPI-145 Product.

(c) With respect to each applicable INFI Product Related Contract, INFI will use Diligent Efforts to cooperate with Licensee on determining the preferred effective dates of assignment for key INFI Product Related Contracts and the accounting groups of each Party will cooperate with Licensee in the assessment of proper accounting treatment of the applicable INFI Product Related Contracts.

3.2.3 During the Transition Period, INFI shall make its relevant and available scientific and technical personnel reasonably available to Licensee to answer questions or provide instruction as reasonably requested by Licensee concerning the Duvelisib Know-How delivered pursuant to this Section 3.2 in order to facilitate the transfer of such Duvelisib Know-How to Licensee. Notwithstanding the foregoing, INFI shall have no obligation to (i) maintain any personnel or (ii) following the disclosure or transfer, as applicable, of information and materials as described in Section 3.2.1, maintain any records, files or other materials, related to the IPI-145 Product or any of the information or materials disclosed or transferred hereunder.

3.2.4 Licensee shall reimburse INFI for any reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses incurred by INFI pursuant to Sections 3.2.1, 3.2.2, and 3.2.3 within [* * *] days following receipt by Licensee of an invoice providing reasonable documentation of such expenses.

3.3 Reports. Licensee shall submit semi-annual written progress reports by December 20 and June 20 of each year, summarizing Licensee's (and its Affiliates' and the Sublicensees') activities related to the development of the IPI-145 Product in the Field, including Development activities and an overview of future Development activities reasonably contemplated, including

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the status of obtaining Marketing Authorization for each of the United States, Europe and Japan, and planning for Commercialization in such territories (including a projection of all such activities for the next thirty days). Such reports shall be submitted, with respect to activities for the United States, until first Commercial Sale of the IPI-145 Product in the United States, and with respect to activities for countries or regions outside the United States, until first Commercial Sale of the IPI-145 Product in any country outside the United States.

**ARTICLE 4
REGULATORY MATTERS**

4.1 Licensee Regulatory Responsibility.

4.1.1 INDs. Subject to this Section 4.1.1, INFI shall own and be responsible for preparing, filing and maintaining all INDs for the IPI-145 Compound and IPI-145 Product in the Field in the Territory as of the Effective Date and Licensee shall reimburse INFI's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses related thereto. Promptly after the Effective Date and in any event no later than the end of the Transition Period, INFI and Licensee, as applicable, shall make the necessary filings with the Regulatory Authorities in the Territory necessary to transfer the INDs for the IPI-145 Compound and IPI-145 Product to Licensee, and following the approval of such transfer by the applicable Regulatory Authorities (if applicable) or other effectuated transfer, Licensee shall own all such INDs and be the IND holder for the IPI-145 Compound and IPI-145 Product in the Territory.

(a) Until such time as the INDs have been transferred to Licensee, INFI shall act as Licensee's agent to maintain the INDs and communicate with Regulatory Authorities in the Territory relating to the IPI-145 Compound and IPI-145 Product and Licensee shall reimburse INFI's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses related thereto. Except with respect to non-substantive administrative correspondence with Regulatory Authorities, (i) INFI shall act on Licensee's behalf as instructed by Licensee with respect to submissions related to the INDs for the IPI-145 Compound and IPI-145 Product and receiving and submitting correspondence with Regulatory Authorities in the Territory related thereto and (ii) INFI will provide to Licensee copies of all correspondence received from Regulatory Authorities within [* * *] Business Days of receipt or such earlier date as required by applicable Law or the relevant Regulatory Authority or if necessary given the circumstances of the correspondence, and INFI shall not respond to such correspondences or otherwise interact with the Regulatory Authorities except as instructed by Licensee.

(b) With respect to the INDs for the IPI-145 Compound and IPI-145 Product, Licensee will provide INFI with copies of all submissions in advance of filing so that INFI may submit such submissions on behalf of Licensee. INFI will provide to Licensee copies of any material written communications to or from Regulatory Authorities related to the IPI-145 Compound and the IPI-145 Product within [* * *] Business Days of receipt or delivery of such communication, as the case may be, or such earlier date as required by applicable Law or the relevant Regulatory Authority or if necessary given the circumstances of the correspondence. In

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addition, except for submissions which are required to meet the “Sponsor” obligations under 21 C.F.R. 312 and analogous regulations in non-U.S. jurisdictions, during such period INFI will be responsible for all communications and other dealings with Regulatory Authorities in the Territory with respect to the IPI-145 Compound and the IPI-145 Product, provided, however, that INFI will only communicate with the Regulatory Authorities as instructed by Licensee. To the extent permitted by applicable Law, INFI will arrange all meetings with Regulatory Authorities such that representatives of Licensee are able to attend and participate. Licensee shall reimburse INFI’s reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses related to the activities set forth in this Section 4.1.1.

4.1.2 Marketing Authorizations. Licensee shall, at its sole cost, use Diligent Efforts, itself or through its Affiliates and the Sublicensees, to prepare, file, prosecute and maintain all applications for Marketing Authorization for the marketing, use, promotion, import, sale, distribution or commercialization of the IPI-145 Product in the Field in the Territory.

4.1.3 Regulatory Documentation. Except as otherwise set forth in this Section 4.1, Licensee shall own and be responsible for preparing, filing and maintaining all Regulatory Documentation and Regulatory Approvals that are required for the Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product in the Field in the Territory; and Licensee shall be responsible for all other submissions to, and communications and interactions with, Regulatory Authorities in the Territory with respect to the IPI-145 Compound or IPI-145 Product in the Field.

4.2 Safety Data Reporting. As set forth in the Transition Plan, until INFI has transferred all INDs to Licensee, INFI shall be responsible for reporting all adverse drug reactions/experiences with respect to the IPI-145 Product in the Field to the appropriate Regulatory Authorities in the Territory in accordance with all applicable Laws. INFI shall ensure that its Affiliates comply with such reporting obligations in the Territory. Following the transfer of all INDs to Licensee, Licensee shall be responsible for reporting all adverse drug reactions/experiences with respect to the IPI-145 Product in the Field to the appropriate Regulatory Authorities in the Territory in accordance with all applicable Laws. Licensee shall ensure that its Affiliates and the Sublicensees comply with such reporting obligations in the Territory. Licensee shall be responsible for each Party’s reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses with respect the activities under this Section 4.2.

**ARTICLE 5
COMMERCIALIZATION**

5.1 Overview. As between the Parties, and subject to the terms and conditions of this Agreement, Licensee shall control, and bear all responsibility, costs and expenses associated with, the Commercialization of the IPI-145 Product in the Field in the Territory.

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5.2 Commercial Diligence. Licensee shall, at its sole cost, use Diligent Efforts, itself or through its Affiliates and the Sublicensees, to Commercialize the IPI-145 Product that receives Marketing Authorization in the Field in the Territory.

5.3 Standards of Conduct. In Commercializing the IPI-145 Product under this Agreement, Licensee shall, and shall ensure that its Affiliates and the Sublicensees, comply in all respects with the INFI Third Party Agreements and with all applicable Laws and applicable guidelines, including those concerning the advertising, sales and marketing of prescription drug products, the Foreign Corrupt Practices Act of 1977, as amended, and any applicable local anti-bribery Laws.

5.4 Progress Reports. Within [* * *] days after the first Commercial Sale of IPI-145 Product by Licensee or any of its Affiliates or any Sublicensee, and by each January 20th thereafter, Licensee shall provide a forward-looking, non-binding forecast, for the relevant Calendar Year (or, with respect to the first such forecast, the remainder of the current Calendar Year), of anticipated Annual Net Sales (as defined in this Agreement) of the IPI-145 Product; provided, however, that if the first Commercial Sale of the IPI-145 Product by Licensee or any of its Affiliates or any of the Sublicensees occurs between October 1st and December 31st, the first such forecast shall cover the remainder of the current Calendar Year (if applicable) and the next Calendar Year, and no forecast shall be due by January 20th of such next Calendar Year. By way of example and without limitation, if the first Commercial Sale of the IPI-145 Product by Licensee, any of its Affiliates or any Sublicensee occurs on November 1, 2017, the first such forecast shall be due by November 20, 2017 and shall cover the period from November 20, 2017 through December 31, 2018 and no forecast shall be due by January 20, 2018.

**ARTICLE 6
PAYMENTS**

6.1 Payments.

6.1.1 Royalties to INFI.

(a) Licensee will pay royalties to INFI on Annual Net Sales of IPI-145 Product at the applicable rates set forth below, subject to the provisions of this Section 6.1 and Section 6.2. For the avoidance of doubt, royalties shall be payable only once with respect to the same unit of IPI-145 Product.

<i>Annual Net Sales of IPI-145 Product</i>	<i>Royalty Rate</i>
The portion less than US\$[* * *]	[* * *]%
The portion greater than or equal to US\$[* * *] and less than US\$[* * *]	[* * *]%
The portion greater than or equal to US\$[* * *] and less than US\$[* * *]	[* * *]%
The portion greater than or equal to US\$[* * *]	[* * *]%

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(b) Royalties will be payable to INFI [* * *] on an IPI-145 Product-by-IPI-145 Product and country-by-country basis until the later of (i) expiration of the applicable Royalty Term or (ii) ten (10) years after the first Commercial Sale of such IPI-145 Product in such country (such later date, the “Royalty Termination Date”).

(c) Solely with respect to Net Sales in the United States, following the expiration of the last to expire Valid Claim of any Duvelisib Patent Right claiming or covering the composition, formulation, preparation or method of manufacture or use of the applicable IPI-145 Product (or the IPI-145 Compound therein) in the United States, the applicable royalty under Section 6.1.1(a) with respect to Net Sales of such IPI-145 Product in the United States shall be reduced by fifty percent (50%), with the Net Sales for such IPI-145 Product in the United States allocated pro rata across each of the relevant royalty tiers. [* * *].

(d) If Licensee (i) reasonably determines in good faith that it is required to obtain a license from a Third Party to any Patent Right that, in the absence of such license, would be infringed by the Commercialization in a particular country of the IPI-145 Product in the form in which the IPI-145 Product exists as of the Effective Date (the “Existing IPI-145 Product”), which Patent Right (A) is not licensed or sublicensed hereunder, (B) claims the composition of matter of the IPI-145 Compound contained in the Existing IPI-145 Product or the method of use of such composition of matter in hematologic malignancies, and (C) is necessary (and not just useful) to Commercialize the Existing IPI-145 Product (the relevant “Infringed Patent Right”), or (ii) shall be subject to a final court or other binding order or ruling that such Commercialization of the Existing IPI-145 Product infringed an Infringed Patent Right requiring any payments, including a payment of a royalty to the applicable Third Party Patent Right holder in respect of future sales of the Existing IPI-145 Product in a country in the Territory, then the amount of Licensee’s royalty payments to INFI under Section 6.1.1(a) shall be reduced by fifty percent (50%) of the amount paid by Licensee to such Third Party with respect to such Infringed Patent Right in each applicable Calendar Quarter that is reasonably and appropriately allocable to the Existing IPI-145 Product in such country in each Calendar Quarter; provided, however, that in no event will a deduction or deductions under this Section 6.1.1(d) reduce any royalty payment made by Licensee in respect of Net Sales (or Combination Product Net Sales) of the Existing IPI-145 Product in such country in such Calendar Quarter by more than fifty percent (50%) of the royalties otherwise payable by Licensee to INFI under Section 6.1.1(a) with respect to IPI-145 Product.

(e) Notwithstanding any provision of this Agreement to the contrary, in no event will the deductions or adjustments under Sections 6.1.1(c) or 6.1.1(d) cause the royalties due to INFI in any applicable Calendar Quarter with respect to any IPI-145 Product in such country to be less than fifty percent (50%) of the royalties otherwise payable by Licensee to INFI under Section 6.1.1(a) (without taking into account Sections 6.1.1(c) or 6.1.1(d)) with respect to IPI-145 Product.

6.1.2 Paid Up License Following Royalty Termination Date. Except with respect to the payments owed to INFI pursuant to Section 6.1.3, following the Royalty Termination Date on an IPI-145 Product-by-IPI-145 Product and country-by-country basis, Licensee’s licenses with

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respect to such IPI-145 Product shall continue in effect, but become fully paid-up and royalty-free and shall become perpetual and irrevocable upon expiration of this Agreement or termination by Licensee for INFI's breach; provided, however, that, following the last Royalty Termination Date with respect to all IPI-145 Products, on a country-by-country basis, Licensee's licenses with respect to all IPI-145 Compounds and IPI-145 Products shall continue in effect, but become fully paid-up, royalty-free, and shall become perpetual and irrevocable upon expiration of this Agreement or termination by Licensee for INFI's breach.

6.1.3 Payments to Third Party Grantors.

(a) Payments to INK. INFI shall be responsible for making all payments owed to INK on INFI's Qualifying Transaction Revenue (as defined in the INK Agreement) in accordance with the terms of the INK Agreement. Licensee shall have no obligation to make any such payments to INK and the royalties and other amounts paid under this Agreement to INFI shall not be increased to cover such amounts owed to INK by INFI under the INK Agreement. INFI hereby covenants to make all payments owed to INK on INFI's Qualifying Transaction Revenue.

(b) Payments to Mundipharma and Purdue.

(i) In addition to the royalty owed to INFI pursuant to Section 6.1.1, Licensee shall pay to INFI (for payment to MICL) an amount equal to 3.756% of Net Sales (the "MICL Royalty Payment") of IPI-145 Product. For purposes of this Section 6.1.3(b)(i) only, Net Sales of Combination Products will be calculated in accordance with Section 1.59(I) and will not be reduced by the multiplication factor reflected in Section 1.59(II). INFI shall provide Licensee with prompt notice if the Securities Purchase Agreement (as defined in the MICL Agreements) is terminated pursuant to Section 8.1 thereof, and in such case, the MICL Royalty Payment shall be reduced to 2.817% of Net Sales. Licensee shall only be obligated to make the MICL Royalty Payment on Net Sales of IPI-145 Product until such time as MICL has received an aggregate amount equal to \$244,547,850 (the "MICL Repayment Amount") from the combination of MICL Royalty Payments made by Licensee with respect to IPI-145 Product and other royalties paid by INFI or its Affiliates or licensees or sublicensees with respect to any other Products subject to the royalty payments under the MICL Agreement with MICL. On an annual basis, INFI shall inform Licensee of the remaining balance of the MICL Repayment Amount. INFI shall provide Licensee with prompt notice when such MICL Repayment Amount has been paid in full, in which case, (a) Licensee shall no longer be required to make the MICL Royalty Payment to INFI and (b) Licensee will be required to make the MICL Trailing Royalty Payment to INFI pursuant to Section 6.1.3(c). In the event the rate of the MICL Royalty Payment has changed from the initial rate, as set forth in this Section 6.1.3(b)(i), and, as a result, Licensee has overpaid to INFI the MICL Royalty Payment with respect thereto, such overpaid amount shall be credited toward Licensee's MICL Royalty Payments or MICL Trailing Royalty Payment until fully credited.

(ii) In addition to the royalty owed to INFI pursuant to Section 6.1.1, Licensee shall pay to INFI (for payment to Purdue) an amount equal to 0.244% of Net Sales

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(the "Purdue Royalty Payment") of an IPI-145 Product. For purposes of this Section 6.1.3(b)(ii) only, Net Sales of Combination Products will be calculated in accordance with Section 1.59(I) and will not be reduced by the multiplication factor reflected in Section 1.59(II). INFI shall provide Licensee with prompt notice if the Securities Purchase Agreement (as defined in the MICL Agreements) is terminated pursuant to Section 8.1 thereof, and in such case, the Purdue Royalty Payment shall be reduced to 0.183% of Net Sales. Licensee shall only be obligated to make the Purdue Royalty Payment on Net Sales of IPI-145 Product until such time as Purdue has received an aggregate amount equal to \$15,908,706 (the "Purdue Repayment Amount") from the combination of Purdue Royalty Payments made by Licensee with respect to IPI-145 Product and other royalties paid by INFI or its Affiliates or licensees or sublicensees with respect to any other Products subject to the royalty payments under the MICL Agreement with Purdue. On an annual basis, INFI shall inform Licensee of the remaining balance of the Purdue Repayment Amount. INFI shall provide Licensee with prompt notice when such Purdue Repayment Amount has been paid in full, in which case, Licensee shall no longer be required to make the Purdue Royalty Payment to INFI. In the event the rate of the Purdue Royalty Payment has changed from the initial rate, as set forth in this Section 6.1.3(b)(ii), and, as a result, Licensee has overpaid to INFI the Purdue Royalty Payment with respect thereto, such overpaid amount shall be credited toward Licensee's Purdue Royalty Payments or, if the Purdue Repayment Amount has been paid in full, any other payment owed by Licensee to INFI.

(iii) On an IPI-145 Product-by-IPI-145 Product and country-by-country basis, if the sole basis for the continuance of a Royalty Term is the existence of Regulatory Exclusivity, the MICL Royalty Payment and the Purdue Royalty Payment shall be reduced by fifty percent (50%).

(iv) INFI shall promptly pay the full amount of all MICL Royalty Payments and Purdue Royalty Payments received from Licensee to MICL, subject only to the last sentence of Section 6.1.3(b)(i) and the last sentence of Section 6.1.3(b)(ii).

(c) Mundipharma Trailing Royalty. Once the MICL Repayment Amount has been paid in full, Licensee shall no longer be required to pay the MICL Royalty Payment. Instead, Licensee will be required to pay MICL an amount equal to one percent (1%) of Net Sales of IPI-145 Product in the United States (the "MICL Trailing Royalty Payment"). For purposes of this Section 6.1.3(c) only, Net Sales of Combination Products will be calculated in accordance with Section 1.59(I) and will not be reduced by the multiplication factor reflected in Section 1.59(II). The MICL Trailing Royalty Payment shall be paid on an IPI-145 Product-by-IPI-145 Product basis until the expiration of the applicable Royalty Term in the United States. Thereafter, no further amounts shall be payable by Licensee to INFI for payment to MICL with respect to the MICL Agreements.

(i) On an IPI-145 Product-by-IPI-145 Product basis, if the sole basis for the continuation of a Royalty Term in the United States is the existence of Regulatory Exclusivity, then the MICL Trailing Royalty Payment shall be reduced by fifty percent (50%).

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(ii) If Licensee (i) reasonably determines in good faith it, in order to avoid infringement of any patent not licensed hereunder, it is reasonably necessary to obtain a license from a Third Party in order to Manufacture or Commercialize an IPI-145 Product in a country in the Territory and to pay a royalty or other consideration under such license (including in connection with the settlement of a patent infringement claim), or (ii) shall be subject to a final court or other binding order or ruling requiring any payments, including a payment of a royalty to a Third Party patent holder in respect of future sales of any IPI-145 Product in a country in the Territory, then the amount of the MICL Trailing Royalty Payment shall be reduced by fifty percent (50%) of the amount paid by Licensee to such Third Party that is reasonably and appropriately allocable to, as applicable, such IPI-145 Product; provided, however, that in no event will a deduction or deductions under this Section 6.1.3(c) reduce the MICL Trailing Royalty Payment by more than fifty percent (50%).

6.1.4 Payment Terms. Except as otherwise set forth in this Agreement, all payments by or on behalf of Licensee under this Agreement shall be non-creditable (except pursuant to Section 6.5, the last sentence of Section 6.1.3(b)(i), or the last sentence of Section 6.1.3(b)(ii)) and non-refundable.

6.2 Methods of Payment.

6.2.1 All payments due under this Agreement shall be paid in Dollars, except as expressly set forth in Section 3.1.2(c)(ii). All payments to INFI under this Agreement shall be paid by electronic wire transfer of immediately available funds to a bank account in the United States designated in writing by INFI. All payments to INFI pursuant to Section 6.1.1 for a [* * *] shall be due [* * *] days after the end of each [* * *]. With respect to all payments to INFI pursuant to Sections 6.1.3(b) or 6.1.3(c), Licensee shall deliver such payments to INFI within [* * *] days after the end of each [* * *] during the applicable Royalty Term, reasonably detailed written accountings of Net Sales of IPI-145 Products that are subject to payments due to MICL or Purdue, as applicable for such [* * *]. Such accountings shall be Confidential Information of Licensee and subject to the confidentiality provisions set forth in the MICL Agreements. Such [* * *] reports shall indicate (i) gross sales and Net Sales (including reasonable detail for deductions from gross sales to Net Sales) on a country-by-country and IPI-145 Product-by-IPI-145 Product basis, and (ii) the calculation of the MICL Royalty, the Purdue Royalty, the MICL Trailing Royalty Payment from such gross sales and Net Sales; provided, however, such reports shall include (i) the actual information specified in this Section 6.2.1 for all [* * *] other than the [* * *] and (ii) a good faith estimate of the information specified in this Section 6.2.1 for the [* * *], which estimates shall be promptly reconciled with the actual information for such month in the next [* * *]. On the date on which Licensee is required to have delivered such accounting to INFI, Licensee shall also deliver the payments due for such [* * *]; provided, however, that such payments will be based on (a) the actual information specified in this Section 6.2.1 for all weeks in such [* * *] other than the last month of such [* * *] and (b) a good faith estimate of the information specified in this Section 6.2.1 for the last month of such [* * *], which estimates shall be promptly reconciled with the actual information for such month in the next [* * *].

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6.2.2 For the purposes of calculating any sums due under this Agreement, Licensee shall convert any amount expressed in a foreign currency into US Dollar equivalents, calculated using the applicable currency conversion rate as published in [* * *], (a) for sales, on the last Business Day of the applicable Calendar Quarter for the Calendar Quarter in which the relevant sales were made or (b) for calculations of all other payments payable under this Agreement, on the day the payment obligation accrued.

6.3 Late Payments. Without limiting any other rights or remedies available to INFI hereunder, interest shall be payable by Licensee on any amounts payable to INFI, Purdue or MICL under this Agreement which are not paid by the due date for payment. All interest shall accrue and be calculated on a daily basis (both before and after any judgment) at a rate per annum equal to [* * *] percentage points above the then current “prime rate” in effect published in [* * *] (but in no event in excess of the maximum rate permissible under applicable Law), for the period from the due date for payment until the date of actual payment.

6.4 Taxes.

6.4.1 All payments due and payable under this Agreement will be made without any deduction or withholding for or on account of any tax except to the extent otherwise required by applicable Laws. If Licensee is so required to withhold, Licensee will (a) promptly notify INFI of such requirement; (b) deduct from each payment to which such requirement relates and pay to the relevant Governmental Authority the full amount required to be withheld promptly upon the earlier of (i) determining that such withholding is required or (ii) receiving notice that such amount has been assessed against INFI or any Third Party Grantor; and (c) promptly forward to INFI an official receipt (or certified copy) or other documentation reasonably acceptable to INFI evidencing such payment to such authorities.

6.4.2 [* * *]

6.5 Books and Records; Audit Rights.

6.5.1 Licensee shall keep, and shall require its Affiliates and the Sublicensees to keep, complete and accurate records of the latest [* * *] years relating to gross sales, Annual Net Sales, and all revenue and expense data relating to the calculations of any payment due under this Agreement. For the sole purpose of verifying amounts payable to INFI, MICL or Purdue under Article 6, INFI shall have the right, [* * *], at INFI’s expense (except as set forth below), to retain an independent certified public accountant selected by INFI and reasonably acceptable to Licensee, to review such records in the location(s) where such records are maintained by Licensee, its Affiliates and the Sublicensees upon reasonable notice and during regular business hours. Such representatives shall execute a suitable confidentiality agreement reasonably acceptable to Licensee prior to conducting such audit. Such representatives shall disclose to each of INFI and Licensee only their conclusions regarding the accuracy of payments hereunder and of records related thereto. The right to audit any records underlying any royalty report shall extend for [* * *] from the end of the Calendar Year in which the royalty report was delivered. Licensee shall,

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within [* * *] days after the Parties' receipt of the audit report, pay INFI the amount of any underpayment revealed by such audit together with interest calculated in the manner provided in Section 6.3. If the underpayment is equal to or greater than [* * *] of the amount that was otherwise due, Licensee shall reimburse INFI's reasonable Out-of-Pocket Expenses of such review. If the audit demonstrates that Licensee has made an overpayment to INFI, Licensee shall be entitled to credit such amount against future payments due to INFI.

6.5.2 Upon the expiration of the [* * *] years following the end of any Calendar Year, the calculation of amounts payable under Article 6 with respect to such Calendar Year shall be binding and conclusive upon the Parties, and the Parties shall be released from any liability or accountability with respect to payments for such Calendar Year.

6.5.3 The Third Party Grantors shall have the same rights of audit and inspection with respect to Licensee and its Affiliates and Sublicensees as granted by INFI to such Third Party Grantor pursuant to the applicable INFI Third Party Agreement, provided, however, that any audit conducted by a Third Party Grantor shall constitute an audit conducted by INFI for purposes of this Section 6.5 and any such audit shall be limited to the scope set forth in this Section 6.5.

6.6 Financial Statements Required by Rule 3-05 of Regulation S-X. If Licensee determines in good faith that it would be required to file with the SEC pursuant to Rule 3-05 of Regulation S-X audited annual financial statements of the business related to the IPI-145 Product (the "Audited Financial Statements") and/or unaudited quarterly financial statements of the business related to the IPI-145 Product (the "Unaudited Financial Statements") for the periods specified by Rule 3-05 of Regulation S-X (any Audited Financial Statements together with any Unaudited Financial Statements, the "SEC Financial Statements"), then (X) Licensee will notify INFI of such determination no later than [* * *] days after the Effective Date and (Y) INFI will deliver to Licensee as soon as reasonably practicable, but in any event no later than [* * *] days after the Effective Date, the SEC Financial Statements. The SEC Financial Statements will be (a) prepared in accordance with the books and records of the business related to the IPI-145 Product, (b) prepared in accordance with Regulation S-X and U.S. GAAP and (c) in the case of the Audited Financial Statements, accompanied by an opinion (the "Audit Opinion") of Ernst & Young (the "Independent Auditor"), which opinion complies with Regulation S-X. INFI will use its commercially reasonable efforts to cause the Independent Auditor to provide to Licensee the consents requested by Licensee no later than [* * *] Business Days prior to the required filing date of the SEC Financial Statements to permit the inclusion of the Audit Opinion with respect to the Audited Financial Statements in Licensee's reports and registration statements filed with the SEC for periods required under applicable Law. Licensee will reimburse INFI for INFI's costs incurred by INFI supported by reasonable documentation for INFI's activities pursuant to this Section 6.6.

6.7 Other INFI Financial Deliverables. INFI will deliver to Licensee (a) within [* * *] after the Effective Date, a statement of assets acquired and liabilities assumed of the business related to the IPI-145 Product as of the Effective Date and (b) as soon as reasonably practicable, but in any event no later than [* * *] Business Days after the Effective Date, a statement of direct revenues and expenses of the business related to the IPI-145 Product (i) for the year ended

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December 31, 2015 and (ii) for the nine (9) months ended September 30, 2016 that includes information by Calendar Quarter for each of the first three (3) Calendar Quarters of fiscal year 2016. The financial information described in this Section 6.7 will be prepared in accordance with (X) the books and records of the business related to the IPI-145 Product and (Y) U.S. GAAP; provided, however, that all such information is unaudited and may be subject to change.

**ARTICLE 7
OWNERSHIP OF INTELLECTUAL PROPERTY RIGHTS**

7.1 Inventorship. For purposes of determining ownership of inventions pursuant to Section 7.2, inventorship for patentable inventions conceived or reduced to practice during the course of the performance of activities pursuant to this Agreement shall be determined in accordance with United States patent laws for determining inventorship.

7.2 Ownership. Subject to the licenses and rights granted to Licensee under this Agreement, INFI shall own the entire right, title and interest in and to any Know-How first made, authored, discovered, conceived or reduced to practice solely by employees, consultants, contractors or subcontractors of INFI, or acquired solely by INFI, any Patent Rights claiming patentable inventions therein and any other intellectual property rights (other than Patent Rights) covering such Know-How. Licensee shall solely own the entire right, title and interest in and to any Know-How first made, authored, discovered, conceived or reduced to practice solely by employees, consultants, contractors or subcontractors of Licensee or acquired solely by Licensee, any Patent Rights claiming patentable inventions therein and any other intellectual property rights (other than Patent Rights) covering such Know-How. Subject to the licenses and rights granted under this Agreement, all Know-How first made, authored, discovered, conceived or reduced to practice jointly by (i) employees, consultants, contractors or subcontractors of Licensee or any of its Affiliates and (ii) employees, consultants, contractors or subcontractors of INFI or any of its Affiliates, ("Joint Know-How"), Patent Rights claiming patentable inventions therein ("Joint Patent Rights") and other intellectual property rights (other than Patent Rights) covering such Know-How, shall be jointly owned by the Parties without any duty to account, and each Party shall have the right to grant licenses and otherwise exploit the Joint IP, subject to the licenses granted hereunder. Each Party shall, and shall ensure that its Affiliates and its and its Affiliates' employees, consultants, contractors, subcontractors and any other agents, execute all documents necessary, and otherwise reasonably cooperate with the other Party, to effectuate this Section 7.2.

7.3 Prosecution and Maintenance of Patent Rights.

7.3.1 Prosecution Patent Rights.

(a) Licensee shall have the first right, at its sole expense, to Prosecute and Maintain the INFI Prosecution Patent Rights, the INK Prosecution Patent Rights and the Joint Patent Rights (collectively, the "Prosecution Patent Rights") using Jones Day, Lando & Anastasi or other legal counsel reasonably acceptable to INFI. Licensee shall (i) provide INFI and, with respect to the INK Prosecution Patent Rights, INK, copies of all prosecution filings related to the

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Prosecution Patent Rights sent to or received from patent offices in the Territory, unless otherwise directed by INFI, (ii) provide INFI with a draft of each such filing reasonably in advance of submission, (iii) provide INFI an opportunity to provide comments on and make requests of Licensee concerning such filings, (iv) consider in good faith any comments regarding such draft application that INFI may timely provide, (v) keep INFI and, with respect to the INK Prosecution Patent Rights, INK, regularly and reasonably informed of the status of the Prosecution Patent Rights as may be requested from time to time by INK, and (vi) provide INFI and, with respect to the INK Prosecution Patent Rights, INK, such other information related to Prosecution and Maintenance of the Prosecution Patent Rights in the Territory as INFI or, with respect to the INK Prosecution Patent Rights, INK, may from time to time reasonably request to allow INFI and, with respect to the INK Prosecution Patent Rights, INK, to track Prosecution and Maintenance of such Patent Rights.

(b) Licensee shall bear one hundred percent (100%) of all Patent Expenses during the Term with respect to the Prosecution and Maintenance of the Prosecution Patent Rights in accordance with Section 7.3.1(a).

(c) If INK objects to Licensee's Prosecution and Maintenance of any of the INK Prosecution Patent Rights, then, upon Licensee's request, (i) INFI shall Prosecute and Maintain such Patent Right, in accordance with Licensee's reasonable direction with respect thereto using mutually acceptable counsel which, as of the Effective Date includes Jones Day and Lando & Anastasi; and (ii) INFI shall resolve such dispute with INK in accordance with the INK Agreement. Licensee shall pay, or reimburse INFI, for all reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses associated with such Prosecution and Maintenance and such dispute resolution.

(d) In the event Licensee decides to cease to Prosecute or Maintain any claim of a Prosecution Patent Right in a country of the Territory, decides to not otherwise Prosecute and Maintain any Prosecution Patent Right in a country of the Territory, or does not wish to bear the costs or expenses with respect to the Prosecution or Maintenance of any Prosecution Patent Right in a country of the Territory:

(i) Licensee shall give INFI prior written notice sufficiently in advance thereof, but not less than [* * *] days before any action would be required to be taken by INFI to avoid a loss of rights in such Prosecution Patent Right, in order to allow INFI (at its discretion) to assume such Prosecution or Maintenance without a loss of rights in such Prosecution Patent Right. If INFI determines not to assume such Prosecution or Maintenance with respect to such INK Prosecution Patent Right, then INFI shall give written notice to INK in sufficient time (but no less than [* * *] days before any applicable statutory bar) to permit INK to Prosecute and Maintain such INK Prosecution Patent Right;

(ii) INFI or, with respect to the INK Prosecution Patent Rights, INK (to the extent set forth in the INK Agreement), shall thereafter have the sole right to Prosecute and Maintain such Prosecution Patent Right, in INFI's name or, with respect to the INK

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Prosecution Patent Rights, INK's name, in such country. Licensee shall use reasonable efforts to make available to INFI and, with respect to the INK Prosecution Patent Rights, INK, Licensee's employees, authorized attorneys, agents or representatives as are reasonably necessary to assist INFI and, with respect to the INK Prosecution Patent Rights, INK, in Prosecuting and Maintaining, such Prosecution Patent Rights. Licensee shall sign, or have signed, all legal documents necessary to Prosecute and Maintain such patent applications or patents in respect of such Patent Rights; and

(iii) such Patent Right shall no longer be included in the INFI Prosecution Patent Rights or INK Prosecution Patent Rights, as applicable, and all licenses and rights granted to Licensee hereunder with respect to such Patent Right, including the licenses granted under Section 2.1, shall automatically terminate.

7.3.2 Non-Prosecution Patent Rights. Licensee shall have no right to Prosecute or Maintain, and Licensee shall not be required to bear any costs associated with the Prosecution and Maintenance of, any of the INFI Other Patent Rights or any of the INK Non-Prosecution Patent Rights.

7.4 Third Party Infringement. Each Party will promptly notify the other Party and, with respect to the INK Prosecution Patent Rights, the notifying Party will promptly notify INK (in accordance with the notice provision in the INK Agreement), in writing of (a) any actual or threatened infringement or misappropriation by a Third Party of any Prosecution Patent Right of which it becomes aware, as a result of such Third Party's Research, Development, Manufacture, use, sale, offer for sale, other Commercialization or importation of the IPI-145 Compound or any IPI-145 Product in the Territory, including any certification filed by a Third Party pursuant to 21 U.S.C. §355(b)(2)(A)(iv) or 355(j)(2)(A)(vii)(IV) or any notice under comparable U.S. or foreign law (a "Paragraph IV Certification") which references the foregoing; or (b) an actual or threatened challenge to any Prosecution Patent Right by a Third Party (any such infringement or challenge in clause (a) or (b), a "Third Party Infringement"). The Parties will consult with each other through each Party's patent attorneys (and, with respect to any INK Prosecution Patent, INK, through its patent attorney, may consult with respect to any INK Prosecution Patent) to determine the response to any such infringement or challenge by a Third Party of any Prosecution Patent Right, including any Paragraph IV Certification which references the foregoing.

7.5 Enforcement Rights.

7.5.1 With respect to the INFI Prosecution Patent Rights and the INK Prosecution Patent Rights, Licensee shall have the first right, but not the obligation, to initiate a proceeding or take other appropriate action in connection with the Third Party Infringement to the extent that such Third Party Infringement involves the Research, Development, Manufacture, use or Commercialization of the IPI-145 Compound or any IPI-145 Product in the Territory. Notwithstanding the foregoing sentence, Licensee shall not initiate any lawsuit or other enforcement action asserting any such Patent Rights without first consulting with INFI and giving good faith consideration to any reasonable objection from INFI regarding Licensee's proposed course of action. INFI shall have the right, at INFI's sole expense, to be represented in any such

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action by counsel of its own choice; provided, however, that Licensee shall bear all of INFI's costs and expenses with respect to any activities undertaken by INFI at Licensee's request. With respect to any INK Prosecution Patent, INK shall have the right to be represented in any such action by counsel of its own choice, at INK's sole expense. Licensee shall not, through any court action or proceeding, any settlement arrangement or any proceeding, filing or communication with any patent office, admit the invalidity of, or otherwise impair INFI's or INK's rights in, any Duvelisib Patent Right without the prior written consent of INFI and, with respect to the INK Prosecution Patent Rights or INK Non-Prosecution Patent Rights, INK. Any recoveries resulting from such an action brought by Licensee in accordance with this Section 7.5.1 shall be applied as follows:

(a) First, to reimburse (i) INK's out-of-pocket expenses and (ii) each Party for all Out-of-Pocket Expenses in connection with such proceeding (on a pro rata basis, based on each Party's respective litigation costs, to the extent the recovery was less than all such litigation costs);

(b) Second, any portion of the remainder that is attributable to lost profits with respect to sales of the IPI-145 Product outside the Field shall be subject to a royalty payment to INK in accordance with the INK Agreement equal to the amount that would be due if such amount were Net Sales (as defined in the INK Agreement) under the INK Agreement, and Licensee shall promptly pay such royalty payment to INK; and

(c) Third, the remainder shall be retained by Licensee, shall be considered Net Sales under this Agreement and shall be subject to the royalty obligations under this Agreement.

7.5.2 If Licensee decides not to, or fails to, initiate proceedings or take other appropriate action pursuant to Section 7.5.1 with respect to a Third Party Infringement of any such Prosecution Patent Right within the shorter of (a) [* * *] days following Licensee's becoming aware of the alleged infringement (which shall be [* * *] days with respect to the INK Prosecution Patent Rights) or (b) solely with respect to a Paragraph IV Certification, [* * *] days following the earlier of Licensee's or INFI's receipt of notice thereof (which shall be [* * *] days with respect to the INK Prosecution Patent Rights), then (y) Licensee shall promptly notify INFI thereof and (z) INFI or, with respect to the INK Prosecution Patent Rights, INK (to the extent set forth in the INK Agreement), shall have the right, but not the obligation, to bring and control any such action at its own expense and by counsel of its own choice. Licensee shall notify INFI and, with respect to the INK Prosecution Patent Rights, Licensee shall notify INK (in accordance with the notice provision in the INK Agreement), as soon as Licensee is aware that it will not initiate such proceedings or take such action within such time periods. Any recoveries resulting from such an action brought by INFI or INK in accordance with this Section 7.5.2 will be retained by INFI or, with respect to the INK Prosecution Patent Rights, INK (to the extent set forth in the INK Agreement).

7.6 Conduct of Certain Actions; Costs. The Party initiating legal action under Section 7.5 with respect to Prosecution Patent Rights (the "Initiating Party") shall have the sole and

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exclusive right to select counsel for any suit initiated by it. At the request of the Initiating Party or, with respect to the INK Prosecution Patent Rights, INK (if it is then controlling the relevant action), the other Party shall provide reasonable assistance and cooperation in connection therewith. If Licensee is the Initiating Party, Licensee shall [* * *]. The other Party shall reasonably cooperate in the prosecution of such suit as may be reasonably requested by the Initiating Party or, with respect to the INK Prosecution Patent Rights, INK (if it is then controlling the relevant action), including by agreeing to be joined to such legal action to the extent required in order to maintain such legal action; provided, that if Licensee is the Initiating Party, Licensee shall [* * *]. The other Party and INK (where applicable pursuant to Section 10.3(b) of the INK Agreement) shall have the right to participate and be represented in any such legal action (in cases where such other Party has standing) by its own counsel at its own cost.

7.7 Defense of Actions. In the event that a declaratory judgment or similar action alleging the invalidity or non-infringement, or any request for, or filing or declaration of, any interference, opposition, reissue or reexamination, of any Prosecution Patent Right is initiated by any Third Party, each Party will promptly notify the other and the rights and responsibilities for defending against any such action shall be determined in the same manner as Prosecution and Maintenance of the relevant Prosecution Patent Right pursuant to Section 7.4. INK shall have the sole right to defend against any declaratory judgment or similar action alleging the invalidity or non-infringement, or any request for, or filing or declaration of, any interference, opposition, reissue or reexamination, of any INK Non-Prosecution Patent Right.

7.8 Trademarks.

7.8.1 Licensee shall have the right to brand IPI-145 Products using Licensee related trademarks and trade names and any other trademarks and trade names it determines appropriate for the IPI-145 Product, which may vary by country or within a country. Licensee and, if applicable, certain Licensee Affiliates or Sublicensees, shall own all right, title and interest in and to such marks and all goodwill associated therewith and Licensee or such Affiliates or Sublicensees may file, seek registration and maintain such marks in the countries and regions they determine reasonably necessary, in each case solely to the extent such marks are not Product Marks or the INK Mark licensed to Licensee pursuant to this Agreement. Notwithstanding the foregoing, unless INK waives its relevant rights under the INK Agreement, (a) with respect to any IPI-145 Product sold in the United States after receipt of Marketing Authorization for such IPI-145 Product in the United States, Licensee shall and shall ensure that its applicable Affiliates and the applicable Sublicensees, to the extent permitted under applicable Law and if reasonably practicable, include the INK name or logo (“INK Mark”) on the commercial packaging for such IPI-145 Product, and a disclosure that such IPI-145 Product is licensed from INK, and (b) Licensee and its applicable Affiliates or the applicable Sublicensees may otherwise include the INK Mark on the IPI-145 Product or any packaging, labels, containers, advertisements and other materials related thereto; provided, however, that any use of the INK Mark shall be in compliance with INK’s then-current reasonable trademark guidelines provided to Licensee (whether by INFI or by INK).

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7.8.2 Subject to the terms and conditions of this Agreement, INFI hereby grants Licensee a non-exclusive, sublicenseable, royalty-free, transferrable (in accordance with Section 12.5) right to use the INK Mark in connection with the foregoing.

7.8.3 INK or an Affiliate of INK shall retain the ownership of the entire right, title and interest in and to the INK Mark, and all goodwill associated with or attached to the INK Mark arising out of the use thereof by Licensee, its Affiliates and the Sublicensees shall inure to the benefit of INK. Licensee shall not, and shall ensure that its Affiliates and the Sublicensees shall not, contest, oppose or challenge INK's ownership of the INK Mark. Licensee shall not, and shall ensure that its Affiliates and the Sublicensees shall not, at any time do or suffer to be done any act or thing that will in any way impair INK's ownership of or rights in and to the INK Mark or any registration thereof or that may depreciate the value of the INK Mark or the reputation of INK.

7.9 Drug Price Competition and Patent Term Restoration Act.

7.9.1 The Parties shall cooperate with each other in an effort to avoid loss of any Prosecution Patent Rights which may otherwise be available under the provisions of the Drug Price Competition and Patent Term Restoration Act of 1984 or comparable United States or foreign laws, including by executing any documents as may be reasonably required. In particular, the Parties shall, at Licensee's sole expense, cooperate in obtaining patent term restoration or supplemental protection certificates or their equivalents in any country and region ("Patent Term Extensions"), where applicable to the Prosecution Patent Rights. INFI shall provide all reasonable assistance to Licensee, including permitting Licensee to proceed with applications for such in the name of INFI, if so required.

7.9.2 After consultation by Licensee with INFI and INK, Licensee shall have the sole right to determine, if applicable, for which, if any, of the Prosecution Patent Rights the Parties will attempt to seek Patent Term Extensions for the IPI-145 Product. INFI shall provide reasonable assistance to Licensee, at Licensee's sole expense, including by executing any required documents and providing any relevant patent information and other relevant information to Licensee, so that Licensee can obtain such extensions and additional protection and inform the FDA or other Regulatory Authority of such intended Patent Term Extension.

7.9.3 Licensee shall have no right to seek Patent Term Extension for any INK Non-Prosecution Patent Right or INFI Other Patent Right.

7.10 Orange Book Information. Licensee shall have the sole right, but not the obligation, to select and submit to all applicable Governmental Authorities patent information pertaining to each IPI-145 Product pursuant to 21 U.S.C. § 355(b)(1)(G) (or any amendment or successor statute thereto), or any similar statutory or regulatory requirement in any non-U.S. country or other regulatory jurisdiction.

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7.11 Patent Marking. Licensee shall, and shall ensure that its Affiliates and the Sublicensees, comply with the patent marking statutes in each country in which a IPI-145 Product is sold by Licensee, its Affiliates or the Sublicensees.

**ARTICLE 8
CONFIDENTIALITY**

8.1 Confidentiality: Exceptions. Except to the extent expressly authorized by this Agreement or otherwise agreed to by the Parties in writing, the Receiving Party and its Affiliates shall keep confidential, and shall not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement, any Confidential Information of the Disclosing Party or any of its Affiliates, except to the extent that it can be established by the Receiving Party that such Confidential Information:

8.1.1 was in the lawful knowledge and possession of the Receiving Party or any of its Affiliates prior to the time it was disclosed to the Receiving Party or any of its Affiliates by the Disclosing Party or any of its Affiliates;

8.1.2 was developed by the Receiving Party or any of its Affiliates without the aid, use, or access of or to Confidential Information of the Disclosing Party or any of its Affiliates, as evidenced by written records kept in the ordinary course of business or other documentary proof of actual use by the Receiving Party or any of its Affiliates;

8.1.3 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party or any of its Affiliates by the Disclosing Party or any of its Affiliates;

8.1.4 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 or any of its Representatives in breach of this Agreement; or

8.1.5 was disclosed to the Receiving Party or any of its Affiliates, other than under an obligation of confidentiality, by a Third Party who had no obligation to the Disclosing Party or any of its Affiliates not to disclose such information to others.

8.2 Authorized Disclosure. Except as expressly provided otherwise in this Agreement, a Receiving Party or any of its Affiliates may use and disclose Confidential Information of the Disclosing Party or any of its Affiliates as follows:

8.2.1 to its Affiliates, its Sublicensees (solely with respect to Licensee), and its and their respective employees, consultants, contractors, subcontractors, agents, legal advisors and financial advisors (all the foregoing, collectively, "Representatives") who need to know such Confidential Information for purposes of the Receiving Party performing its obligations or exercising its rights under this Agreement, each of which Representatives shall, prior to such

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disclosure, be subject to written obligations, or professional ethical obligations, substantially similar to those in the Agreement, and the Receiving Party shall remain responsible for any failure by its Representatives to treat such Confidential Information as required under this ARTICLE 8;

8.2.2 except as set forth in Section 8.2.1, in connection with the performance of its obligations or exercise of rights granted or reserved in this Agreement, provided, that such Confidential Information is disclosed under appropriate confidentiality provisions substantially similar to those in this Agreement and the Receiving Party shall remain responsible for any failure by any such recipient to treat such Confidential Information as required under this ARTICLE 8;

8.2.3 to the extent such disclosure is reasonably necessary in Prosecution and Maintenance of Patent Rights in a manner not inconsistent with this Agreement, prosecuting or defending litigation, complying with applicable Law (including the rules and regulations of any stock exchange or NASDAQ), preparing and submitting filings to Regulatory Authorities consistent with this Agreement or is otherwise required by Law; except that if the Receiving Party or any of its Affiliates is required by Law to make any such disclosure of a Disclosing Party's (or any of its Affiliates') Confidential Information (other than a disclosure to a Regulatory Authority in a filing required by Law) the Receiving Party will, to the extent practicable, give reasonable advance notice to the Disclosing Party of such disclosure requirement and shall furnish only that portion of the Disclosing Party's (or its Affiliate's) Confidential Information that the Receiving Party or its Affiliate is legally required to furnish;

8.2.4 by INFI to any Third Party Grantor in order to exercise INFI's rights or comply with INFI's obligations under the INFI Third Party Agreement, and Licensee agrees and acknowledges that such Third Parties shall not be bound to any confidentiality or non-use information with respect to Licensee's Confidential Information other than as set forth in the relevant INFI Third Party Agreement;

8.2.5 by INFI to any counterparty to any INFI Product Related Contract to the extent reasonably necessary to comply with INFI's obligations under this Agreement with respect to such INFI Product Related Contract, and Licensee agrees and acknowledges that such Third Parties shall not be bound to any confidentiality or non-use information with respect to Licensee's Confidential Information other than as set forth in the relevant INFI Product Related Contract;

8.2.6 except as set forth in Section 8.2.1 or Section 8.2.4, in communications with existing or prospective acquirers, merger partners, investors, financing sources, advisors, licensees, sublicensees or collaborators or others on a need to know basis, in each case under appropriate confidentiality provisions substantially equivalent to those of this Agreement, and the Receiving Party shall remain responsible for any failure by any of the foregoing to treat such Confidential Information as required under this ARTICLE 8; or

8.2.7 to the extent agreed to in writing by the Disclosing Party.

8.3 Press Release; Disclosure of Agreement.

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8.3.1 Neither Party shall issue any press release or make other disclosures regarding this Agreement or the Parties' activities hereunder, or any results or data arising hereunder, except (a) that either Party may issue a press release agreed to in writing by the other Party, such agreement not to be unreasonably withheld, conditioned or delayed; (b) with the other Party's prior written consent; (c) in accordance with Section 8.5; or (d) for any disclosure that is reasonably necessary to comply with applicable securities exchange listing requirements or other applicable Laws. Notwithstanding the foregoing, to the extent information regarding this Agreement has already been publicly disclosed, either Party may subsequently disclose the same information to the public without the consent of the other Party. Each Party shall be permitted to disclose the terms of this Agreement, in each case subject to Section 8.2.6 and under appropriate confidentiality provisions substantially equivalent to those of this Agreement, to any actual or potential acquirers, merger partners, licensees, sublicensees, licensors, investors, financing sources and professional advisors on a need to know basis.

8.3.2 Each Party shall, if practicable, give the other Party a reasonable opportunity to review applications for confidential treatment of this Agreement filed with the United States Securities and Exchange Commission (or any stock exchange, including NASDAQ, or any similar regulatory agency in any country other than the United States) prior to submission of such filings, and shall give due consideration to any reasonable comments by the non-filing Party relating to such filing.

8.4 Remedies. In the event a Party breaches any of the confidentiality or non-use obligations set forth in this ARTICLE 8, the other Party shall be entitled to seek, in addition to any other right or remedy it may have, at law or in equity, a temporary injunction, without the posting of any bond or other security, enjoining or restraining the breaching Party from any violation or threatened violation of this ARTICLE 8.

8.5 Publications. Licensee may publish the scientific results of activities undertaken by either Party, any of its Affiliates or any Sublicensee (or, with respect to INFI, any licensee or sublicensee) with respect to the Research, Development, Manufacture and Commercialization of the IPI-145 Compound or IPI-145 Product. Except to the extent required by applicable Law, INFI shall not publish scientific or other results of activities undertaken by INFI with respect to the Research, Development, Manufacture and Commercialization of the IPI-145 Compound or the IPI-145 Product without the prior written consent of Licensee.

8.6 Existing Third Party Agreements. The provisions of this ARTICLE 8 are subject to the terms of each applicable INFI Third Party Agreement or INFI Product Related Contract and shall be interpreted in a manner that is consistent with the rights of the relevant Third Party under the relevant INFI Third Party Agreement or INFI Product Related Contract. Notwithstanding anything to the contrary in this ARTICLE 8, Licensee shall comply with all applicable restrictions in the relevant INFI Third Party Agreements with respect to Licensee's publication or disclosure of the results of any of the activities conducted by Licensee under this Agreement.

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8.7 Survival. The confidentiality and non-use obligations set forth in this ARTICLE 8 shall survive for the longer of (a) [* * *] years after the Term or (b) with respect to any Confidential Information subject to any obligations to the relevant Third Party under any INFI Third Party Agreement or INFI Product Related Contract, such longer period as may be required under such agreement.

**ARTICLE 9
REPRESENTATIONS AND WARRANTIES**

9.1 Representations and Warranties of Both Parties. Each Party hereby represents and warrants to the other Party, as of the Effective Date, that:

9.1.1 such Party is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

9.1.2 such Party has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

9.1.3 this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, binding obligation, enforceable against it in accordance with the terms hereof;

9.1.4 the execution, delivery and performance of this Agreement by such Party do not conflict with any agreement or any provision thereof, or any instrument or understanding, oral or written, to which it is a party or by which it is bound, nor violate any Law of any Governmental Authority having jurisdiction over such Party;

9.1.5 no government authorization, consent, approval, license, exemption of or filing or registration with any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, under any applicable Laws currently in effect, is or will be necessary for, or in connection with, the transaction contemplated by this Agreement, or for the performance by it of its obligations under this Agreement, except as necessary to conduct clinical studies, to transfer the INDs and other Regulatory Documentation in accordance with Section 3.2 or to seek or obtain Regulatory Approvals; and

9.1.6 neither it nor any of its or its Affiliates' employees or agents performing hereunder has ever been, or is currently: (a) debarred under 21 U.S.C. § 335a; (b) excluded, debarred, suspended, or otherwise ineligible to participate in Federal health care programs or in Federal procurement or non-procurement programs; (c) listed on the FDA's Disqualified and Restricted Lists for clinical investigators; or (d) convicted of a criminal offense that falls within the scope of 42 U.S.C. § 1320a-7(a), even if not yet excluded, debarred, suspended, or otherwise declared ineligible. If Licensee becomes aware that it or any of its or its Affiliates' employees or agents performing hereunder is the subject of any investigation or proceeding that could lead to

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such Person becoming a debarred entity or individual, an excluded entity or individual or a convicted entity or individual, Licensee shall immediately notify INFI, and INFI shall have the right to immediately terminate this Agreement.

9.2 Representations and Warranties of INFI. INFI hereby represents and warrants to Licensee, as of the Effective Date:

9.2.1 INFI is the sole and exclusive owner of the entire right, title and interest in the INFI Prosecution Patent Rights. INFI is the sole and exclusive licensee of the INK Prosecution Patent Rights. INFI is a non-exclusive licensee of the INK Non-Prosecution Patent Rights. With respect to the INFI Prosecution Patent Rights and the INK Prosecution Patent Rights, such Patent Rights are (i) subsisting and in good standing, and (ii) being diligently prosecuted in the respective patent offices in the Territory in accordance with Law, and have been filed and maintained properly and correctly and all applicable fees have been paid on or before the due date for payment.

9.2.2 To the Knowledge of INFI's General Counsel and INFI's Chief Patent Counsel, all Know-How being used by INFI to Research, Develop, Manufacture and Commercialize the IPI-145 Compound and IPI-145 Products as of the Effective Date (a) constitutes Duvelisib Know-How and is being licensed to Licensee hereunder or (b) is generally known to the public.

9.2.3 To the Knowledge of INFI's Vice President, Regulatory Affairs and Quality Assurance, true, complete, and correct copies of: (a) all Regulatory Documentation existing as of the Effective Date relating to the IPI-145 Product in the Field, that is to be transferred to Licensee pursuant to the Transition Plan; and (b) all material adverse information with respect to the safety and efficacy of the IPI-145 Compound known to INFI as of the Effective Date, to be transferred to Licensee pursuant to the Transition Plan, in each case ((a) and (b)) have been or will be provided or made available to Licensee prior to the end of the Transition Period.

9.2.4 There are no claims, judgments, or settlements against, or amounts with respect thereto, owed by INFI or any of its Affiliates relating to the INFI Prosecution Patent Rights or INK Prosecution Patent Rights existing as of the Effective Date (the "Existing Patents") or the Duvelisib Know-How. No claim or litigation has been brought or, to the Knowledge of INFI's General Counsel and INFI's Chief Patent Counsel, threatened by any Person (a) alleging that Existing Patents are invalid or unenforceable, (b) asserting the misuse, or non-infringement of any of the Existing Patents, (c) challenging INFI's Control of the Existing Patents or (d) alleging misappropriation of the Duvelisib Know-How.

9.2.5 Except as set forth in the INFI Third Party Agreements, the Existing Patent Rights are free and clear of any liens, charges, encumbrances or, to the Knowledge of INFI's General Counsel and INFI's Chief Patent Counsel, claims of ownership by an Third Party, other than (a) non-exclusive licenses granted by Infinity to Third Parties, which grants are not in conflict with, or do not preclude Licensee from exercising, the licenses granted to Licensee hereunder, or of the nature of material transfer agreements, clinical trial agreements and manufacturing

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agreements, which will not adversely affect Licensee's ability to Develop, Manufacture or Commercialize the IPI-145 Products in accordance with this Agreement and (b) the rights of the relevant Third Party Grantor and their licensors. INFI is entitled to grant the licenses specified in this Agreement.

9.2.6 No written claim of infringement of the Patent Rights or misappropriation of the Know-How of any Third Party has been made, or to the Knowledge of INFI's General Counsel and INFI's Patent Counsel, threatened, against INFI or any of its Affiliates with respect to the Research, Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Products.

9.2.7 There are no judgments or settlements against or owed by INFI or, to the Knowledge of INFI's General Counsel and INFI's Patent Counsel, pending litigation against INFI or litigation threatened against INFI in writing, in each case related to the IPI-145 Product, including any relating to any Regulatory Documentation Controlled by INFI as of the Effective Date.

9.2.8 Neither INFI nor any of its Affiliates is or has been a party to any agreement with the U.S. federal government or an agency thereof pursuant to which the U.S. federal government or such agency provided funding for the Development of the IPI-145 Compound or IPI-145 Product, and the inventions claimed or covered by the Existing Patents are not a "subject invention" as that term is described in 35 U.S.C. Section 201(f).

9.2.9 (a) The INFI Third Party Agreements are the only agreements between INFI and any Third Party pursuant to which INFI has in-licensed any Patent Rights or pursuant to which INFI owes any Third Party any royalties with respect to IPI-145 Compound or IPI-145 Products; (b) prior to the Effective Date, INFI has provided Licensee with an opportunity to review complete and correct copies of the INFI Third Party Agreements; (c) to the Knowledge of INFI's General Counsel and INFI's Patent Counsel, such INFI Third Party Agreements remain in full force and effect as of the Effective Date; (d) as of the Effective Date, INFI is in material compliance with the terms of such INFI Third Party Agreements and, to the Knowledge of INFI's General Counsel and INFI's Patent Counsel, the Third Party Grantors are in material compliance with the terms of the applicable INFI Third Party Agreements; and (e) INFI has obtained any and all consents required under the INFI Third Party Agreements as may be necessary to perform its obligations under this Agreement. Without limiting this Section 9.2.9, the terms of this Agreement do not materially breach or constitute a material default under the terms of any INFI Third Party Agreement.

9.2.10 To the Knowledge of INFI's Vice President, Regulatory Affairs and Quality Assurance, INFI and its Affiliates have generated, prepared, maintained, and retained all Regulatory Documentation that are required to be maintained or retained pursuant to and in material compliance with applicable Law, and have conducted in material compliance with applicable Law, including GLP and GCP, (a) all Development of the IPI-145 Compound or the

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IPI-145 Products in the Field that they have conducted prior to the Effective Date and (b) all Research activities that are material to the receipt of Regulatory Approval for the IPI-145 Product.

9.2.11 To the Knowledge of INFI's General Counsel and INFI's Chief Patent Counsel, no material breach of confidentiality has been committed by any Third Party with respect to the Duvelisib Know-How and INFI has used reasonable measures to protect the confidentiality thereof.

9.2.12 (a) INFI has obtained from each of its Affiliates, employees and agents, and from the employees and agents of its Affiliates, who have participated in the Research, Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Products, rights to any and all Know-How created by such employees and agents that relates to the IPI-145 Compound or IPI-145 Products, such that Licensee shall, by virtue of this Agreement, receive from INFI, without payments beyond those required by ARTICLE 6, the licenses and other rights granted to Licensee hereunder, except with respect to those Persons from whom obtaining such rights is not customary, such as academic and non-profit Persons; (b) each Person who has or has had any ownership rights in or to any issued Existing Patents purported to be owned solely by INFI, has assigned and has executed an agreement assigning its entire right, title, and interest in and to such Existing Patent to INFI; and (c) to the Knowledge of INFI's General Counsel and INFI's Patent Counsel, no current officer, employee, agent, or consultant of INFI or any of its Affiliates is in violation of any term of any assignment or other agreement, in each case, regarding the protection of Patents Rights or other intellectual property or proprietary information of INFI or such Affiliate.

9.2.13 To the Knowledge of INFI's Vice President, Regulatory Affairs and Quality Assurance, neither INFI nor any of its Affiliates, nor any of its or their respective officers, employees, or agents has made an untrue statement of material fact or fraudulent statement to the FDA or any other Regulatory Authority with respect to the Development of the IPI-145 Compound or the IPI-145 Products, failed to disclose a material fact required to be disclosed to the FDA or any other Regulatory Authority with respect to the Development of the IPI-145 Compound or the IPI-145 Products, or committed an act, made a statement, or failed to make a statement with respect to the Development of the IPI-145 Compound or the IPI-145 Products that could reasonably be expected to provide a basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities", set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto or any analogous laws or policies in the Territory.

9.2.14 Any shares of Licensee Common Stock acquired by INFI in accordance with the terms of this Agreement will be acquired for investment for INFI's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and INFI has no present intention of selling, granting any participation in, or otherwise distributing the same. INFI is aware of the Licensee's business affairs and financial condition and has acquired sufficient information about the Licensee to reach an informed and knowledgeable decision to acquire such shares of Licensee Common Stock. INFI is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

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9.3 Mutual Covenants. Each Party hereby covenants to the other Party that it shall not, during the Term, grant any right or license to any Third Party relating to any of the intellectual property rights it owns or Controls which would conflict with any of the rights or licenses granted or to be granted to the other Party hereunder.

9.4 Licensee Covenants. Licensee hereby covenants to INFI that:

9.4.1 Licensee shall comply, and shall ensure that its Affiliates and the Sublicensees comply, with all applicable Laws in connection with their activities under this Agreement and the transactions contemplated hereby, including GCP, GLP and GMP and ICH guidelines;

9.4.2 All employees, consultants, contractors and subcontractors of Licensee or its Affiliates working under this Agreement are and will be under the obligation to automatically assign all right, title and interest in and to their inventions, discoveries and other Know-How, whether or not patentable, and all Patent Rights and other intellectual property rights therein, to Licensee or its Affiliate as the sole owner thereof and waive all moral rights therein;

9.4.3 Neither Licensee nor any of its Affiliates is subject to any non-compete or other restrictions that would impair its ability to Develop, Manufacture or Commercialize the IPI-145 Product in the Field in the Territory;

9.5 Disclaimer. Except as otherwise expressly set forth in this Agreement, (a) NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY THAT ANY PATENT RIGHTS ARE VALID OR ENFORCEABLE, AND (b) EACH PARTY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. Without limiting the generality of the foregoing, except as otherwise set forth in this Agreement, INFI disclaims any warranties with regards to: (x) the success of the IPI-145 Compound or IPI-145 Product under this Agreement; (y) the safety or usefulness for any purpose of the technology or materials, including any compounds, it provides or discovers under this Agreement; and (z) the validity, enforceability, or non-infringement of any intellectual property rights or technology it provides or licenses to Licensee under this Agreement.

**ARTICLE 10
INDEMNIFICATION; LIMITATION OF LIABILITY; INSURANCE**

10.1 Indemnification by Licensee. Licensee shall defend, indemnify and hold harmless the INFI Indemnitees from and against any and all losses, damages, fees, expenses, settlement amounts or costs (including reasonable legal expense, attorneys' fees and witness fees) ("Losses") relating to or in connection with a Third Party claim to the extent arising out of (a) the research, development, manufacture or commercialization of the IPI-145 Compound or the IPI-145 Product by Licensee, any Licensee Affiliate, any Sublicensee, INFI (to the extent properly acting in

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accordance with Licensee's express direction) or any of their respective employees, consultants, contractors, subcontractors or agents after the Effective Date, including any actual or alleged death, personal bodily injury or damage to real or tangible personal property, or other product liability claimed to result from the IPI-145 Product Researched, Developed, Manufactured or Commercialized by or on behalf of Licensee or any of its Affiliates or any Sublicensee, (b) any breach by Licensee of any of its representations, warranties, covenants or obligations under this Agreement, or (c) any negligent act or omission or willful misconduct of Licensee, any of its Affiliates or any Sublicensee, or any of their respective employees, consultants, contractors, subcontractors or agents, in performing Licensee's obligations or exercising Licensee's rights under this Agreement; except that the foregoing indemnity shall not apply with respect to any INFI Indemnitee to the extent that any such Losses (x) are caused by the gross negligence or willful misconduct of any INFI Indemnitee, or (y) are otherwise subject to an obligation by INFI to indemnify the Licensee Indemnitees under Section 10.2.

10.2 Indemnification by INFI. INFI shall defend, indemnify and hold harmless the Licensee Indemnitees from and against any and all Losses relating to or in connection with a Third Party claim to the extent arising out of (a) the research, development, manufacture or commercialization of the IPI-145 Compound or the IPI-145 Product by INFI, any INFI Affiliate, any sublicensee of INFI (other than Licensee, any of its Affiliates or any Sublicensee) or any of their respective employees, consultants, contractors, subcontractors or agents prior to the Effective Date, including any actual or alleged death, personal bodily injury or damage to real or tangible personal property, or other product liability claimed to result from the IPI-145 Product Researched, Developed, Manufactured or Commercialized by or on behalf of INFI, any INFI Affiliate, any sublicensee of INFI (other than Licensee, any of its Affiliates or any Sublicensee), (b) any breach by INFI of its representations, warranties, covenants or obligations under this Agreement, or (c) any negligent act or omission or willful misconduct of INFI or any of its Affiliates, or any of their respective employees, consultants, contractors, subcontractors or agents, in performing INFI's obligations or exercising INFI's rights under this Agreement; except that that the foregoing indemnity shall not apply with respect to any Licensee Indemnitee to the extent that any such Losses (x) are caused by the negligence or willful misconduct of any of the Licensee Indemnitees, or (y) are otherwise subject to an obligation by Licensee to indemnify any of the INFI Indemnitees under Section 10.1.

10.3 Procedure. In the event of a claim by a Third Party against any Person entitled to indemnification under this Agreement, the Party claiming indemnification on behalf of such Person (in such capacity, the "Indemnified Party") shall promptly notify the other Party (in such capacity, the "Indemnifying Party") in writing of the claim (it being understood that the failure by the Indemnified Party to give prompt notice of a Third Party claim as provided in this Section 10.3 shall not relieve the Indemnifying Party of its indemnification obligation under this Agreement except and only to the extent that such Indemnifying Party is actually prejudiced as a result of such failure to give prompt notice). Within [* * *] days after delivery of such notification, the Indemnifying Party may, upon written notice thereof to the Indemnified Party, undertake and solely manage and control, at its sole expense and with counsel reasonably satisfactory to the

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Indemnified Party, the defense of the claim. If the Indemnifying Party does not undertake such defense, the Indemnified Party may control such defense but shall not be entitled to indemnification hereunder if it does not then control such defense. The Party not controlling such defense shall cooperate with the other Party and may, at its option and expense, participate in such defense; provided, that if the Indemnifying Party assumes control of such defense and the Indemnified Party in good faith concludes, based on advice from counsel, that the Indemnifying Party and the Indemnified Party (or the relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification) have conflicting interests with respect to such action, suit, proceeding or claim, the Indemnified Party's counsel may fully participate in such defense and the Indemnifying Party shall be responsible for the reasonable fees and expenses of counsel to the indemnified Persons solely in connection therewith. The Party controlling such defense shall keep the other Party advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the other Party with respect thereto. Except if the Indemnifying Party did not undertake defense of the claim or if the Indemnifying Party and the Indemnified Party (or the relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification) have conflicting interests with respect to such action, suit, proceeding or claim and the Indemnified Party engages separate counsel, as provided above, the Indemnifying Party shall not be liable for any litigation costs or expenses incurred by the Indemnified Party (or the relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification) without the Indemnifying Party's written consent. The Indemnified Party and any Person seeking indemnification under this Agreement shall not settle any such action, suit, proceeding or claim without the prior written consent of the Indemnifying Party, which shall not be unreasonably withheld, delayed or conditioned. The Indemnifying Party shall not settle, without the prior written consent of the Indemnified Party, any such action, suit, proceeding or claim, or consent to any judgment in respect thereof, that (a) does not include a complete and unconditional release of the Indemnified Party (and the relevant INFI Indemnitees or Licensee Indemnitees seeking indemnification) from all liability with respect thereto, (b) imposes any liability or obligation on the Indemnified Party (or any relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification), (c) permits any injunction, declaratory judgment, other order or other non-monetary relief to be entered, directly or indirectly against the Indemnified Party (or any relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification), or (d) acknowledges fault by the Indemnified Party (or any relevant INFI Indemnitee or Licensee Indemnitee seeking indemnification).

10.4 Allocation. In the event a claim is based partially on an indemnified claim and partially on a non-indemnified claim or based partially on a claim indemnified by one Party and partially on a claim indemnified by the other Party, any payments in connection with such claims are to be apportioned between the Parties in accordance with the degree of cause attributable to each Party.

10.5 EXCLUSION OF CONSEQUENTIAL DAMAGES. EXCEPT WITH RESPECT TO [* * *], NEITHER INFI NOR LICENSEE, NOR ANY OF THEIR RESPECTIVE AFFILIATES, WILL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL,

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SPECIAL, EXEMPLARY, MULTIPLE OR PUNITIVE DAMAGES, COSTS OR EXPENSES (INCLUDING LOST PROFITS, LOST REVENUES OR LOST SAVINGS), ARISING OUT OF THIS AGREEMENT OR RELATING TO ANY BREACH OF THIS AGREEMENT, WHETHER LIABILITY IS ASSERTED IN CONTRACT, TORT (INCLUDING NEGLIGENCE AND STRICT PRODUCT LIABILITY), INDEMNITY OR CONTRIBUTION, AND IRRESPECTIVE OF WHETHER SUCH PARTY OR ANY REPRESENTATIVE OF SUCH PARTY HAS BEEN ADVISED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF, ANY SUCH LOSS OR DAMAGE.

10.6 Insurance.

10.6.1 Licensee's Insurance Requirement. During the Term and thereafter for a period of at least [* *] years after the later of the expiration or termination of this Agreement or the last commercial sale of the IPI-145 Product under this Agreement (the "Insurance Period"), Licensee shall maintain on an ongoing basis with a reputable, solvent insurer, comprehensive general liability insurance in the minimum amount of \$[* *] per occurrence and \$[* *] annual aggregate combined single limit for bodily injury and property damage liability; clinical trial coverage with limits and policy terms required by applicable Law in the territories where applicable clinical trials are taking place (and in any event not less than \$[* *]), which coverage shall include clinical trials using inventory or other materials manufactured by INFI or at INFI's direction or otherwise provided to Licensee by INFI; and products liability insurance (including contractual liability coverage on Licensee's indemnification obligations under this Agreement) in the amount of at least \$[* *] per occurrence and as an annual aggregate combined single limit for bodily injury and property damage liability; provided, however, that, (a) Licensee will not be required to procure or maintain the clinical trial coverage described above until ten days prior to transfer of the INDs for IPI-145 Product from INFI to Licensee pursuant to Section 4.1.1 and (b) commencing not later than [* *] days prior to the reasonably anticipated first Commercial Sale of the IPI-145 Product by Licensee or any of its Affiliates or any Sublicensee, and thereafter during the Insurance Period, Licensee shall obtain and maintain on an ongoing basis products liability insurance (including contractual liability coverage on Licensee's indemnification obligations under this Agreement) in the amount of at least \$[* *] per occurrence and as an annual aggregate combined single limit for bodily injury and property damage liability. All of such insurance coverage may be maintained through a self insurance plan that substantially complies with the foregoing limits and requirements and may be satisfied through one or more policies, including an umbrella policy. INFI and INK shall each be named as an additional insured on such policy and Licensee shall provide INFI with written evidence of such insurance on the Effective Date and at any other times upon request. Licensee shall provide INFI with written notice at least [* *] days prior to the cancellation or non-renewal of such insurance; provided, that the provision of such notice shall not permit Licensee to cancel or not renew such insurance contrary to the provisions of this Section 10.6.1.

10.6.2 INFI's Insurance Requirement. For a period of at least [* *] years after the Effective Date, INFI shall maintain on an ongoing basis with a reputable, solvent insurer,

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comprehensive general liability insurance in the minimum amount of \$[* * *] per occurrence and \$[* * *] annual aggregate combined single limit for bodily injury and property damage liability; and products liability insurance (including contractual liability coverage on INFI's indemnification obligations under this Agreement) in the amount of at least \$[* * *] per occurrence and as an annual aggregate combined single limit for bodily injury and property damage liability. All of such insurance coverage may be maintained through a self insurance plan that substantially complies with the foregoing limits and requirements and may be satisfied through one or more policies, including an umbrella policy. Licensee shall be named as an additional insured on such policy and INFI shall provide Licensee with written evidence of such insurance on the Effective Date and at any other times upon request. INFI shall provide Licensee with written notice at least [* * *] days prior to the cancellation or non-renewal of such insurance; provided, that such notice shall not permit INFI to cancel or not renew such insurance contrary to the provisions of this Section 10.6.2.

10.6.3 Additional INFI Insurance Requirement. From the Effective Date until the date that all of the INDs for the IPI-145 Compound and IPI-145 Product have transferred to Licensee, INFI shall maintain on an ongoing basis with a reputable, solvent insurer, comprehensive general liability insurance, product liability insurance and clinical trial insurance covering the DUO clinical trial consistent with the amount and coverage INFI had prior to the Effective Date. Licensee shall reimburse INFI the premiums of such insurance.

**ARTICLE 11
TERM AND TERMINATION**

11.1 Term; Expiration. This Agreement shall become effective as of the Effective Date, and, shall continue in full force and effect until the Parties have no further obligations to each other hereunder, unless and until earlier terminated as provided herein (the "Term"). The Parties acknowledge and agree that this Agreement cannot be terminated except as expressly set forth herein.

11.2 Termination for Cause. Either Party (the "Non-Breaching Party") may, without prejudice to any other remedies available to it at law or in equity, terminate this Agreement if the other Party (the "Breaching Party") shall have materially breached or defaulted in the performance of its obligations hereunder, and such default shall have continued for sixty (60) days (or, in the case of a payment breach, thirty (30) days) following the Breaching Party's receipt of notice of such breach from the Non-Breaching Party. Any such termination of this Agreement under this Section 11.2 shall become effective at the end of such sixty (60) day or thirty (30) day (as applicable) cure period, unless the Breaching Party has cured such breach or default prior to the expiration of such cure period. The right of either Party to terminate this Agreement as provided in this Section 11.2 shall not be affected in any way by such Party's waiver or failure to take action with respect to any previous default. Notwithstanding the foregoing, (a) if such material breach (other than a payment breach), by its nature, is curable, but is not reasonably curable within the sixty (60) day cure period, then such cure period shall be extended if the Breaching Party provides a written plan for curing such breach to the Non-Breaching Party and uses Diligent Efforts to cure

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such breach in accordance with such written plan; provided, that no such extension shall exceed sixty (60) days without the consent of the Non-Breaching Party; and (2) if the Breaching Party disputes that it has materially breached this Agreement, the dispute shall be resolved pursuant to Section 12.1 and Section 12.2, as applicable. If, as a result of the application of such dispute resolution procedures, the Breaching Party is determined to be in material breach of this Agreement (an “Adverse Ruling”), then if the Breaching Party fails to cure such material breach within sixty (60) days after such ruling (whether or not such actions are specified by the Adverse Ruling) (or thirty (30) days after such ruling in the case of a payment breach), then the Non-Breaching Party may terminate this Agreement upon written notice to the Breaching Party as provided in this Section 11.2.

11.3 Termination for Patent Challenge. If Licensee or any of its Affiliates or any Sublicensee (a) commences or otherwise voluntarily determines to participate in any action or proceeding (including any patent opposition or re-examination proceeding), challenging or denying the validity or enforceability of any INFI Prosecution Patent Right, INFI Other Patent Right or INK Prosecution Patent Right or any claim thereof, or (b) actively assists any other Person in bringing or prosecuting any action or proceeding (including any patent opposition or re-examination proceeding) challenging or denying the validity or enforceability of any INFI Prosecution Patent Right, INFI Other Patent Right or INK Prosecution Patent Right or any claim thereof, then INFI shall have the right to terminate this Agreement upon thirty (30) days written notice to Licensee unless Licensee, its Affiliates and Sublicensees have withdrawn such action before the end of the above notice period.

11.4 Licensee’s Termination for Convenience. At any time during the Term following the earlier of (a) determination whether the DUO clinical trial has or has not met its pre-specified primary endpoint as defined in the DUO clinical trial protocol, as amended, attached as Exhibit H, and (b) a determination by Licensee to discontinue the DUO clinical trial under Section 3.1.4(c), Licensee shall have the right to terminate this Agreement in its entirety upon not less than one hundred eighty (180) days prior written notice thereof to INFI.

11.5 Termination for Insolvency. In the event that either Party (a) files for protection under bankruptcy or insolvency laws, (b) makes an assignment for the benefit of creditors, (c) appoints or suffers appointment of a receiver or trustee over substantially all of its property that is not discharged within ninety (90) days after such filing, (d) proposes a written agreement of composition or extension of its debts, (e) proposes or is a party to any dissolution or liquidation, (f) files a petition under any bankruptcy or insolvency act or has any such petition filed against that is not discharged within sixty (60) days of the filing thereof, or (g) admits in writing its inability generally to meet its obligations as they fall due in the general course, then the other Party may terminate this Agreement in its entirety effective immediately upon written notice to such Party.

11.6 Effect of Termination by INFI Pursuant to Section 11.2, 11.3 or 11.5 or Licensee pursuant to Section 11.4. Upon INFI’s termination of this Agreement pursuant to Section 11.2, 11.3 or 11.5 or Licensee’s termination of this Agreement pursuant to Section 11.4, all rights and

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licenses granted by INFI to Licensee hereunder shall terminate and Licensee shall not have any rights to use, or exercise any rights under, the Duvelisib IP. If, within thirty (30) days following the effective date of such termination, Licensee receives from INFI a written waiver of any and all claims for damages that INFI or any of its Affiliates may have against Licensee, its Affiliates or its Sublicensees arising from or relating to this Agreement (except, to the extent that such termination results from a Headlicense Termination Event, such waiver will not be required to waive any direct damages INFI suffers as a result of such Headlicense Termination Event, which may include (i) any payments INFI is required to make to INK resulting from termination of the INK Agreement, (ii) any reasonable costs associated with INFI's obtaining a replacement for the INK Agreement, or (iii) the difference between the economic terms of such new agreement with INK and the economic terms of the INK Agreement (provided that INFI uses commercially reasonable efforts to mitigate any such difference), then at Licensee's sole cost:

11.6.1 INFI, within thirty (30) days after the date of such notice or waiver, shall promptly prepare, with Licensee's reasonable cooperation, and the Parties shall negotiate, a termination and wind-down plan that will include, at a minimum, a plan for accomplishing the activities described in this Section 11.6.

11.6.2 Licensee shall, at INFI's request, promptly provide to INFI a fair and accurate detailed written description of the status of the Development, Manufacture and Commercialization of the IPI-145 Compound and the IPI-145 Product in the Territory as of the effective date of the termination;

11.6.3 To the extent requested by INFI, Licensee shall, at its own expense, promptly transfer and assign to INFI all of Licensee's, each of its Affiliates' and each Sublicensee's rights in any INDs, Marketing Authorizations and Regulatory Documentation necessary or useful for the Research (including to perform medicinal chemistry), Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product in the Territory; except that Licensee may retain a single copy of such items for its records, and such Regulatory Documentation shall become the Confidential Information of INFI (with INFI considered the Disclosing Party and Licensee considered the Receiving Party), and Licensee may not rely on the exceptions enumerated in Sections 8.1.1, 8.1.2 or 8.1.5 with respect to its obligations regarding the confidentiality and non-use of such Confidential Information under this Agreement;

11.6.4 To the extent requested by INFI, Licensee shall, at its own expense, promptly transfer and assign to INFI all of Licensee's, each of its Affiliates' and each Sublicensee's rights to other technical and other information or materials that are necessary or useful for the Research (including to perform medicinal chemistry), Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product in the Territory and all promotional materials, customer data, competitive intelligence data, market research and other materials, information or data related to the marketing, promotion or sale of the IPI-145 Compound or IPI-145 Product in the Territory in its possession or control as of the effective date of such termination; except that Licensee may retain a single copy of such items for its records, and such technical and other information or materials shall become the Confidential Information of INFI

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(with INFI considered the Disclosing Party and Licensee considered the Receiving Party), and Licensee may not rely on the exceptions enumerated in Sections 8.1.1, 8.1.2 or 8.1.5 with respect to its obligations regarding the confidentiality and non-use of such Confidential Information under this Agreement;

11.6.5 Within thirty (30) days after the effective date of expiration or termination of this Agreement, the Receiving Party shall, and shall cause its Affiliates to, (a) destroy all tangible items solely comprising, bearing or containing any Confidential Information of the Disclosing Party or any of its Affiliates that are in the Receiving Party's or its Affiliates' possession or control, and provide written certification of such destruction, or (b) ship such tangible items of the Disclosing Party's (or any of its Affiliates') Confidential Information to the Disclosing Party, as the Disclosing Party may direct, at the Receiving Party's expense; provided, that in any event, (x) each Party may retain one copy of the Confidential Information of the other Party or any of its Affiliates to the extent necessary to perform its obligations that survive expiration or termination of this Agreement; (y) the Receiving Party may retain one copy of such Confidential Information of the Disclosing Party or any of its Affiliates for its legal archives; and (z) INFI may retain Licensee's (or any of its Affiliates') Confidential Information to the extent necessary for INFI to exercise its rights that survive expiration or termination of this Agreement. Any Confidential Information that is subject to the exceptions enumerated in Sections 8.1.1, 8.1.2, 8.1.3, 8.1.4 or 8.1.5 shall not be subject to the obligations imposed on the Receiving Party pursuant to clause (a) or (b) of this Section 11.6.5;

11.6.6 At INFI's request, Licensee shall, at its own expense, promptly transfer and assign to INFI all of Licensee's, each of its Affiliates' and each Sublicensee's rights, title and interests in and to the IPI-145 Product-specific trademark(s) (for the avoidance of doubt, not including any Licensee housemarks) used for the IPI-145 Product in the Territory, including the Product Mark, and all goodwill therein;

11.6.7 Promptly upon request by INFI, but in no event commencing later than [* * *] days after the effective date of termination and in no event lasting longer than [* * *] days following the effective date of termination, Licensee shall provide such assistance as may be reasonably necessary or useful for INFI to commence or continue Developing, Manufacturing or Commercializing the IPI-145 Compound or IPI-145 Product in the Territory, to the extent Licensee, any of its Affiliates or any Sublicensee is then performing or having performed such activities, including transferring (by novation) or amending as appropriate and where permitted by applicable contractual restriction, upon request of INFI, any agreements or arrangements with Third Party vendors to Develop, Manufacture, distribute, sell or otherwise Commercialize the IPI-145 Compound or IPI-145 Product in the Territory. To the extent that any such contract is not assignable to INFI, Licensee shall reasonably cooperate with INFI to arrange to continue to provide such services for a reasonable time after termination;

11.6.8 If there are any clinical studies being conducted by or under the authority of Licensee or any of its Affiliates or any Sublicensee at the time of notice of termination, Licensee shall, as INFI may request, (a) at Licensee's expense, promptly transition to INFI or its designee

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some or all of such on-going clinical studies and the activities related to or supporting such clinical studies, (b) at INFI's expense, continue to conduct such on-going clinical studies for a period requested by INFI up to a maximum of [* * *] months after the effective date of such termination, or (c) at Licensee's expense, terminate such on-going clinical studies in a manner consistent with applicable Law; provided, however, that in the event that INFI, Licensee, an institutional review board or independent safety board determines that an on-going clinical study being run by Licensee or any of its Affiliates or any Sublicensee would pose an unacceptable safety risk for subjects or patients participating in such on-going clinical study, Licensee shall not be obligated to continue such clinical study and Licensee shall provide INFI with a full explanation of the safety issue concerns raised by such institutional review board or independent safety board and, if requested by INFI, reasonable documentation thereof; and

11.6.9 At INFI's request, Licensee shall provide INFI written notice of the quantity of the IPI-145 Compound or IPI-145 Product that Licensee or any of its Affiliates has in inventory in the Territory and permit INFI, at INFI's option, to take ownership and control of all or any part of such inventory.

Notwithstanding any provision of this Agreement to the contrary, Licensee shall have no obligations under Sections 11.6.1 through 11.6.9 unless and until INFI executes the waiver of damages described in Section 11.6 and delivers such executed waiver of damages to Licensee.

11.7 Effect of Termination by Licensee Pursuant to Section 11.2 or 11.5. Upon Licensee's termination of this Agreement pursuant to Sections 11.2 or 11.5, all rights and licenses granted by INFI to Licensee hereunder shall terminate and Licensee shall not have any rights to use, or exercise any rights under, the Duvelisib IP and all rights and license granted by Licensee to INFI under Section 2.3 shall terminate (except as otherwise set forth in Section 6.1.2) and INFI shall not have any rights to use, or exercise any rights under, the Licensee IP. At INFI's sole cost and request, the Parties shall perform the following actions and in such an event, INFI shall pay to Licensee a royalty of [* * *] on Net Sales (applied to INFI in the same manner as applied to Licensee):

11.7.1 To the extent requested by INFI, Licensee shall, at INFI's own expense, promptly transfer and assign to INFI all of Licensee's, each of its Affiliates' and each Sublicensee's rights in any INDs, Marketing Authorizations and Regulatory Documentation necessary or useful for the Research (including to perform medicinal chemistry), Development, Manufacture or Commercialization of the IPI-145 Compound or IPI-145 Product in the Territory; except that Licensee may retain a single copy of such items for its records, and such Regulatory Documentation shall become the Confidential Information of INFI (with INFI considered the Disclosing Party and Licensee considered the Receiving Party), and Licensee may not rely on the exceptions enumerated in Sections 8.1.1, 8.1.2 or 8.1.5 with respect to its obligations regarding the confidentiality and non-use of such Confidential Information under this Agreement;

11.7.2 At INFI's request, Licensee shall, at INFI's expense, promptly transfer and assign to INFI all of Licensee's, each of its Affiliates' and each Sublicensee's rights, title and

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interests in and to the IPI-145 Product-specific trademark(s) (for the avoidance of doubt, not including any Licensee housemarks) used for the IPI-145 Product in the Territory, including the Product Mark, and all goodwill therein;

11.7.3 If there are any clinical studies being conducted by or under the authority of Licensee or any of its Affiliates or any Sublicensee at the time of notice of termination, Licensee shall, as INFI may request, (a) at INFI's expense (including the reimbursement of Licensee's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses in connection therewith), promptly transition to INFI or its designee some or all of such on-going clinical studies and the activities related to or supporting such clinical studies, (b) at INFI's expense (including the reimbursement of Licensee's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses in connection therewith), and to the extent possible given the resources Licensee has available to it at the relevant time, continue to conduct such on-going clinical studies for a period requested by INFI up to a maximum of [* * *] months after the effective date of such termination, or (c) at INFI's expense (including the reimbursement of Licensee's reasonable and documented Internal Personnel Expenses and Out-of-Pocket Expenses in connection therewith), terminate such on-going clinical studies in a manner consistent with applicable Law

11.8 Accrued Rights; Surviving Provisions of the Agreement.

11.8.1 Termination or expiration of this Agreement for any reason shall be without prejudice to any rights that shall have accrued to the benefit of any Party or any Third Party Grantor prior to such termination or expiration, including the payment obligations under this Agreement or any INFI Third Party Agreement (including Licensee's payment obligations for sales of the IPI-145 Product made during the Term and including Licensee's payment obligations with respect to any milestone payment or Reimbursement Event achieved during the Term), and any and all damages or remedies arising from any breach hereunder. Such termination or expiration shall not relieve any Party from obligations which are expressly indicated to survive termination of this Agreement.

11.8.2 The provisions of Sections 2.1 (to the extent such license survives pursuant to Section 6.1.2), 2.2 (to the extent the license in Section 2.1 survives pursuant to Section 6.1.2), 2.3 (except if such license is terminated as a result of INFI's breach), 2.4.6 (as applicable), 2.4.7, 2.4.8 (as applicable), 2.6.1, 2.7 (to the extent the relevant license survives in accordance with this Agreement), 3.1.2(c) (to the extent any portion of the Reimbursement Payments are made in Licensee Common Stock and such restrictions still apply at the time of termination of this Agreement), 3.1.4(b), 6.1.2 (to the extent the grant of such licenses is triggered prior to the effective date of termination), 6.1.4, 6.2 (to the extent related to a Calendar Quarter prior to the termination of this Agreement), 6.3, 6.4, 6.5 (for [* * *]), 6.6 (to the extent there are remaining obligations at the time of termination of this Agreement), 6.7 (to the extent there are remaining obligations at the time of termination of this Agreement), 7.1, 7.2, 7.9.3, 8 (for the survival term specified in Section 8.7), 9.5, 10.1 through 10.4 (solely with respect to indemnifiable events that occur prior to the effective date of termination), 10.5, 10.6 (for the survival periods specified

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therein), 11.6, 11.7, 11.8, 11.9, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.9, 12.11, 12.12, 12.13, 12.14, 12.15, 12.16, 12.17, 12.18 and 12.19, any applicable definitions in ARTICLE 1 and any other definitions or provisions necessary to interpret such surviving provisions, shall survive the termination of this Agreement in its entirety or expiration of this Agreement for any reason, in accordance with their respective terms and conditions, and for the duration stated, and where no duration is stated, shall survive indefinitely.

11.9 Damages; Relief. Except to the extent INFI executes and delivers a waiver of damages described in Section 11.6, termination of this Agreement shall not preclude either Party from claiming any other damages, compensation or relief that it may be entitled to upon such termination.

**ARTICLE 12
MISCELLANEOUS**

12.1 Disputes. In the event any dispute arises out of or in relation to or in connection with this Agreement, including failure to perform under or breach of this Agreement, or any issue relating to the interpretation or application of this Agreement or any INFI Third Party Agreement, the Parties shall use good faith efforts to resolve such dispute within [* * *] days after a Party notifies the other Party of such dispute. If the Parties are unable to resolve such dispute within such [* * *] day period, either Party may, by written notice to the other Party, refer such dispute to the Senior Executives for resolution, and the Senior Executives shall attempt in good faith to resolve such dispute within [* * *] days after such notice.

12.2 Arbitration. If the Senior Executives are unable to resolve a given dispute referred to it pursuant to Section 12.1 within [* * *] days following such referral of such dispute, either Party may have such dispute settled by binding arbitration in the manner described below:

12.2.1 Arbitration Request. If a Party intends to begin an arbitration to resolve a dispute arising under this Agreement, such Party shall provide written notice (the "Arbitration Request") to the other Party of such intention and the issues for resolution.

12.2.2 Additional Issues. Within [* * *] days after the receipt of the Arbitration Request, the other Party may, by written notice, add additional issues for resolution.

12.2.3 Arbitration Rules; Location. Except as expressly provided herein, the sole mechanism for resolution of any claim, dispute or controversy arising out of or in connection with or relating to this Agreement or the breach or alleged breach thereof shall be arbitration by the American Arbitration Association ("AAA"), in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the AAA as then in effect. The arbitration shall take place in Boston, Massachusetts.

12.2.4 English Language. All proceedings shall be held in English and a transcribed record prepared in English. Documents submitted in the arbitration (the originals of

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which are not in English) shall be submitted together with a reasonably complete and accurate English translation.

12.2.5 Selection of Arbitrators. Each Party shall choose one arbitrator within [* * *] days after receipt of notice of the intent to arbitrate and the said two arbitrators shall select by mutual agreement a third arbitrator within [* * *] days after they have been selected as arbitrators. If one or more arbitrators are not appointed within the times herein provided or any extension of time that is mutually agreed on, the AAA shall make such appointment within [* * *] days after such failure.

12.2.6 Experience. If the issues in dispute involve scientific or technical matters, any arbitrators chosen hereunder shall have educational training or experience sufficient to demonstrate a reasonable level of knowledge in the pharmaceutical and biotechnology fields.

12.2.7 Time Schedule. Within [* * *] days after initiation of arbitration, the Parties shall reach agreement upon and thereafter follow procedures directed at ensuring that the arbitration will be concluded and the final award rendered within no more than [* * *] months from selection of the three arbitrators or as soon thereafter as practicable. Failing such agreement, the AAA will design and the Parties will follow procedures directed at meeting such a time schedule.

12.2.8 Powers of Arbitrators. The arbitrators shall be limited in the scope of their authority to resolving only the specific matter which the Parties have referred to arbitration for resolution and shall not have authority to render any decision or award on any other issues. Without limiting the foregoing, the arbitrators:

(a) shall not have any power or authority to add to, alter, amend or modify the terms of this Agreement but shall specify rules sufficient to allow reasonable discovery by the Parties;

(b) shall establish and enforce appropriate rules to ensure that the proceedings, including the decision, be kept confidential and that all Confidential Information of any Party disclosed during such proceedings be kept confidential in accordance with this Agreement and be used for no purpose other than the arbitration unless otherwise permitted in accordance with ARTICLE 8; and

(c) shall issue all preliminary awards and the final award in writing.

12.2.9 Injunctive Relief. Nothing in this Agreement shall be deemed as preventing either Party from seeking injunctive relief (or any other provisional remedy such as temporary restraining order, preliminary injunction or other interim equitable relief) from the arbitrators or from any court having jurisdiction over the Parties (and prior to or during any arbitration if necessary to protect the interests of such Party in avoiding irreparable harm or to preserve the status quo pending the arbitration proceeding) and the subject matter of the dispute, as necessary

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to protect such Party's name, Confidential Information, Know-How or any other proprietary right or otherwise to avoid irreparable harm. Without limiting the generality of the foregoing, either Party may seek such injunctive relief (or any other such provisional remedy) if it reasonably believes that the other Party has breached this Agreement.

12.2.10 Costs; Exclusion from Award. The award rendered by the arbitrators shall not include costs of arbitration, attorneys' fees or costs for expert and other witnesses, which shall be the responsibility of each Party (*i.e.*, each Party shall bear its own costs and expenses), except that the Parties shall share equally the fees of the arbitrators.

12.2.11 Judgment. Judgment on the award rendered by the arbitrators may be entered in any court having jurisdiction thereof.

12.2.12 Survivability. Any duty to arbitrate under this Agreement shall remain in effect and be enforceable after termination of this Agreement.

12.3 Timing. Resolution of any disputes shall be subject to the relevant Third Party Grantor's rights under the applicable INFI Third Party Agreement and any time frames set forth in Sections 12.1 or 12.2 shall, to the extent necessary to comply with such rights, be modified to accommodate the time-frames for dispute resolution under the relevant INFI Third Party Agreement.

12.4 Governing Law. This Agreement and any dispute arising from the performance or breach hereof shall be governed by and construed and enforced in accordance with the Laws of the State of New York without giving effect to conflicts of the laws provisions thereof. The provisions of the United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement or any subject matter hereof.

12.5 Assignment. Neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred by any Party without the consent of the other Party; except that any Party may, without such consent, assign this Agreement, in whole or in part: (a) to any of its respective Affiliates, provided, that the assigning Party shall remain jointly and severally liable with such Affiliate in respect of all obligations so assigned; or (b) to any successor in interest by way of merger, acquisition or sale of all or substantially all of its assets to which this Agreement relates, provided, that such successor agrees in writing to be bound by the terms of this Agreement as if it were the assigning party. Any assignment or transfer of this Agreement not in accordance with this Section 12.5 shall be void and unenforceable.

12.6 No Reach Through to Acquirer IP.

12.6.1 Notwithstanding anything in this Agreement to the contrary, following the closing of a Change of Control of INFI, Licensee shall not obtain rights or access to the Patent Rights or Know-How controlled by the INFI Acquirer (as defined below) or any of the Affiliates of INFI (other than INFI and its Affiliates which exist immediately prior to the closing of such

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Change of Control (such Affiliates, the “INFI Pre-Existing Affiliates”). For clarity but without limitation, Licensee’s rights in all Patent Rights and Know-How Controlled by INFI or any of its INFI Pre-Existing Affiliates, which Patent Rights and Know-How exist as of the date of the closing of such Change of Control and are then licensed hereunder to Licensee, and all Counterparts of such Patent Rights, shall remain licensed to Licensee after the date of the closing of such Change of Control in accordance with and subject to the terms and conditions of this Agreement and shall not be affected in any manner by virtue of such Change of Control. “INFI Acquirer” means the Third Party that acquires INFI or its direct or indirect controlling Affiliate, or that acquires all or substantially all of the assets of INFI or its direct or indirect controlling Affiliate.

12.6.2 Notwithstanding anything in this Agreement to the contrary, following the closing of a Change of Control of Licensee, INFI shall not obtain rights or access to the Patent Rights or Know-How controlled by the Licensee Acquirer (as defined below) or any of the Affiliates of Licensee (other than Licensee and its Affiliates which exist immediately prior to the closing of such Change of Control (such Affiliates, the “Licensee Pre-Existing Affiliates”). For clarity but without limitation, INFI’s rights in all Patent Rights and Know-How Controlled by Licensee or any of its Licensee Pre-Existing Affiliates, which Patent Rights and Know-How exist as of the date of the closing of such Change of Control and are then licensed hereunder to INFI, and all Counterparts of such Patent Rights, shall remain licensed to INFI after the date of the closing of such Change of Control in accordance with and subject to the terms and conditions of this Agreement and shall not be affected in any manner by virtue of such Change of Control. “Licensee Acquirer” means the Third Party that acquires Licensee or its direct or indirect controlling Affiliate, or that acquires all or substantially all of the assets of Licensee or its direct or indirect controlling Affiliate.

12.7 Licensee Acquisition of Third Party Grantor. In the event that (a) Licensee or any of its Affiliates acquires any Third Party Grantor or any of its Affiliates, by merger, purchase of assets or otherwise, and (b) a breach by Licensee, any of its Affiliates or any Sublicensee of this Agreement results in a breach by INFI of the applicable INFI Third Party Agreement, then: (x) such breach shall not be cited by Licensee or its Affiliates against INFI as a breach of such INFI Third Party Agreement and INFI shall have a reasonable period of time to cure such breach that is no less than the longer of (i) the time that Licensee had to perform such activity or to cure such breach or (ii) one hundred eighty (180) days; (y) if such breach relates to Licensee’s failure to make any payment due hereunder which amount is owed to such Third Party Grantor under such INFI Third Party Agreement, INFI shall have no obligation to make the corresponding payment to such Third Party Grantor; and (z) if such breach is incapable of cure using commercially reasonable efforts, it shall not be deemed a breach of either this Agreement or such INFI Third Party Agreement, and neither Licensee nor its Affiliates shall be entitled to take any further action against INFI with respect to such breach.

12.8 Force Majeure. No Party shall be held liable or responsible to the other Party nor be deemed to be in default under, or in breach of any provision of, this Agreement for failure or delay in fulfilling or performing any obligation (other than a payment obligation) of this

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Agreement when such failure or delay is due to force majeure, and without the fault or negligence of the Party so failing or delaying. For purposes of this Agreement, force majeure is defined as causes beyond the reasonable control of the failing or delaying Party, which may include strike, fire, flood, earthquake, accident, war, act of terrorism, act of God or of the government of any country or of any local government or by other cause unavoidable or beyond the reasonable control of such Party. In such event the affected Party shall immediately notify the other Party of such inability and of the period for which such inability is expected to continue. The Party giving such notice shall thereupon be excused from such of its obligations under this Agreement as it is thereby disabled from performing for so long as it is so disabled for up to a maximum of ninety (90) days, after which time INFI and Licensee shall promptly meet to discuss in good faith how to best proceed in a manner that maintains and abides by the Agreement. The failing or delaying Party shall use commercially reasonable efforts to minimize the duration of any force majeure and to resume performance of its obligations. Notwithstanding the foregoing, Licensee may not rely on this Section 12.8, or any comparable provision at law or in equity, (a) to excuse, or extend any cure period without respect to, any breach or failure to perform by Licensee that may cause INFI to be in breach of any INFI Third Party Agreement, except to the extent permitted by the applicable INFI Third Party Agreement or (b) to extend any period for performance of any obligation of Licensee (whether to be performed directly or through any of its Affiliates or any Sublicensee) that, if breached, may cause INFI to be in breach of any INFI Third Party Agreement, except to the extent permitted by the applicable INFI Third Party Agreement.

12.9 Notices. All notices, consents, waivers, and other communications under this Agreement must be in writing and will be deemed to have been duly given when (a) delivered by hand (with written confirmation of receipt) or (b) when received by the addressee, if sent by an internationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses set forth below (or to such other addresses as a Party may designate by notice):

If to INFI, addressed to:

Infinity Pharmaceuticals, Inc.
784 Memorial Drive
Cambridge, Massachusetts 02139
Attention: General Counsel

with a copies to:

Infinity Pharmaceuticals, Inc.
784 Memorial Drive
Cambridge, Massachusetts 02139
Attention: Chief Executive Officer

and

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Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, MA 02109
Attention: Belinda M. Juran, Esq.

If to Licensee, addressed to:

Verastem, Inc.
117 Kendrick Street, Suite 500
Needham, Massachusetts 02494
Attention: Chief Operating Officer

with a copy to:

Verastem, Inc.
117 Kendrick Street, Suite 500
Needham, Massachusetts 02494
Attention: Senior Corporate Counsel

and

Ropes & Gray LLP
Prudential Tower, 800 Boylston Street
Boston, MA 02199-3600
Attention: Marko Zatylny

12.10 Export Clause. Each Party acknowledges that the Laws of the United States restrict the export and re-export of commodities and technical data of United States origin. Each Party agrees that it will not export or re-export restricted commodities or the technical data of the other Party in any form without the appropriate United States and non-U.S. United States government licenses.

12.11 Waiver. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. The failure of either Party to assert a right hereunder or to insist upon compliance with any term of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

12.12 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any jurisdiction, (a) such provision shall be deemed stricken from this Agreement, (b) the Parties shall negotiate in good faith a valid, legal and enforceable substitute provision that most nearly reflects the original intent of the Parties and (c) all other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in

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order to carry out the intentions of the Parties as nearly as may be possible. Such invalidity, illegality or unenforceability shall not affect the validity, legality or enforceability of such provision in any other jurisdiction.

12.13 Entire Agreement. This Agreement, together with the Exhibits hereto, sets forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties as to the subject matter of this Agreement and supersedes and terminates all prior agreements and understanding between the Parties with respect to the subject matter hereof. In particular, and without limitation, this Agreement supersedes and replaces the Superseded Agreement which is hereby terminated in its entirety effective as of the Effective Date, the Existing Confidentiality Agreement and any and all term sheets relating to the transactions contemplated by this Agreement and exchanged between the Parties or any of their Affiliates prior to the Effective Date. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties as to the subject matter of this Agreement other than as set forth herein and therein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by the respective authorized officers of the Parties.

12.14 Independent Contractors. Nothing herein shall be construed to create any relationship of employer and employee, agent and principal, partnership or joint venture between the Parties. Each Party is an independent contractor. Neither Party shall assume, either directly or indirectly, any liability of or for the other Party. Neither Party shall have the authority to bind or obligate the other Party and neither Party shall represent that it has such authority.

12.15 Headings; Construction; Interpretation.

12.15.1 Headings used herein are for convenience only and shall not in any way affect the construction of or be taken into consideration in interpreting this Agreement.

12.15.2 The terms of this Agreement represent the results of negotiations between the Parties and their representatives, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and each of the Parties hereby waives the application in connection with the interpretation and construction of this Agreement of any rule of Law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

12.15.3 Any reference in this Agreement to an Article, Section, subsection, paragraph, clause, Schedule or Exhibit shall be deemed to be a reference to any Article, Section, subsection, paragraph, clause, Schedule or Exhibit, of or to, as the case may be, this Agreement.

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12.15.4 Except where the context otherwise requires, (a) any definition of or reference to any agreement, instrument or other document refers to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (b) any reference to any Law refers to such Law as from time to time enacted, repealed or amended, (c) the words “herein,” “hereof” and “hereunder,” and words of similar import, refer to this Agreement in its entirety and not to any particular provision hereof, (d) the words “include,” “includes,” and “including” shall be deemed to be followed by the phrase “but not limited to,” “without limitation” or words of similar import, (e) the word “or” is used in the inclusive sense (and/or), (f) words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders, (g) a capitalized term not defined herein but reflecting a different part of speech than a capitalized term which is defined herein shall be interpreted in a correlative manner, (h) the word “will” will be construed to have the same meaning and effect as the word “shall”, (i) any reference herein to any Person will be construed to include such Person’s successors and/or permitted assignees, (j) the word “notice” means notice in writing (whether or not specifically stated) and no inference or conclusions of any sort shall be drawn from the fact that in some instances in this Agreement, the word “notice” is actually preceded or followed by “in writing” or the equivalent while in other instances they are not, and (k) provisions that require a Party or the Parties to “agree”, “consent”, “approve” or the like, or to inform the other Party, will require that such agreement, consent, approval or the like, or such notice informing the other Party, be specific and in a writing signed by an authorized officer of such Party(ies), and no inferences or conclusions of any sort shall be drawn from the fact that in some instances in this Agreement, the words “agree”, “consent”, “approve” or the like, or the requirement to inform the other Party, are actually preceded or followed by “in writing” or the equivalent while in other instances they are not.

12.16 Further Actions. Each Party shall execute, acknowledge and deliver such further instruments as may be necessary or appropriate in order to carry out the expressly stated purposes and the clear intent of this Agreement.

12.17 Parties in Interest. All of the terms and provisions of this Agreement shall be binding upon, and shall inure to the benefit of and be enforceable by the Parties and their respective and permitted assigns.

12.18 Performance by Affiliates. To the extent that this Agreement imposes obligations on Affiliates of a Party, such Party agrees to cause its Affiliates to perform such obligations and a breach by such Affiliate shall be considered a breach by such Party.

12.19 Counterparts. This Agreement may be signed in counterparts, each and every one of which shall be deemed an original, notwithstanding variations in format or file designation which may result from the electronic transmission, storage and printing of copies from separate computers or printers. Facsimile signatures and signatures transmitted via PDF shall be treated as original signatures.

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IN WITNESS WHEREOF, and intending to be legally bound hereby, the Parties have caused this Agreement to be executed by their duly authorized representatives to be effective as of the Effective Date.

INFINITY PHARMACEUTICALS, INC.

VERASTEM, INC.

By: /s/ Adelene Q. Perkins

By: /s/ Robert Forrester

Name: Adelene Q. Perkins

Name: Robert Forrester

Title: CEO and Chair

Title: CEO

[Signature Page to Amended and Restated License Agreement]

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Exhibit A

INFI PROSECUTION PATENT RIGHTS

[* * *]

Exhibit A-1

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Exhibit B

INK PROSECUTION PATENT RIGHTS

[* * *]

Exhibit B-1

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Exhibit C

IPI-145 OR DUVELISIB

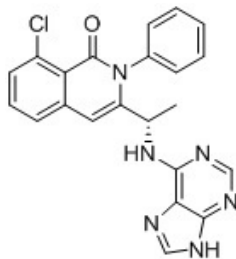


Exhibit C-1

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Exhibit D

IPI-443

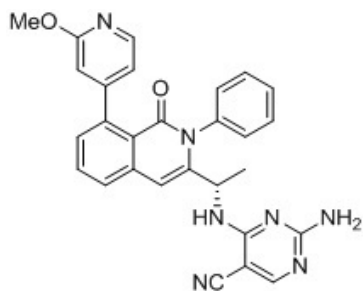


Exhibit D-1

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Exhibit E

PRODUCT MARKS

Mark (Class)	Country	Status	Filing No.	Filing Date	Reg. No.	Reg. Date
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]		
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]		
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]		
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]		
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]	[* * *]

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**EXHIBIT F
TRANSITION PLAN**

[* * *]

Exhibit F-1

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Exhibit F-1

INFI PRODUCT RELATED CONTRACTS

[* * *]

Exhibit F-1-1

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Exhibit F-2

SPECIFICATION FOR DUVELISIB DRUG SUBSTANCE AND RSMS

[* * *]

Exhibit F-2-1

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EXHIBIT F-3

Inventory

[* * *]

Exhibit F-3-1

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Exhibit G

DEVELOPMENT PLAN

[* * *]

Exhibit G-1

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Exhibit H

DUO CLINICAL TRIAL PROTOCOL

[* * *]

Exhibit H-1

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Exhibit I

TARGET INHIBITOR CRITERIA

[* * *]

Exhibit I-1

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Exhibit I-1

[* * *] DESCRIPTION

[* * *]

Exhibit I-1-1

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT is made and dated as of March 21, 2017, and is entered into by and among (a) VERASTEM, INC., a Delaware corporation (“Verastem”), and each of its Qualified Subsidiaries (hereinafter collectively referred to as the “Borrower”), (b) the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, referred to as “Lender”), and (c) HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, the “Agent”).

RECITALS

A. Borrower has requested Lender to make available to Borrower a loan or loans in an aggregate principal amount of up to Twenty-Five Million Dollars (\$25,000,000.00) (the “Term Loan”); and

B. Lender is willing to make the Term Loan on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrower, Agent and Lender agree as follows:

SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

“1934 Act” means the Securities Exchange Act of 1934, as amended.

“Account Control Agreement(s)” means any agreement entered into by and among the Agent, Borrower and a third-party Bank or other institution (including a Securities Intermediary) in which Borrower maintains a Deposit Account or an account holding Investment Property (in each case subject to the provisions of Section 7.12) and which grants Agent a perfected first priority security interest in the subject account or accounts.

“ACH Authorization” means the ACH Debit Authorization Agreement in substantially the form of Exhibit H, which account numbers shall be redacted for security purposes if and when filed publicly by the Borrower.

“ACH Failure” means (i) the failure of the Automated Clearing House (ACH) system to effect a transfer of funds requested by Lender to be used to satisfy all or part of Borrower’s obligations to pay principal and interest due hereunder or (ii) a failure by Lender to initiate debit entries for the periodic payments of such principal or interest.

“Advance(s)” means a Term Loan Advance.

“Advance Date” means the funding date of any Advance.

“Advance Request” means a request for an Advance submitted by Borrower to Agent in substantially the form of Exhibit A, which account numbers shall be redacted for security purposes if and when filed publicly by the Borrower.

“Affiliate” means (a) any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question, (b) any Person directly or indirectly owning, controlling or holding with power to vote ten percent (10%) or more of the outstanding voting securities of another Person or (c) any Person ten percent (10%) or more of whose outstanding voting securities are directly or indirectly owned, controlled or held by another Person with power to vote such securities. As used in the definition of “Affiliate,” the term “control” means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise.

“Agent” has the meaning given to it in the preamble to this Agreement.

“Agreement” means this Loan and Security Agreement, as amended from time to time.

“Amortization Date” means November 1, 2018; provided however, if the Interest Only Extension Conditions are satisfied on or prior to November 1, 2018, then “Amortization Date” shall mean May 1, 2019.

“Assignee” has the meaning given to it in Section 11.13.

“Board” means Borrower’s board of directors or any duly qualified subcommittee thereof, as applicable.

“Borrower Products” means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by Borrower or which Borrower intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower since its incorporation.

“Business Day” means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

“Cash” means all cash, cash equivalents and liquid funds.

“Change in Control” means any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the 1934 Act, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the 1934 Act) of more than fifty percent (50%) of the equity interests of Verastem entitled to vote for members of its Board on a fully diluted basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right).

“Claims” has the meaning given to it in Section 11.10.

“Closing Date” means the date of this Agreement.

“Code” means the Internal Revenue Code of 1986, as amended from time to time.

“Collateral” means the property described in Section 3.

“Common Stock” means the common stock, \$0.001 par value per share of Verastem.

“Confidential Information” has the meaning given to it in Section 11.12.

“Contingent Obligation” means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term “Contingent Obligation” shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

“Copyright License” means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“Copyrights” means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

“Deposit Accounts” means any “deposit accounts,” as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

“Designated Foreign Subsidiary” means any Foreign Subsidiary, individually, and in the aggregate with other Foreign Subsidiaries, which owns personal property and assets, in each case determined as of the most recent fiscal year end, in an amount less than ten percent (10.0%) of all of the personal property and assets of Verastem.

“Domestic Subsidiary” means any Subsidiary that is not a Foreign Subsidiary or Excluded Subsidiary.

“Due Diligence Fee” means Twenty-Thousand Dollars (\$20,000.00), which fee is due to Lender on or prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

“Eligible Foreign Subsidiary” means any Foreign Subsidiary (which is not a Designated Foreign Subsidiary) whose execution of a Joinder Agreement would not result in a material adverse tax consequence to Borrower and whom Agent elects to join as a Borrower.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

“Event of Default” has the meaning given to it in Section 9.

“Excluded Account” means (i) any Account (including, for the avoidance of doubt, any cash, cash equivalents, or other property contained therein) to the extent, and for so long as, such Account is pledged and used exclusively to secure performance of obligations arising under clauses (vi) and (xiv) of the defined term “Permitted Liens”, and whether such pledge is by escrow or otherwise, (ii) accounts used solely to fund payroll or employee benefits, (iii) withholding tax, benefits, trust, escrow, or fiduciary accounts, and (iv) other Accounts that have an aggregate balance not to exceed One Hundred Thousand Dollars (\$100,000.00) for all such Accounts at any time and (v) deposit, securities, commodity or similar accounts in jurisdictions outside the United States of America that have an aggregate balance not to exceed One Hundred Thousand Dollars (\$100,000.00) for all such accounts at any time.

“Excluded Subsidiary” means Verastem Securities Company, a Massachusetts securities corporation, which is a Subsidiary of Borrower that has applied or is in the process of applying to be classified as a “security corporation” under Massachusetts General Laws Ch. 63, Section 38B(a), as amended, supplemented and/or modified.

“Excluded Taxes” shall mean (i) taxes imposed on or with respect to Lender’s overall net or gross income or gross receipts, or franchise taxes imposed in lieu of the foregoing, by any jurisdiction in which Lender is resident, has a branch or otherwise has any other former or present connection (other than any connection solely attributable to this Agreement), (ii) branch profits taxes, (iii) any withholding taxes imposed on Lender with respect to the payments it is entitled to receive hereunder pursuant to laws in effect on the date it becomes a party to this Agreement (which in the case of any permitted assignee of Lender, shall mean the date as of which Lender’s rights and obligations under this Agreement are assigned to such Person), (iv) Taxes attributable to Lender’s failure to comply with Sections 7.10(b) and 7.10(c), (v) any U.S. federal withholding taxes imposed on Lender under FATCA, and (vi) any U.S. federal backup withholding tax.

“Facility Charge” means Seventy-Five Thousand Dollars (\$75,000.00).

“FATCA” means Section 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Code, and any applicable intergovernmental agreement with respect thereto and applicable official implementing guidance thereunder.

“Financial Statements” has the meaning given to it in Section 7.1.

“Foreign Subsidiary” means any Subsidiary that is not a “United States person” within the meaning of Section 7701(a)(3) of the Code.

“Foreign Subsidiary HoldCo” means any (a) Domestic Subsidiary substantially all the assets of which consist, directly or indirectly, of equity interests (or equity interests and indebtedness) of one or more Foreign Subsidiaries that are treated as a controlled foreign corporation within the meaning of Section 957 of the Code, or (b) Subsidiary that is disregarded for U.S. federal income tax purposes and substantially all the assets of which consist, directly or indirectly, of equity interests (or equity interests and indebtedness) of one or more Foreign Subsidiaries that are treated as a controlled foreign corporation within the meaning of Section 957 of the Code.

“GAAP” means generally accepted accounting principles in the United States of America, as in effect from time to time, consistently applied, except that for purposes of the classification of operating leases (other than with respect to Section 7.1), GAAP shall be determined on the basis of such principles in effect on the Closing Date. For purposes of Section 7.1, GAAP shall be determined on the basis of such principles in effect on the Closing Date and consistent with those used in the preparation of the most recent audited or unaudited financial statements filed with the Securities and Exchange Commission in a Form 10-K or Form 10-Q (with such changes as are permitted to be made to GAAP pursuant to Section 7.1).

“Indebtedness” means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business due within ninety (90) days), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, and (d) all Contingent Obligations; provided that Indebtedness shall not include (i) prepaid or deferred revenue arising in the ordinary course of business and (ii) endorsements of checks or drafts arising in the ordinary course of business.

“Intellectual Property” means all of Borrower’s Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; Borrower’s applications therefor and reissues, extensions, or renewals thereof; and Borrower’s goodwill associated with any of the foregoing, together with Borrower’s rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

“Interest Only Extension Conditions” means satisfaction of each of the following events: (a) no default or Event of Default shall have occurred; and (b) confirmation by Agent and Lender that Borrower has received, after the Closing Date but on or prior to November 1, 2018, unrestricted and unencumbered net cash proceeds in a minimum amount of at least Twenty Million Dollars (\$20,000,000) in connection with either (i) the issuance and sale by Borrower of its equity securities or Subordinated Indebtedness with investors reasonably acceptable to Agent, and/or (ii) ongoing commercial partnerships reasonably acceptable to Agent with Persons reasonably acceptable to Agent.

“Inventory” means “inventory” as defined in Article 9 of the UCC.

“Investment” means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of all, or substantially all, of the assets of another Person. The amount of any Investment at any time shall be the original principal amount thereof less all dividends, distributions, interest payments, returns of principal or equity or other amount received on the sale or disposition of such Investment on or before such time and shall, if made by the transfer or exchange of assets other than cash, be deemed to have been made in an amount equal to the fair market value of such assets at the time of such Investment

“Joinder Agreements” means for each Qualified Subsidiary, a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

“Lender” has the meaning given to it in the preamble to this Agreement.

“License” means any Copyright License, Patent License, Trademark License or other license of rights or interests.

“Lien” means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest; provided that in no event shall an operating lease entered into in the ordinary course of business or any precautionary UCC filings made pursuant thereto by an applicable lessor or lessee, be deemed to be a Lien.

“Liquidity Requirement” shall have the meaning assigned to such term in Section 7.15.

“Loan” means the Advances made under this Agreement.

“Loan Documents” means this Agreement, the Notes (if any), the ACH Authorization, the Account Control Agreements, the Joinder Agreements, all UCC Financing Statements, any subordination agreement, and any other documents executed in connection with the Secured Obligations or the transactions contemplated hereby, as the same may from time to time be amended, modified, supplemented or restated.

“Material Adverse Effect” means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrower and its Subsidiaries taken as a whole; or (ii) the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent’s Liens on the Collateral or the priority of such Liens.

“Maximum Rate” shall have the meaning assigned to such term in Section 2.3.

“Milestone Event” shall mean that (a) no Event of Default shall have occurred, and (b) Agent shall have confirmed, in Agent’s reasonable discretion, on or prior to September

20, 2017, that Borrower has achieved the pre-specified primary endpoint in a Phase III clinical study evaluating the safety and efficacy of Duvelisib in the treatment of patients with relapsed/refractory chronic lymphocytic leukemia or small lymphocytic lymphoma.

“Note(s)” means a promissory note or promissory notes to evidence Lender’s Loans substantially in the form of Exhibit B.

“Patent License” means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement Borrower now holds or hereafter acquires any interest.

“Patents” means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

“Permitted Indebtedness” means: (i) Indebtedness of Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document; (ii) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A; (iii) Indebtedness of up to Two Hundred Thousand Dollars (\$200,000) outstanding at any time secured by a Lien described in clause (vii) of the defined term “Permitted Liens,” provided such Indebtedness does not exceed the cost of the Equipment financed with such Indebtedness; (iv) Indebtedness to trade creditors incurred in the ordinary course of business, and Indebtedness incurred in the ordinary course of business with corporate credit cards (including travel and entertainment expenses and similar expenses incurred in the ordinary course of business); (v) Indebtedness that also constitutes a Permitted Investment; (vi) Subordinated Indebtedness; (vii) reimbursement obligations in connection with letters of credit and cash management services (including credit cards, debit cards and similar instruments) that are secured by Cash and issued on behalf of the Borrower or a Subsidiary thereof in an amount not to exceed Three Hundred Thousand Dollars (\$300,000) at any time outstanding, (viii) other unsecured Indebtedness in an amount not to exceed Two Hundred Thousand Dollars (\$200,000) at any time outstanding, (ix) intercompany Indebtedness as long as either (A) each of the Subsidiary obligor and the Subsidiary obligee under such Indebtedness is a Qualified Subsidiary that has executed a Joinder Agreement or (B) neither the Subsidiary obligor nor the Subsidiary obligee under such Indebtedness is a Borrower, and (x) extensions, refinancings, renewals, modifications, amendments, restatements, or amendments and restatements of any items of Permitted Indebtedness, provided that the principal amount is not increased or the terms modified do not impose materially more burdensome terms upon Borrower or its Subsidiary, as the case may be.

“Permitted Investment” means: (i) Investments existing on the Closing Date which are disclosed in Schedule 1B; (ii) (a) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof, (b) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor’s Corporation or Moody’s Investors Service, (c) certificates of deposit issued by any bank with assets of at least Five Hundred Million Dollars (\$500,000,000) maturing no more than one year from the date of investment therein, (d) money market accounts, and (e) such other

Investments as are described in the Board-approved investment guidelines delivered to Agent prior to the Closing Date or with such changes as reasonably acceptable to Agent made after the Closing Date; (iii) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; (iv) Investments accepted in connection with Permitted Transfers; (v) 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 Borrower's business; (vi) 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, provided that this subparagraph (vi) shall not apply to Investments of Borrower in any Subsidiary; (vii) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds to employees, officers or directors relating to the purchase of capital stock of Borrower pursuant to employee stock purchase plans or other similar agreements approved by the Board; (viii) Investments consisting of travel advances in the ordinary course of business; (ix) Investments in newly-formed Domestic Subsidiaries, provided that each such Domestic Subsidiary enters into a Joinder Agreement promptly after its formation by Borrower or any Subsidiary and execute such other documents as shall be reasonably requested by Agent; (x) intercompany Investments as long as either (A) each of the Subsidiary investor and the Subsidiary investee under such Investments is a Qualified Subsidiary that has executed a Joinder Agreement or (B) neither the Subsidiary investor nor the Subsidiary investee under such Investment is a Borrower or an Excluded Subsidiary; (xi) Investments in Foreign Subsidiaries approved in advance in writing by Agent; (xii) joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the nonexclusive licensing of technology, the development of technology or the providing of technical support, provided that any cash Investments by Borrower or any Subsidiary do not exceed Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate in any fiscal year; (xiii) Investments in the Excluded Subsidiary, so long as an Event of Default does not exist at the time of such Investment and would not exist after giving effect to such Investment and provided that Borrower is, at all times, in compliance with the Liquidity Requirement; and (xiv) additional Investments that do not exceed Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate.

"Permitted Liens" means any and all of the following: (i) Liens in favor of Agent or Lender; (ii) Liens existing on the Closing Date which are disclosed in Schedule 1C; (iii) Liens for taxes, fees, assessments or other governmental charges or levies, either (A) not delinquent or (B) being contested in good faith by appropriate proceedings and Borrower maintains adequate reserves therefor in accordance with GAAP (to the extent required thereby); (iv) Liens securing claims or demands of materialmen, artisans, mechanics, carriers, warehousemen, landlords and other like Persons arising in the ordinary course of Borrower's business and imposed without action of such parties; provided, that the payment thereof is not yet required; (v) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder; (vi) deposits to secure the performance of obligations (including by way of deposits to secure letters of credit issued to secure the same) under commercial supply and/or manufacturing agreements in an amount not to exceed Five Hundred Thousand Dollars (\$500,000) and the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for

the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds; (vii) Liens on Equipment or software or other intellectual property constituting purchase money Liens and Liens in connection with capital leases securing Indebtedness permitted in clause (iii) of “Permitted Indebtedness”; (viii) Liens incurred in connection with Subordinated Indebtedness; (ix) leasehold interests in leases, subleases, licenses or sublicenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor; (x) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due; (xi) Liens on insurance proceeds securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to such insurance proceeds and not to any other property or assets); (xii) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms; (xiii) easements, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property; (xiv) (A) Liens on Cash securing obligations permitted under clause (vii) of the definition of Permitted Indebtedness and (B) security deposits in connection with real property leases, the combination of (A) and (B) in an aggregate amount not to exceed Seven Hundred Thousand Dollars (\$700,000) at any time; (xv) sales, transfers, licenses, sublicenses, leases, subleases or other dispositions of assets not prohibited by Section 7.8 and, in connection therewith, customary rights and restrictions contained in agreements relating to such transactions pending the completion thereof or during the term thereof, and any option or other agreement to sell, transfer, license, sublicense, lease, sublease or dispose of an asset not prohibited by Section 7.8 and (xvi) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xvi) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced, modified, amended, restated or amended and restated (as may have been reduced by any payment thereon) does not increase.

“Permitted Transfers” means (i) sales, transfers or other dispositions of Inventory in the ordinary course of business, (ii) licenses, sublicenses and similar arrangements for the use of Intellectual Property and related assets in the ordinary course of business and other licenses and sublicenses that could not result in a legal transfer of title of the licensed property, (iii) transfers expressly permitted under Section 7.5, 7.6 or 7.7, (iv) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business, (v) transfers by and among the Borrower and any of its Subsidiaries, provided that such Subsidiary has entered into a Joinder Agreement and such other documents as shall reasonably be required by Agent, (vi) transfers by and among Subsidiaries, provided that no Subsidiary involved in such transfer is a Borrower or an Excluded Subsidiary, (vii) the use or transfer of cash or cash equivalents in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents and in the ordinary course of business, (viii) transfers consisting of Permitted Liens, and (ix) other Transfers of assets having a fair market value of not more than Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate in any fiscal year.

“Person” means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

“Prepayment Charge” shall have the meaning assigned to such term in Section 2.4.

“Prime Rate” is the “prime rate” as reported in *The Wall Street Journal* or any successor publication thereto.

“Proposed Future Royalty Backed Indebtedness Transactions” is defined in Section 11.19 hereof.

“Qualified Subsidiary” means any direct or indirect Domestic Subsidiary (other than the Excluded Subsidiary) or Eligible Foreign Subsidiary.

“Receivables” means (i) all of Borrower’s Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

“Register” shall have the meaning assigned to such term in Section 11.7(b).

“Required Lenders” means at any time, the holders of more than 50% of the aggregate unpaid principal amount of the Term Loan Advances then outstanding.

“Secured Obligations” means Borrower’s obligations under this Agreement and any Loan Document, including any obligation to pay any amount now owing or later arising.

“SPE” means any Subsidiary formed for the sole purpose of effectuating a Proposed Future Royalty Backed Indebtedness Transactions.

“Subordinated Indebtedness” means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its sole but reasonable discretion.

“Subsidiary” means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which Borrower owns or controls 50% or more of the outstanding voting securities, including each entity listed on Schedule 1 hereto.

“Tax” and “Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

“Term Loan” shall have the meaning assigned to such term in the preamble to this Agreement.

“Term A Loan Advance” shall have the meaning assigned to such term in Section 2.1(a).

“Term B Draw Period” means the period of time commencing upon the Closing Date, and continuing through the earliest to occur of (a) December 20, 2017, (b) the date that is ninety (90) days after the occurrence of the Milestone Event, or (c) an Event of Default.

“Term B Loan Advance” shall have the meaning assigned to such term in Section 2.1(a).

“Term C Draw Period” means the period of time commencing upon the occurrence of each of (a) the Milestone Event and (b) Lender making both the Term A Loan Advance and the Term B Loan Advance, and continuing through the earliest to occur of (a) December 20, 2017, (b) the date that is ninety (90) days after the occurrence of the Milestone Event, or (c) an Event of Default.

“Term C Loan Advance” shall have the meaning assigned to such term in Section 2.1(a).

“Term D Draw Period” means the period of time commencing upon the occurrence of the Lender making each of the Term A Loan Advance, the Term B Loan Advance and the Term C Loan Advance, and continuing through the earlier to occur of (a) June 30, 2018 or (b) an Event of Default.

“Term D Loan Advance” shall have the meaning assigned to such term in Section 2.1(a).

“Term Commitment” means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to the Borrower in a principal amount not to exceed the amount set forth under the heading “Term Commitment” opposite such Lender’s name on Schedule 1.1.

“Term Loan Advance” and “Term Loan Advances” shall have the meaning assigned to such terms in Section 2.1(a).

“Term Loan Interest Rate” means for any day a floating per annum rate of interest equal to the greater of either (a) 10.5% and (b) the lesser of (i) 12.75% and (ii) the sum of (x) 10.5% plus (y) (A) the Prime Rate minus (B) 4.5%.

“Term Loan Maturity Date” means December 1, 2020.

“Trademark License” means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“Trademarks” means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

“UCC” means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory provisions

of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC.

SECTION 2. THE LOAN

2.1 Term Loan.

(a) Term Loan Advances. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, and Borrower agrees to draw, one (1) advance in a principal amount of Two Million Five Hundred Thousand Dollars (\$2,500,000) on the Closing Date (the "Term A Loan Advance"). Subject to the terms and conditions of this Agreement, during the Term B Draw Period, upon Borrower's written request in accordance with this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, one (1) advance in a principal amount of Two Million Five Hundred Thousand Dollars (\$2,500,000) (the "Term B Loan Advance"). Subject to the terms and conditions of this Agreement, during the Term C Draw Period, upon Borrower's written request in accordance with this Agreement and Borrower's payment to Lender of a fully-earned non-refundable commitment fee equal to Twenty-Five Thousand Dollars (\$25,000), Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, one (1) advance in a principal amount of Five Million Dollars (\$5,000,000) (the "Term C Loan Advance"). Subject to the terms and conditions of this Agreement, during the Term D Draw Period, upon Borrower's written request in accordance with this Agreement and Borrower's payment to Lender of a fully-earned non-refundable commitment fee equal to one percent (1%) of the principal amount of each such advance, Lender may in its sole discretion elect to make or not make, in an amount not to exceed its respective Term Commitment, an advance or advances, each in a principal amount of greater than or equal to Five Million Dollars (\$5,000,000) (each a "Term D Loan Advance") but in an aggregate principal amount for all Term D Loan Advances not to exceed Fifteen Million Dollars. The Term A Loan Advance, the Term B Loan Advance, the Term C Loan Advance, and each Term D Loan Advance are hereinafter referred to individually as a "Term Loan Advance" and collectively as the "Term Loan Advances". The aggregate outstanding principal amount of Term Loan Advances shall not exceed the

Term Loan. Proceeds of any Term Loan Advance shall be deposited into an account that is subject to a first priority perfected security interest in favor of Agent perfected by an Account Control Agreement.

(b) Advance Request. To obtain a Term Loan Advance, Borrower shall complete, sign and deliver to Agent an Advance Request (at least three (3) Business Days before the Advance Date other than (i) the Term A Loan Advance, which shall be at least one (1) Business Day, and (ii) any Term D Loan Advance, which shall be at least thirty (30) days). Lender shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the requested Advance Date.

(c) Interest. The principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Interest Rate will float and change on the day the Prime Rate changes from time to time.

(d) Payment. Borrower will pay interest on each Term Loan Advance on the first (1st) Business Day of each month, beginning the month after the Advance Date. Borrower shall repay the aggregate Term Loan principal balance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style), based upon an amortization schedule of thirty (30) months, beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid. Notwithstanding the foregoing, the entire Term Loan principal balance and all accrued but unpaid interest hereunder and all other Secured Obligations with respect to Term Loan Advances, shall be due and payable on Term Loan Maturity Date. Borrower shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to the Borrower's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender under each Term Loan Advance and (ii) reasonable and invoiced out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement. Once repaid, a Term Loan Advance or any portion thereof may not be reborrowed.

2.2 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrower has actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrower shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lender's accrued interest,

costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrower.

2.3 Default Interest. In the event any payment is not paid on the scheduled payment date (or within three (3) Business Days of the scheduled payment date, provided that such late payment is due to an ACH Failure), an amount equal to five percent (5%) of the past due amount shall be payable on demand, provided that no such amount shall be payable if such nonpayment is due to Lender's failure to initiate debt entries pursuant to the ACH Authorization. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c) plus five percent (5%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or this Section 2.3, as applicable.

2.4 Prepayment. At its option upon at least seven (7) Business Days prior notice to Agent (or such shorter notice period as agreed by Agent), Borrower may prepay all or any portion of the outstanding Term Loan Advances by paying the entire principal balance (or any portion thereof) with respect to the principal balance being prepaid, all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the Term Loan Advance amount being prepaid: if such Term Loan Advance amounts are prepaid in any of the first twelve (12) months following the Closing Date, three percent (3%); on or after twelve (12) months but prior to twenty-four (24) months, two percent (2%), and thereafter, one percent (1%) (each, a "Prepayment Charge"). Borrower agrees that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Term Loan Advances. Borrower shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge if Agent and Lender (in its sole and absolute discretion) agree in writing to refinance the Term Loan Advances prior to the Maturity Date. Notwithstanding anything to the contrary contained in this Agreement, Borrower may rescind any notice of prepayment if such prepayment would have resulted from a refinancing of all or a portion of the Term Loan Advances, which refinancing shall not be consummated or shall otherwise be delayed.

2.5 End of Term Charge. On the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full, or (iii) the date that the Secured Obligations become due and payable, Borrower shall pay Lender a charge of four and one half of one percent (4.5%) of the greater of (a) Five Million Dollars (\$5,000,000) and (b) the total principal amount of all Term Loan Advances made hereunder. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

2.6 Notes. If so requested by Lender by written notice to Borrower, then Borrower shall execute and deliver to Lender (and/or, if applicable and if so specified in such

notice, to any Person who is an assignee of Lender pursuant to Section 11.13) (promptly after the Borrower's receipt of such notice) a Note or Notes to evidence Lender's Loans.

2.7 Pro Rata Treatment. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advances shall be made pro rata according to the Term Commitments of the relevant Lender.

SECTION 3. SECURITY INTEREST

3.1 As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in and to the following personal property whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles (other than Intellectual Property); (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower (other than Intellectual Property) whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrower's property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing; provided, however, that the Collateral shall include all Accounts and General Intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, Borrower is not granting to Agent, and Agent is not receiving from Borrower, any grant of security interest in (a) any Excluded Account, (b) any of the outstanding capital stock or other equity interests of any owned (x) Foreign Subsidiary (other than an Eligible Foreign Subsidiary) or (y) Foreign Subsidiary HoldCo of Borrower in excess of sixty-five percent (65%) of the equity interests (as determined for U.S. federal income tax purposes) of such Subsidiary, (c) any of the outstanding capital stock or other equity interests of a Subsidiary owned by a Foreign Subsidiary HoldCo, (d) equipment financed by capital leases or purchase money financing, products, proceeds and insurance proceeds of the foregoing, but only to the extent and for so long as the agreements under which the equipment is financed prohibit granting a security interest therein to Lender, or (e) any particular asset if the pledge thereof or the security interest therein is prohibited or restricted by applicable law, rule or regulation (including any requirement to obtain the consent of any governmental authority, regulatory authority or third party), provided that the foregoing exclusion of this clause (e) shall in no way be construed (1) to apply to the extent that any described prohibition or restriction is unenforceable under Section 9-406, 9-407, 9-408, or 9-409 of the UCC or other applicable law or (2) to apply to the extent that any consent or waiver has been obtained, or is hereafter obtained, that would permit the Agent's security interest or Lien notwithstanding the prohibition or restriction on the pledge of such asset.

3.2 For the avoidance of doubt, without the written agreement of Borrower, the Excluded Subsidiary is not granting to Agent, and Agent is not receiving from the Excluded Subsidiary, any grant of a security interest in the Excluded Subsidiary's property or assets, whether now owned or hereafter acquired. Notwithstanding the previous

sentence, nothing herein will limit the Agent's (i) ability to require Borrower to completely liquidate the Excluded Subsidiary and transfer all proceeds of such liquidation to an account in the name of Borrower that is subject to an Account Control Agreement pursuant to the terms of Section 7.15 hereof, or (ii) rights and remedies under the Loan Documents upon the occurrence and during the continuance of an Event of Default

3.3 If this Agreement is terminated in accordance with its terms, Agent's Lien in the Collateral shall continue until the Secured Obligations (other than inchoate indemnity obligations) are satisfied in full, and at such time Agent shall, at Borrower's sole cost and expense, authorize Borrower to terminate its security interest in the Collateral and all rights therein shall automatically revert to Borrower. Agent shall execute such documents and take such other steps as are reasonably necessary for Borrower to accomplish the foregoing, all at Borrower's sole cost and expense.

SECTION 4. CONDITIONS PRECEDENT TO LOAN

The obligations of Lender to make the Term Loan Advances hereunder, in each case, are subject to the satisfaction by Borrower of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrower shall have delivered to Agent the following:

(a) executed copies of the Loan Documents, Account Control Agreements, a legal opinion of Borrower's counsel, and all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral, in all cases in form and substance reasonably acceptable to Agent;

(b) certified copy of resolutions of the Board evidencing approval of the Loan and other transactions evidenced by the Loan Documents;

(c) certified copies of the Certificate of Incorporation and the Bylaws, as amended through the Closing Date, of Borrower;

(d) a certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified would have a Material Adverse Effect;

(e) payment of the Due Diligence Fee, the Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance;

(f) an executed copy of a legal opinion of Borrower's counsel dated as of the Closing Date; and

(g) such other documents as Agent may reasonably request.

4.2 All Advances. On each Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), duly executed by Borrower's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.

(b) the representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representations and warranties shall be true and correct in all material respects as of such earlier date;

(c) Borrower shall be in compliance with all the terms and provisions set forth herein and in each other Loan Document on its part to be observed or performed, and at the time of and immediately after such Advance no Event of Default shall have occurred and be continuing; and

(d) each Advance Request shall be deemed to constitute a representation and warranty by Borrower on the relevant Advance Date as to the matters specified in paragraphs (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWER

Borrower represents and warrants that:

5.1 Corporate Status. Borrower is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, as may be updated by Borrower in a written notice (including any Compliance Certificate) provided to Agent after the Closing Date.

5.2 Collateral. Borrower owns the Collateral and the Intellectual Property, free of all Liens, except for Permitted Liens. Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Borrower's execution, delivery and performance of this Agreement and all other Loan Documents (i) have been duly authorized by all necessary corporate action of Borrower, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and

the other Loan Documents, (iii) do not violate any provisions of Borrower's Certificate or Articles of Incorporation (as applicable), bylaws, or any, law, regulation, order, injunction, judgment, decree or writ to which Borrower is subject and (iv) except as described on Schedule 5.3, do not violate any contract or agreement or require the consent or approval of any other Person which has not already been obtained, except for consents and approvals the failure of which to obtain could not reasonably be expected to have a material adverse effect on Borrower's business. The individual or individuals executing the Loan Documents are duly authorized to do so.

5.4 Material Adverse Effect. No event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of Borrower, threatened against or affecting Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws. Borrower is not in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. Borrower is not in default in any manner under any provision of any agreement or instrument evidencing material Indebtedness in excess of One Hundred Fifty Thousand Dollars (\$150,000), or any other material agreement to which it is a party or by which it is bound, which default could reasonably be expected to have a material adverse effect on Borrower's business.

Borrower, its Subsidiaries and, to the knowledge of the Borrower and its Subsidiaries, any agent or other party acting on behalf of Borrower or its Subsidiaries are in compliance with all applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations, and none of the funds to be provided under this Agreement will be used, directly or indirectly, for any activities in violation of such laws and regulations.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrower to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrower, and (ii) the most current of such projections provided to the Board (it being understood that such projections are subject to significant uncertainties and contingencies, many of which are beyond the control of Borrower, that no assurance is given that any particular projections will be realized, that actual results may differ).

5.8 Tax Matters. Except as described on Schedule 5.8 and except those being contested in good faith with adequate reserves under GAAP, (a) Borrower has filed all

material federal, state and local tax returns that it is required to file, (b) Borrower has duly paid or fully reserved for all taxes or installments thereof (including any interest or penalties) as and when due, which have become due pursuant to such returns, and (c) Borrower has paid or fully reserved for any tax assessment received by Borrower for the three (3) years preceding the Closing Date, if any (including any taxes being contested in good faith and by appropriate proceedings) in each case, other than with respect to taxes that do not exceed Fifty Thousand Dollars (\$50,000) in the aggregate.

5.9 Intellectual Property Claims. Borrower is the sole owner of, or otherwise has the right to use, the Intellectual Property material to Borrower's business. Except as described on Schedule 5.9, (i) each of the Copyrights, Trademarks and Patents is valid and enforceable, (ii) no part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and (iii) to the best of Borrower's knowledge, no claim has been made to Borrower that any part of the Intellectual Property violates the rights of any third party which could reasonably be expected to have a material adverse effect on Borrower's business. Exhibit D is a true, correct and complete list of each of Borrower's Patents, registered Trademarks, registered Copyrights, and material agreements under which Borrower licenses Intellectual Property from third parties (other than shrink-wrap software licenses), together with application or registration numbers, as applicable, owned by Borrower or any Subsidiary, in each case as of the Closing Date. Borrower is not in breach of, nor has Borrower failed to perform any obligations under, any of the foregoing contracts, licenses or agreements and, to Borrower's knowledge, no third party to any such contract, license or agreement is in breach thereof or has failed to perform any obligations thereunder, in each case, to the extent such breach could be reasonably expected to have a material adverse effect on Borrower's business.

5.10 Intellectual Property. To Borrower's knowledge, except as described on Schedule 5.10, Borrower has all material rights with respect to Intellectual Property necessary in the operation or conduct of Borrower's business as currently conducted by Borrower. Without limiting the generality of the foregoing, and in the case of Licenses, except for restrictions that are unenforceable under Division 9 of the UCC, Borrower has the right, to the extent required to operate Borrower's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted by Borrower, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and Borrower owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to Borrower's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Borrower Products that are material to Borrower's business except customary covenants in inbound license agreements, equipment and real property leases where Borrower is the licensee or lessee.

5.11 Borrower Products. Except as described on Schedule 5.11, no Intellectual Property owned by Borrower or Borrower Product has been or is subject to any actual or, to the knowledge of Borrower, threatened in writing litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign

office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner Borrower's use, transfer or licensing thereof or that may affect the validity, use or enforceability thereof, in each case, which could reasonably be expected to have a material adverse effect on Borrower's business.

There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates Borrower to grant licenses or ownership interest in any future Intellectual Property related to the operation or conduct of the business of Borrower or Borrower Products. Except as set forth on the Compliance Certificate, Borrower has not received any written notice or claim, or, to the knowledge of Borrower, oral notice or claim, challenging or questioning Borrower's ownership in any Intellectual Property material to Borrower's business (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property material to Borrower's business of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to Borrower's knowledge, in each case, is there a reasonable basis for any such claim. Neither Borrower's use of its Intellectual Property material to Borrower's business nor the production and sale of Borrower Products material to Borrower's business infringes the Intellectual Property or other rights of others.

5.12 Financial Accounts. Exhibit E, as may be updated by the Borrower in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which Borrower or any Subsidiary maintains Deposit Accounts and (b) all institutions at which Borrower or any Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name, address and telephone number of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Except as permitted by Section 7.7(a), Borrower has no outstanding loans to any employee, officer or director of the Borrower nor has Borrower guaranteed the payment of any loan made to an employee, officer or director of the Borrower by a third party.

5.14 Capitalization and Subsidiaries. Borrower does not own any stock, partnership interest or other securities of any Person, except for Permitted Investments. Attached as Schedule 5.14, as may be updated by Borrower in a written notice provided after the Closing Date, is a true, correct and complete list of each Subsidiary.

SECTION 6. INSURANCE; INDEMNIFICATION

6.1 Coverage. Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrower's line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrower must maintain a minimum of Two Million Dollars (\$2,000,000) of commercial general liability insurance for each occurrence; any combination of primary and umbrella liability policies may be utilized in order to maintain this limit. Borrower has and agrees to maintain a minimum of Two

Million Dollars (\$2,000,000) of directors' and officers' insurance for each occurrence and Five Million Dollars (\$5,000,000) in the aggregate. So long as there are any Secured Obligations outstanding (other than inchoate indemnity obligations), Borrower shall also cause to be carried and maintained insurance upon the Collateral, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

6.2 Certificates. Borrower shall deliver to Agent certificates of insurance for its global master insurance policies, which shall evidence Borrower's compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrower's insurance certificate shall state Agent (shown as "Hercules Capital, Inc., as Agent") is an additional insured for its global master commercial general liability insurance policies, a loss payee for all global master risk property damage insurance policies, subject to the insurer's approval, and a loss payee for its global master property insurance policies and additional insured for liability insurance for any future global master insurance that Borrower may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for global master liability and lender's loss payable endorsements for all global master risk property damage insurance. All such certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. Borrower shall provide Agent with a copy of each global master insurance policy, and upon entering or amending any such global master insurance policy required hereunder, Borrower shall provide Agent with a copy of such global master insurance policies and shall promptly deliver to Agent updated insurance certificates with respect to such global master insurance policies.

6.3 Indemnity. Borrower agrees to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable and invoiced out-of-pocket costs (including attorneys' fees) and disbursements and other costs of investigation or defense within ten (10) days of receipt of such invoice (which ten (10) day period shall not apply to costs, expenses, damages and liabilities, out-of-pocket costs (including attorneys' fees) and disbursements and other costs of investigation or defense (including those incurred upon any appeal) due on the Term Loan Maturity Date or in connection with a payoff in full of the Secured Obligations) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. Borrower agrees to pay, and

to save Agent and Lender harmless from, any and all liabilities with respect to, or resulting from any delay in paying, any and all excise, sales or other similar taxes (excluding taxes imposed on or measured by the net income of Agent or Lender) that may be payable or determined to be payable with respect to any of the Collateral or this Agreement. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement. This Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

SECTION 7. COVENANTS OF BORROWER

Borrower agrees as follows:

7.1 Financial Reports. Borrower shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements"):

(a) as soon as practicable (and in any event within 30 days) after the end of each calendar month (commencing with the month ending March 31, 2017), unaudited interim and year-to-date financial statements as of the end of such month (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that would reasonably be expected to have a Material Adverse Effect, all certified by Borrower's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in a manner consistent with past practice by management, except (i) for the absence of footnotes, (ii) that they are subject to normal year end adjustments, and (iii) they do not contain certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) as soon as practicable (and in any event within forty-five (45) days) after the end of the last day of each of the first three fiscal quarters of each fiscal year, unaudited interim and year-to-date financial statements as of the end of such calendar quarter (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that would reasonably be expected to have a Material Adverse Effect, certified by Borrower's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, except (i) for the absence of footnotes, and (ii) that they are subject to normal year end adjustments;

(c) (i) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, unqualified (other than a going concern qualification solely with respect to the maturity of any outstanding Term Loan Advances) audited financial statements as of the end of such year (prepared on a consolidated and consolidating basis,

if applicable), including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrower and reasonably acceptable to Agent, (it being understood that any nationally recognized big four accounting firm is reasonably acceptable to Agent) and (ii) as soon as practical (and in any event within ten (10) days after delivery of the financial statements in the foregoing clause (i), any management report from such accountants;

(d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit F;

(e) at Agent's written request, a report showing agings of accounts receivable and accounts payable;

(f) promptly after the sending or filing thereof, as the case may be, copies of any proxy statements, financial statements or reports that Borrower has made available to holders of Verastem's Common Stock and copies of any regular, periodic and special reports or registration statements that Borrower files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(g) financial and business projections promptly following their approval by the Board, and in any event, within sixty (60) days subsequent to the end of Borrower's fiscal year, as well as budgets, operating plans and other financial information reasonably requested by Agent (provided that Borrower and its Subsidiaries shall not be obligated to disclose pursuant to this Section 7.1(g) any privileged attorney-client communication, or information that Borrower is not permitted by statute, regulation, or court order to disclose).

Borrower shall not make any material change in its (a) accounting policies or reporting practices except for any change required by GAAP through the mandate of new procedures, unless Borrower used commercially reasonable efforts to notify Agent within thirty (30) days in advance of such change, or (b) fiscal years or fiscal quarters, unless Borrower shall have notified Agent in writing within thirty (30) days in advance of such change. The fiscal year of Borrower shall end on December 31.

The executed Compliance Certificate may be sent via email to Agent at legal@herculestech.com. All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financialstatements@herculestech.com with a copy to legal@herculestech.com provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be sent to Agent at: legal@herculestech.com, attention Chief Credit Officer.

Notwithstanding the foregoing, documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower emails a link thereto to Agent; provided that

Borrower shall directly provide Agent all Financial Statements required to be delivered pursuant to Section 7.1(b) and (c) hereunder.

7.2 Management Rights. Borrower shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrower at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than once per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrower to discuss such books of account and records at reasonable times and upon reasonable notice during normal business hours. In addition, Agent or Lender shall be entitled at reasonable times and intervals acceptable to Borrower to consult with and advise the management and officers of Borrower concerning significant business issues affecting Borrower; provided that management and officers of Borrower shall not be bound to accept any such advisement. Such consultations shall not unreasonably interfere with Borrower's business operations. The parties intend that the rights granted Agent and Lender shall constitute "management rights" within the meaning of 29 C.F.R. Section 2510.3-101(d) (3)(ii), but that any advice, recommendations or participation by Agent or Lender with respect to any business issues shall not be deemed to give Agent or Lender, nor be deemed an exercise by Agent or Lender of, control over Borrower's management or policies.

7.3 Further Assurances. Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral (subject only to Permitted Liens that have superior priority to Agent's Lien under this Agreement). Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, Borrower hereby authorizes Agent to execute and deliver on behalf of Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of Borrower in accordance with Section 9-504 of the UCC), collateral assignments, notices, control agreements, security agreements and other documents without the signature of Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for Borrower. Borrower shall protect and defend Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. Borrower shall not create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness, or prepay any Indebtedness (other than in connection with refinancings thereof; provided that the principal amount of such Indebtedness is not increased) or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) purchase money Indebtedness pursuant to its then applicable payment schedule, (c) prepayment by

any Subsidiary of (i) inter-company Indebtedness owed by such Subsidiary to any Borrower, or (ii) if such Subsidiary is not a Borrower, intercompany Indebtedness owed by such Subsidiary to another Subsidiary that is not a Borrower or (d) as otherwise permitted hereunder or approved in writing by Agent.

7.5 Collateral. Borrower shall at all times keep the Collateral, the Intellectual Property and all other property and assets used in Borrower's business or in which Borrower now or hereafter holds any interest free and clear from any legal process or Liens whatsoever (except for Permitted Liens), and shall give Agent prompt written notice of any legal process affecting the Collateral, the Intellectual Property, such other property and assets, or any Liens thereon, provided however, that the Collateral and such other property and assets may be subject to Permitted Liens except that there shall be no Liens whatsoever on Intellectual Property. Borrower shall not agree with any Person other than Agent or Lender not to encumber its property other than (i) as is otherwise permitted in the definitions of "Permitted Transfers" and "Permitted Liens" and (ii) restrictions by reason of customary provisions restricting assignment, subletting or other transfers contained in leases, licenses and similar agreements entered into in the ordinary course of business (provided that such restrictions are limited to the property or assets secured by such Liens or the property or assets subject to such leases, licenses or similar agreements as the case may be). Borrower shall not enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of any Borrower to create, incur, assume or suffer to exist any Lien upon any of its Intellectual Property, whether now owned or hereafter acquired, to secure its obligations under the Loan Documents to which it is a party other than (a) this Agreement and the other Loan Documents, (b) any agreements governing any purchase money Liens or capital lease obligations otherwise permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby) and (c) customary restrictions on the assignment of leases, licenses and other agreements. Borrower shall cause its Subsidiaries to protect and defend such Subsidiary's title to its assets from and against all Persons claiming any interest adverse to such Subsidiary, and Borrower shall cause its Subsidiaries at all times to keep such Subsidiary's property and assets free and clear from any legal process or Liens whatsoever (except for Permitted Liens, provided however, that there shall be no Liens whatsoever on Intellectual Property), and shall give Agent prompt written notice of any legal process affecting such Subsidiary's assets.

7.6 Investments. Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments.

7.7 Distributions. Borrower shall not, and shall not allow any Subsidiary to, (a) repurchase or redeem any class of stock or other equity interest other than pursuant to employee, director or consultant repurchase plans or other similar agreements, provided, however, in each case the repurchase or redemption price does not exceed the original consideration paid for such stock or equity interest and such repurchases or redemptions are in an aggregate amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in any fiscal year, provided that no Event of Default has occurred, is continuing or would exist after giving effect to the repurchases, or (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other equity interest, except that a Subsidiary may pay

dividends or make distributions to Borrower, or (c) lend money to any employees, officers or directors or guarantee the payment of any such loans granted by a third party in excess of One Hundred Fifty Thousand Dollars (\$150,000) in the aggregate or (d) waive, release or forgive any Indebtedness owed by any employees, officers or directors in excess of One Hundred Fifty Thousand Dollars (\$150,000) in the aggregate.

7.8 Transfers. Except for Permitted Transfers, Borrower shall not, and shall not allow any Subsidiary to, voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets.

7.9 Mergers or Acquisitions. Borrower shall not merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of (a) a Subsidiary which is not a Borrower into another Subsidiary or into Borrower or (b) a Borrower into another Borrower), or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person without the prior written consent of Agent.

7.10 Taxes.

(a) Borrower and its Subsidiaries shall pay when due all material taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Agent, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom (other than Excluded Taxes).

(b) 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 and Agent, at the time or times reasonably requested by Borrower or Agent, such properly completed and executed documentation reasonably requested by Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, Lender, if reasonably requested by Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower or Agent as will enable Borrower and Agent to determine whether or not 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 Internal Revenue Service Form W-9 or the relevant Internal Revenue Service Form W-8) shall not be required if in Lender's reasonable judgment such completion, execution or submission would subject Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of Lender.

(c) Without limiting the generality of the foregoing, if a payment made to a Lender would be subject to U.S. federal withholding Tax imposed by FATCA if 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), Lender shall deliver to Borrower and Agent at the time or times prescribed by law and at such time or

times reasonably requested by Borrower or Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by Borrower or Agent as may be necessary for Borrower and Agent to comply with its obligations under FATCA and to determine that Lender has complied with Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (c), "FATCA" shall include any amendments made to FATCA after the date hereof.

(d) Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral. Notwithstanding the foregoing, Borrower may contest, in good faith and by appropriate proceedings, taxes for which Borrower maintains adequate reserves therefor in accordance with GAAP.

7.11 Corporate Changes. Neither Borrower nor any Subsidiary shall change its corporate name, legal form or jurisdiction of formation without twenty (20) days' prior written notice to Agent. Neither Borrower nor any Subsidiary shall suffer a Change in Control. Neither Borrower nor any Subsidiary shall relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America. Neither Borrower nor any Qualified Subsidiary shall relocate any item of Collateral (other than (w) Permitted Transfers, (x) movements of Inventory and/or clinical pharmaceutical compounds and/or drugs to, from and between storage depots and clinical sites in the ordinary course of business, (y) relocations of Equipment having an aggregate value of up to Two Hundred Thousand Dollars (\$200,000) in any fiscal year, and (z) relocations of Collateral from a location described on Exhibit C to another location described on Exhibit C) unless (i) it has provided prompt written notice to Agent, (ii) such relocation is within the continental United States of America and, (iii) if such relocation is to a third party bailee, and such relocated (x) Collateral (other than clinical pharmaceutical compounds and/or drug) has an aggregate value in excess of Five Hundred Thousand Dollars (\$500,000), or (y) clinical pharmaceutical compounds and/or drugs has an aggregate value in excess of One Million Dollars (\$1,000,000), it has used its commercially reasonable efforts to deliver a bailee agreement in form and substance reasonably acceptable to Agent.

7.12 Deposit Accounts. Neither Borrower nor any Qualified Subsidiary shall maintain any Deposit Accounts, or accounts holding Investment Property, except with respect to which Agent has an Account Control Agreement; provided that no Account Control Agreement shall be required for any (i) accounts securing Borrower's reimbursement obligations under letters of credit permitted under subsections (vi) and (xiv) of Permitted Liens and (ii) Excluded Accounts.

7.13 Subsidiaries. Borrower shall notify Agent of each Subsidiary formed subsequent to the Closing Date and, within twenty (20) days of formation, shall cause any such Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement.

7.14 Notification of Event of Default. Borrower shall notify Agent immediately of the occurrence of any Event of Default.

7.15 Liquidity Requirement. Borrower shall at all times maintain in accounts of Borrower that are subject to an Account Control Agreement, unrestricted and unencumbered (other than as a result of this Agreement) Cash in an aggregate amount greater than or equal to the lesser of (a) one hundred twenty-five percent (125%) of the aggregate outstanding Advances and (b) one hundred percent (100%) of all Cash of Borrower maintained in any accounts (other than Cash held in Excluded Accounts) (the "Liquidity Requirement"). In addition to and without limiting the foregoing, if at any time Borrower's unrestricted and unencumbered Cash maintained in accounts of Borrower that are subject to an Account Control Agreement is less than one hundred twenty-five percent (125%) of the aggregate outstanding Advances, Borrower shall immediately completely liquidate the Excluded Subsidiary and transfer all proceeds of such liquidation to an account in the name of Borrower that is subject to an Account Control Agreement.

7.16 Post-Closing Deliverables. Borrower shall deliver to Agent within thirty (30) Business Days after the Closing Date, endorsements to Borrower's global master property and liability policies, which endorsements shall name Agent as lender loss payee or additional insured, as applicable and provide that Agent shall receive prior notice of cancellation of such property and liability policies.

SECTION 8. [RESERVED]

SECTION 9. EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrower fails to pay any amount due under this Agreement or any of the other Loan Documents on the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or Borrower's bank if Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay; or

9.2 Covenants. Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among Borrower, Agent and Lender, and (a) with respect to a default under any covenant under this Agreement (other than under Sections 6 (other than delivery of certificates of insurance pursuant to Section 6.2), 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.14, 7.15, and 7.16 any other Loan Document or any other agreement among Borrower, Agent and Lender, such default continues for more than fifteen (15) days after the earlier of the date on which (i) Agent or Lender has given notice of such default to Borrower and (ii) Borrower has actual knowledge of such default or (b) with respect to a default under any of Sections 6 (other than delivery of certificates of insurance pursuant to Section 6.2), 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.14 7.15, and 7.16 (provided, however for (i) Section 6.2 Borrower fails

to cure such default within fifteen (15) Business Days, and (ii) Section 7.15, Borrower fails to cure such default within one (1) Business Day), the occurrence of such default; or

9.3 Material Adverse Effect. A circumstance has occurred that would reasonably be expected to have a Material Adverse Effect; or

9.4 Representations. Any representation or warranty made by Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Borrower (A) (i) shall make an assignment for the benefit of creditors; or (ii) shall be unable to pay its debts as they become due, or be unable to pay or perform under the Loan Documents, or shall become insolvent; or (iii) shall file a voluntary petition in bankruptcy; or (iv) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (v) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of Borrower or of all or any substantial part (i.e., 33-1/3% or more) of the assets or property of Borrower; or (vi) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (vii) Borrower or the Board or majority shareholders shall take any action initiating any of the foregoing actions described in clauses (i) through (vi); or (B) either (i) forty-five (45) days shall have expired after the commencement of an involuntary action against Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of Borrower being stayed; or (ii) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be timely appealed; or (iii) Borrower shall file any answer admitting or not contesting the material allegations of a petition filed against Borrower in any such proceedings; or (iv) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (v) forty-five (45) days shall have expired after the appointment, without the consent or acquiescence of Borrower, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower without such appointment being vacated; or

9.6 Attachments; Judgments. Any portion of Borrower's assets is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered for the payment of money (not covered by independent third party insurance as to which liability has not been rejected by such insurance carrier), individually or in the aggregate, of at least Two Hundred Thousand Dollars (\$200,000), or Borrower is enjoined or in any way prevented by court order from conducting any part of its business, and such attachment, seizure, levy, judgment or enjoinder is not, within fifteen (15) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); or

9.7 Other Obligations. The occurrence of any default under any agreement or obligation of Borrower involving any Indebtedness in excess of Two Hundred Thousand

Dollars (\$200,000), after giving effect to any applicable grace period thereunder, which has resulted in a right by a third party to accelerate the maturity of such Indebtedness.

SECTION 10. REMEDIES

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in Borrower's name any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, Borrower hereby grants Agent an irrevocable power of attorney coupled with an interest, and (iii) Agent may notify any of Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent may, and at the direction of the Required Lenders shall, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower. Agent may require Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent that is reasonably convenient to Agent and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, and default rate interest pursuant to Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrower or its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of Borrower or any other Person, and Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11. MISCELLANEOUS

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com
Telephone: 650-289-3060

(b) If to Lender:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com
Telephone: 650-289-3060

(c) If to Borrower:

VERASTEM, INC.

Attention: Joseph Chiapponi
117 Kendrick Street, Suite 500
Needham, MA 02494
email: jchiapponi@verastem.com
Telephone: (781) 292-4213

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's revised proposal letter dated December 2, 2016).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrower party to the relevant Loan Document may, or, with the written consent of the Required Lenders, the Agent and the Borrower party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of the Lenders or of the Borrower hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or the Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder) or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of

Required Lenders, consent to the assignment or transfer by the Borrower of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of the Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrower, the Lender, the Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and shall survive the execution and delivery of this Agreement. Sections 6.3 and 8.1 shall survive the termination of this Agreement.

11.7 Successors and Assigns.

(a) The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrower, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrower (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to an Affiliate of any Lender or Agent shall be allowed.

(b) The Agent, acting solely for this purpose as an agent of the Borrower, shall maintain a copy of each assignment and assumption delivered to it and a register for

the recordation of the names and addresses of the Lender, and the commitments of, and principal amounts (and stated interest) of the Term Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Agent and the Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of the Loan Documents. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrower of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.10 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWER, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWER AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrower and Lender; Claims that arise out of or are in any way connected to the relationship among

Borrower, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.11 Professional Fees. Borrower promises to pay Agent's and Lender's reasonable and documented out-of-pocket fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, Borrower promises to pay any and all reasonable attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of Borrower's estate, and any appeal or review thereof.

11.12 Confidentiality. Agent and Lender acknowledge that certain items of Collateral and information provided to Agent and Lender by Borrower or any Subsidiary are confidential and proprietary information of Borrower or such Subsidiary, if and to the extent such information either (x) is marked as confidential by Borrower or any Subsidiary at the time of disclosure, or (y) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrower, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their sole but reasonable discretion determines that any such party should have

access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after an Event of Default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents.

11.13 Assignment of Rights. Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Note(s)(if any), it will endorse thereon a notation as to the portion of the principal of the Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.14 Revival of Secured Obligations. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against Borrower for liquidation or reorganization, if Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations shall be deemed, without any further action or documentation, to have been

revived and reinstated except to the extent of the full, final, and indefeasible payment to Agent or Lender in Cash.

11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrower unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, the Lender and the Borrower.

11.17 Agency.

(a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as the Agent hereunder and under the other Loan Documents and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to the Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Lender agrees to indemnify the Agent in its capacity as such (to the extent not reimbursed by Borrower and without limiting the obligation of Borrower to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against the Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by the Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as the 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 Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. The Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, the Agent shall not:

- (i) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Agent is required to exercise as directed in writing by the Lender, provided that the Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Agent to liability or that is contrary to any Loan Document or applicable law; and

(iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and the Agent shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by any Person serving as the Agent or any of its Affiliates in any capacity.

(e) The Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Lender or as the Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) The Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity

against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.

11.19 Further Transactions. Borrower has notified Agent that after the Closing Date, Borrower may seek to enter into certain transactions pursuant to which Borrower would incur Indebtedness from time to time that is secured solely by stock pledge agreements (by Borrower or a SPE), royalties (or rights therein or related thereof), rights to payment under royalties, licenses and the proceeds thereof solely with respect to clinical assets (the "Proposed Future Royalty Backed Indebtedness Transactions"). Borrower acknowledges that the consummation of any Proposed Further Royalty Back Indebtedness Transaction requires the prior written consent of Agent and Agent agrees to timely review any relevant term sheets and/or documentation relating to Proposed Future Royalty Backed Indebtedness Transactions.

(SIGNATURES TO FOLLOW)

IN WITNESS WHEREOF, Borrower, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

BORROWER:

VERASTEM, INC.

Signature: /s/ Robert Forrester
Print Name: Robert Forrester
Title: Chief Executive Officer

Accepted in Palo Alto, California:

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Jennifer Choe
Print Name: Jennifer Choe
Title: Assistant General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: /s/ Jennifer Choe
Print Name: Jennifer Choe
Title: Assistant General Counsel

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EXHIBIT A

ADVANCE REQUEST

To: Agent: _____ Date: _____, 20[]
Hercules Capital, Inc. (the "Agent")
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@herculestech.com
Attn:

VERASTEM, INC. ("Borrower") hereby requests from Hercules Capital, Inc. ("Lender") an Advance in the amount of _____ Dollars (\$ _____) on _____, _____ (the "Advance Date") pursuant to the Loan and Security Agreement among Borrower, Agent and Lender (the "Agreement"). Capitalized words and other terms used but not otherwise defined herein are used with the same meanings as defined in the Agreement.

Please:

(a) Issue a check payable to Borrower _____

or

(b) Wire Funds to Borrower's account _____ [IF FILED PUBLICLY, ACCOUNT INFO REDACTED FOR SECURITY PURPOSES]

Bank: _____
Address: _____

ABA Number: _____
Account Number: _____
Account Name: _____
Contact Person: _____
Phone Number _____
To Verify Wire Info: _____
Email address: _____

Borrower represents that the conditions precedent to the Advance set forth in the Agreement are satisfied, waived, or shall be satisfied upon the making of such Advance, including but not limited to: (i) that no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing; (ii) that the representations and warranties set forth in the Agreement are and shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date in which case they shall be true and correct in all material respects as of such date; (iii) that Borrower is in compliance with all the terms and provisions set forth in each Loan Document on its part to be observed or performed; and (iv) that as of the Advance Date, no fact or condition exists that

would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default under the Loan Documents. Borrower understands and acknowledges that Agent has the right to review the financial information supporting this representation and, based upon such review in its sole but reasonable discretion, Lender may decline to fund the requested Advance.

Borrower hereby represents that Borrower's corporate status and locations have not changed since the date of the Agreement or, if the Attachment to this Advance Request is completed, are as set forth in the Attachment to this Advance Request.

Borrower agrees to notify Agent promptly before the funding of the Loan if any of the matters which have been represented above shall not be true and correct on the Borrowing Date and if Agent has received no such notice before the Advance Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct as of the Advance Date.

Executed as of [], 20[].

BORROWER: VERASTEM, INC.

SIGNATURE: _____

TITLE: _____

PRINT NAME: _____

ATTACHMENT TO ADVANCE REQUEST

Dated: _____

Borrower hereby represents and warrants to Agent that Borrower's current name and organizational status is as follows:

Name:	Verastem, Inc.
Type of organization:	Corporation
State of organization:	Delaware
Organization file number:	4853179

Borrower hereby represents and warrants to Agent that the street addresses, cities, states and postal codes of its current locations are as follows:

117 Kendrick Street, Suite 500, Needham, MA 02494

EXHIBIT B

THE FOLLOWING INFORMATION IS SUPPLIED SOLELY FOR U.S. FEDERAL INCOME TAX PURPOSES. THIS NOTE WAS ISSUED WITH ORIGINAL ISSUE DISCOUNT (“OID”) WITHIN THE MEANING OF SECTION 1273 OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE “CODE”), AND THIS LEGEND IS REQUIRED BY SECTION 1275(C) OF THE CODE.

HOLDERS MAY OBTAIN INFORMATION REGARDING THE AMOUNT OF OID, THE ISSUE PRICE, THE ISSUE DATE, AND THE YIELD TO MATURITY RELATING TO THE NOTES BY CONTACTING [NAME OR TITLE] [ADDRESS] [TELEPHONE NUMBER]

SECURED TERM PROMISSORY NOTE

\$25,000,000

Advance Date: ____ __, 20[]

Maturity Date: _____, 20[]

FOR VALUE RECEIVED, VERASTEM, INC., a Delaware corporation, for itself and each of its Qualified Subsidiaries (the “Borrower”) hereby promises to pay to Hercules Capital, Inc., a Maryland corporation (or its registered assigns) (the “Lender”) at 400 Hamilton Avenue, Suite 310, Palo Alto, CA 94301 or such other place of payment as the registered holder of this Secured Term Promissory Note (this “Promissory Note”) may specify from time to time in writing, in lawful money of the United States of America, the principal amount of Twenty-Five Million Dollars (\$25,000,000) or such other principal amount as Lender has advanced to Borrower, together with interest at a rate as set forth in Section 2.1(c) of the Loan Agreement based upon a year consisting of 360 days, with interest computed daily based on the actual number of days in each month.

This Promissory Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement dated [], 2017, by and among Borrower, Hercules Capital, Inc., a Maryland corporation (the “Agent”) and the several banks and other financial institutions or entities from time to time party thereto as lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the “Loan Agreement”), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All payments shall be made in accordance with the Loan Agreement. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. An Event of Default under the Loan Agreement shall constitute a default under this Promissory Note.

Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest under the UCC or any applicable law. Borrower agrees to make all payments under this Promissory Note without setoff, recoupment or deduction and regardless of any counterclaim or defense. This Promissory Note has been negotiated and delivered to Lender and is payable in the State of California. This Promissory Note shall be governed by and construed and enforced in accordance with, the laws of the State of California, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

BORROWER FOR ITSELF AND

ON BEHALF OF ITS QUALIFIED SUBSIDIARIES: VERASTEM, INC.

SIGNATURE:

TITLE:

PRINT NAME:

EXHIBIT C

NAME, LOCATIONS, AND OTHER INFORMATION FOR BORROWER

1. Borrower represents and warrants to Agent that Borrower's current name and organizational status as of the Closing Date is as follows:

Name: Verastem, Inc.
Type of organization: Corporation
State of organization: Delaware
Organization file number: 4853179

2. Borrower represents and warrants to Agent that for five (5) years prior to the Closing Date, Borrower did not do business under any other name or organization or form except the following:

Name: None.
Used during dates of: None.
Type of Organization: None.
State of organization: None.
Organization file number: None.
Borrower's fiscal year ends on December 31

Borrower's federal employer tax identification number is: 27-3269467

3. Borrower represents and warrants to Agent that its chief executive office is located at 117 Kendrick Street, Suite 500, Needham, MA 02494.

EXHIBIT D

BORROWER'S PATENTS, TRADEMARKS, COPYRIGHTS AND LICENSES

EXHIBIT E

BORROWER'S DEPOSIT ACCOUNTS AND INVESTMENT ACCOUNTS

EXHIBIT F

COMPLIANCE CERTIFICATE

Hercules Capital, Inc. (as “Agent”)
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Reference is made to that certain Loan and Security Agreement dated [], 2017 and the Loan Documents (as defined therein) entered into in connection with such Loan and Security Agreement all as may be amended from time to time (hereinafter referred to collectively as the “Loan Agreement”) by and among VERASTEM, INC. (the “Company”) as Borrower, the several banks and other financial institutions or entities from time to time party thereto (collectively, the “Lender”) and Hercules Capital, Inc., as agent for the Lender (the “Agent”). All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Company, knowledgeable of all Company financial matters, and is authorized to provide certification of information regarding the Company; hereby certifies, in such capacity, that in accordance with the terms and conditions of the Loan Agreement, the Company is in compliance for the period ending _____ of all covenants, conditions and terms and hereby reaffirms that all representations and warranties contained therein are true and correct in all material respects on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, after giving effect in all cases to any standard(s) of materiality contained in the Loan Agreement as to such representations and warranties. Attached are the required documents supporting the above certification. The undersigned further certifies that these are prepared consistent with past management practice (except for the absence of footnotes with respect to unaudited financial statement and subject to normal year end adjustments) and are consistent from one period to the next except as explained below.

REPORTING REQUIREMENT	REQUIRED	CHECK IF ATTACHED
Interim Financial Statements	Monthly within 30 days (commencing 3/31/17)	
Interim Financial Statements	Quarterly within 45 days	
Audited Financial Statements	FYE within 90 days	

Liquidity Covenant: Borrower shall at all times maintain in accounts of Borrower that are subject to an Account Control Agreement, unrestricted and unencumbered cash (other than as a result of the Loan Agreement) in an aggregate amount greater than or equal to the lesser of (a) one hundred twenty-five percent (125%) of the aggregate outstanding Advances and (b) one hundred percent (100%) of all cash of Borrower maintained in any accounts (other than Excluded Accounts).

125% of Advances: \$ _____

Cash of Borrower maintained in Account Control Agreements: \$ _____

All cash of Borrower: \$ _____

Cash of Borrower in Excluded Accounts: \$ _____

Complies: Yes No

The undersigned hereby also confirms the below disclosed accounts represent all depository accounts and securities accounts presently open in the name of each Borrower or Borrower Subsidiary/Affiliate, as applicable.

		Depository AC #	Financial Institution	Account Type (Depository / Securities)	Last Month Ending Account Balance	Purpose of Account
BORROWER						
Name/Address:						
	1					
	2					
	3					
	4					
	5					
	6					
	7					
BORROWER SUSIDIARY / AFFILIATE COMPANY						
Name/Address						
	1					
	2					
	3					
	4					
	5					
	6					
	7					

Very Truly Yours,
VERASTEM, INC.

By:

Name:

Its:

EXHIBIT G

FORM OF JOINDER AGREEMENT

This Joinder Agreement (the “Joinder Agreement”) is made and dated as of [], 20[], and is entered into by and between _____, a _____ corporation (“Subsidiary”), and HERCULES CAPITAL, INC., a Maryland corporation (as “Agent”).

RECITALS

A. Subsidiary’s Affiliate, VERASTEM, INC., a Delaware corporation (“Company”) has entered into that certain Loan and Security Agreement dated [], 2017, with the several banks and other financial institutions or entities from time to time party thereto as lender (collectively, the “Lender”) and the Agent, as such agreement may be amended (the “Loan Agreement”), together with the other agreements executed and delivered in connection therewith;

B. Subsidiary acknowledges and agrees that it will benefit both directly and indirectly from Company’s execution of the Loan Agreement and the other agreements executed and delivered in connection therewith;

AGREEMENT

NOW THEREFORE, Subsidiary and Agent agree as follows:

1. The recitals set forth above are incorporated into and made part of this Joinder Agreement. Capitalized terms not defined herein shall have the meaning provided in the Loan Agreement.
2. By signing this Joinder Agreement, Subsidiary shall be bound by the terms and conditions of the Loan Agreement the same as if it were the Borrower (as defined in the Loan Agreement) under the Loan Agreement, mutatis mutandis, provided however, that (a) with respect to (i) Section 5.1 of the Loan Agreement, Subsidiary represents that it is an entity duly organized, legally existing and in good standing under the laws of [], (b) neither Agent nor Lender shall have any duties, responsibilities or obligations to Subsidiary arising under or related to the Loan Agreement or the other Loan Documents, (c) that if Subsidiary is covered by Company’s insurance, Subsidiary shall not be required to maintain separate insurance or comply with the provisions of Sections 6.1 and 6.2 of the Loan Agreement, and (d) that as long as Company satisfies the requirements of Section 7.1 of the Loan Agreement, Subsidiary shall not have to provide Agent separate Financial Statements. To the extent that Agent or Lender has any duties, responsibilities or obligations arising under or related to the Loan Agreement or the other Loan Documents, those duties, responsibilities or obligations shall flow only to Company and not to Subsidiary or any other Person or entity. By way of example (and not an exclusive list): (i) Agent’s providing notice to Company in accordance with the Loan Agreement or as otherwise agreed among Company, Agent and Lender shall be deemed provided to Subsidiary; (ii) a Lender’s providing an Advance to Company shall be deemed an Advance to Subsidiary; and (iii) Subsidiary shall have no right to request an Advance or make any other demand on Lender.
3. Subsidiary agrees not to certificate its equity securities without Agent’s prior written consent, which consent may be conditioned on the delivery of such equity securities to Agent in order to perfect Agent’s security interest in such equity securities.
4. Subsidiary acknowledges that it benefits, both directly and indirectly, from the Loan Agreement, and hereby waives, for itself and on behalf on any and all successors in interest (including without limitation any assignee for the benefit of creditors, receiver, bankruptcy trustee or itself as debtor-in-possession under any bankruptcy proceeding) to the fullest extent provided by law, any and all claims, rights or

defenses to the enforcement of this Joinder Agreement on the basis that (a) it failed to receive adequate consideration for the execution and delivery of this Joinder Agreement or (b) its obligations under this Joinder Agreement are avoidable as a fraudulent conveyance.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

SUBSIDIARY:

_____.

By:

Name:

Title:

Address:

Telephone: _____

email: _____

AGENT:

HERCULES CAPITAL, INC.

By: _____

Name: _____

Title: _____

Address:

400 Hamilton Ave., Suite 310

Palo Alto, CA 94301

email: legal@herculestech.com

Telephone: 650-289-3060

EXHIBIT H

ACH DEBIT AUTHORIZATION AGREEMENT

Hercules Capital, Inc.
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Re: Loan and Security Agreement dated _____ (the "Agreement") by and among Verastem, Inc. (the "Borrower"), each of its Qualified Subsidiaries (as defined therein) the Lender (as defined therein) from time to time party thereto and Hercules Capital, Inc., as administrative agent and collateral agent for itself and the Lender (the "Agent")

In connection with the above referenced Agreement, the Borrower hereby authorizes the Company to initiate debit entries for (i) the periodic payments due under the Agreement and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender pursuant to Section 11.11 of the Agreement to the Borrower's account indicated below. The Borrower authorizes the depository institution named below to debit to such account.

[IF FILED PUBLICLY, ACCOUNT INFO REDACTED FOR SECURITY PURPOSES]

DEPOSITORY NAME	BRANCH
CITY	STATE AND ZIP CODE
TRANSIT/ABA NUMBER	ACCOUNT NUMBER

This authority will remain in full force and effect so long as any amounts are due under the Agreement.

VERASTEM, INC.
(Borrower)(Please Print)

By: _____

Date: _____

SCHEDULE 1.1

COMMITMENTS

LENDER	TRANCHE	TERM LOAN COMMITMENT
Hercules Capital, Inc.	Term A Loan	\$2,500,000
Hercules Capital, Inc.	Term B Loan	\$2,500,000
Hercules Capital, Inc.	Term C Loan	\$5,000,000
Hercules Capital, Inc.	Term D Loan	\$15,000,000
TOTAL COMMITMENTS		\$25,000,000

List of Registrant's Subsidiaries

Verastem Securities Company, incorporated in Massachusetts, a wholly owned subsidiary.

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. 333-180475) pertaining to the 2010 Equity Incentive Plan and the 2012 Incentive Plan of Verastem, Inc.,
- (2) Registration Statement (Form S-8 No. 333-190578) pertaining to the 2012 Incentive Plan of Verastem, Inc.,
- (3) Registration Statement (Form S-8 No. 333-201075) pertaining to the 2014 Inducement Award Program of Verastem, Inc., and
- (4) Registration Statement (Form S-8 No. 333-201076) pertaining to the 2012 Incentive Plan of Verastem, Inc.
- (5) Registration Statement (Form S-8 No. 333-211235) pertaining to the 2012 Incentive Plan of Verastem, Inc.

of our report dated March 23, 2017 with respect to the consolidated financial statements of Verastem, Inc. included in this Annual Report (Form 10-K) of Verastem, Inc. for the year ended December 31, 2016.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 23, 2017

CERTIFICATIONS

I, Robert Forrester certify that:

1. I have reviewed this Annual Report on Form 10-K of Verastem, 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.

/s/ Robert Forrester
Robert Forrester
Chief Executive Officer

Date: March 23, 2017

CERTIFICATIONS

I, Joseph Chiapponi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Verastem, 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.

/s/ JOSEPH CHIAPPONI
Joseph Chiapponi
Vice President, Finance

Date: March 23, 2017

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Verastem, Inc. (the "Company") for the period ended December 31, 2016 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), the undersigned, Robert Forrester, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert Forrester
Robert Forrester
Chief Executive Officer

Date: March 23, 2017

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Verastem, Inc. (the "Company") for the period ended December 31, 2016 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), the undersigned, Joseph Chiapponi, Vice President, Finance of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Joseph Chiapponi
Joseph Chiapponi
Vice President, Finance

Date: March 23, 2017

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

Verastem Reports Year-End 2016 Financial Results

BOSTON, MA – March 23, 2017– Verastem, Inc. (NASDAQ: VSTM), focused on discovering and developing drugs to treat cancer, today reported financial results for the year ended December 31, 2016, and also provided an overview of certain corporate developments.

“2016 was a year of significant achievement for Verastem with the in-licensing of duvelisib, a late-stage, clinical product candidate with broad potential across B-cell and T-cell lymphoid malignancies, and the advancement of defactinib into clinical development in combination with immuno-oncology agents,” said Robert Forrester, President and Chief Executive Officer of Verastem. “As we enter 2017, we are laser-focused on several important milestones, beginning with reporting top-line duvelisib data from the Phase 3 DUO™ study in chronic lymphocytic leukemia (CLL) expected mid-year 2017. There remains an unmet medical need for patients with relapsed CLL. We believe duvelisib has potential as a convenient, oral monotherapy with an expected and manageable safety profile for patients with relapsed CLL. For defactinib, we look forward to advancing our ongoing combination trials into important expansion cohorts across several high unmet need indications.”

Mr. Forrester continued, “On the financial front, we ended 2016 with \$80.9 million in cash, cash equivalents and investments, which we believe is sufficient to support our research and development programs and operations into 2018. In March 2017, we entered into a loan facility with Hercules Capital, Inc. for up to \$25.0 million, subject to certain conditions including positive DUO data, which would provide us with additional financial flexibility to advance duvelisib.”

Fourth Quarter 2016 and Recent Highlights:

Duvelisib

- ***In-licensed Late-stage, Complementary Oncology Product Candidate Duvelisib***- Verastem and Infinity Pharmaceuticals, Inc. (Infinity) announced the signing of an agreement under which Verastem licensed exclusive worldwide rights to develop and commercialize duvelisib, an investigational product candidate currently in development for hematologic malignancies. Duvelisib is well aligned with Verastem’s strategic focus of developing novel anti-cancer therapeutics that modulate the tumor microenvironment. The transaction provides a new oncology product candidate with demonstrated activity in lymphoid malignancies.
 - ***Ongoing Phase 3 DUO Study in Relapsed or Refractory CLL***- The safety and efficacy of duvelisib is currently being evaluated in the randomized Phase 3 DUO study in patients with relapsed or refractory CLL. In the DUO study, approximately 300 patients were randomized 1:1 to receive duvelisib (25mg BID) or ofatumumab (8 weekly infusions, starting with an initial intravenous dose of 300mg on day 1 followed by 7 weekly doses of 2,000mg, then 2,000mg monthly for 4 cycles). The primary endpoint of this study is progression free survival (PFS). Key secondary endpoints include overall response rate (ORR), overall survival, duration of response (DOR) and safety. Verastem expects to report top-line data from the DUO study in mid-year 2017.
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- **Positive Phase 2 DYNAMO® Data Reported at ASH 2016**– Positive Phase 2 clinical data from the DYNAMO study demonstrating the clinical activity of duvelisib in patients with relapsed refractory indolent non-Hodgkin lymphoma (iNHL) were presented at the 58th American Society of Hematology (ASH) Annual Meeting in December 2016. In an oral presentation, titled “A phase 2 study demonstrating the clinical activity of duvelisib in patients with relapsed refractory indolent non-Hodgkin lymphoma,” (Publication ID: 1218) Ian Flinn, M.D., Ph.D. (Director, Hematologic Malignancies Program, Sarah Cannon Research Institute), described results from 129 patients with double refractory iNHL (median 3 prior anti-cancer regimens, range 1-18). The study met its primary endpoint, achieving an ORR of 46% as determined by an independent review committee (IRC) (p=0.0001; 95% CI 0.37-0.55). Among disease subgroups, the ORR was 41% in follicular lymphoma (n=83), 68% in small lymphocytic lymphoma (n=28), and 33% in marginal zone lymphoma (n=18). The median DOR among all patients was 9.9 months. Notably, 83% of patients had reductions in the size of their target lymph nodes per the IRC. Duvelisib was generally well tolerated, with an expected and manageable safety profile with appropriate risk mitigation. The DYNAMO study showed that duvelisib monotherapy has a favorable benefit-risk profile in refractory iNHL patients and may represent an important treatment option in this population.

Defactinib (VS-6063)

- **Dosed the First Patient in Combination Trial of Defactinib and Avelumab in Patients with Ovarian Cancer**– As announced in January 2017, the first patient was dosed in a new clinical trial evaluating avelumab, an investigational fully human anti-PD-L1 IgG1 monoclonal antibody, in combination with Verastem’s defactinib, an investigational focal adhesion kinase (FAK) inhibitor, in patients with advanced ovarian cancer. This multicenter, open-label, dose-escalation and dose-expansion Phase 1/2 clinical trial is designed to assess the safety, pharmacokinetics, pharmacodynamics, and initial observations of clinical activity of the avelumab/defactinib combination in patients with recurrent or refractory stage III-IV ovarian cancer. The study is being conducted in collaboration with the alliance between Merck KGaA, Darmstadt, Germany, which in the U.S. and Canada operates as EMD Serono, and Pfizer, and is expected to enroll approximately 100 patients at up to 15 sites across the U.S.

Corporate and Financial

- **Hagop Youssoufian, MSc, M.D., Named Head of Hematology and Oncology Development** In January 2017, Dr. Youssoufian assumed this leadership role at Verastem to oversee the clinical and regulatory development of Verastem’s pipeline, including duvelisib, and provide overall strategic and tactical leadership to our hematology-oncology clinical programs. Dr. Youssoufian brings over 25 years of product development and commercialization experience to Verastem, having served in senior leadership roles at several oncology-focused companies, including BIND Therapeutics, Progenics Pharmaceuticals, Ziopharm Oncology, Imclone Systems, Sanofi Aventis and Bristol-Myers Squibb where he was involved in the development of Sprycel®, Taxotere® and Erbitux®.
- **Additional Key Personnel Appointments**– Recently, Michael Ferrareso joined Verastem as Vice President, Commercial Operations, and Verastem also appointed several highly experienced individuals to the Clinical and Scientific Advisory Board including:
 - Lori Kunkel, M.D., Former Chief Medical Officer, Pharmacyclics
 - Edmund J. Pezalla, M.D., MPH, Former VP, Pharmaceutical Policy and Strategy at Aetna
 - Greg Berk, M.D., Former Chief Medical Officer, Verastem
 - Cheryl Cohen, Former Chief Commercial Officer, Medivation
- Brian Stuglik, PharmD., Former VP and Chief Marketing Officer, Oncology Global Marketing, Eli Lilly

- **Secured \$25 Million Loan Facility**– In March 2017, Verastem entered into a Loan and Security Agreement with Hercules Capital, Inc. for up to \$25.0 million in financing. Verastem received the first \$2.5 million of financing under the Loan and Security Agreement when the transaction closed. The proceeds will be used for Verastem's ongoing research and development programs and for general corporate purposes. Additional tranches of up to \$22.5 million in aggregate will be available subject to certain conditions, including positive data from the Phase 3 DUO clinical trial evaluating duvelisib in patients with relapsed or refractory CLL.

Full Year 2016 Financial Results

Net loss for the year ended December 31, 2016 (2016 Period) was \$36.4 million, or \$0.99 per share, as compared to a net loss of \$57.9 million, or \$1.61 per share, for the year ended December 31, 2015 (2015 Period). Net loss includes non-cash stock-based compensation expense of \$6.2 million and \$9.7 million for the 2016 Period and 2015 Period, respectively.

Research and development expense for the 2016 Period was \$19.8 million compared to \$40.6 million for the 2015 Period. The \$20.8 million decrease from the 2015 Period to the 2016 Period was primarily related to a decrease of \$15.6 million in external contract research organization expense for outsourced biology, chemistry, development and clinical services, which includes our clinical trial costs, a \$3.4 million decrease in personnel related costs, primarily due to the reduction in workforce in October 2015, a decrease of \$1.3 million in stock-based compensation expense and a decrease of \$1.5 million in lab supplies, travel and other research and development expense. These decreases were partially offset by an increase of approximately \$947,000 in consulting and professional fees.

General and administrative expense for the 2016 Period was \$17.2 million compared to \$17.6 million for the 2015 Period. The approximate \$411,000 decrease from the 2015 Period to the 2016 Period primarily resulted from a decrease of \$2.1 million in stock-based compensation expense. This decrease was partially offset by increases of \$1.1 million in consulting and professional fees, approximately \$280,000 in personnel costs, and a net increase of approximately \$306,000 of other general and administrative costs.

As of December 31, 2016, Verastem had cash, cash equivalents and investments of \$80.9 million compared to \$110.3 million as of December 31, 2015. Verastem used \$29.5 million for operating activities during the 2016 Period.

The number of outstanding common shares as of December 31, 2016, was 36,992,418.

Financial Guidance

Based on our current operating plans, we expect to have sufficient cash, cash equivalents and investments to fund our research and development programs and operations into 2018.

Conference Call Information

The Verastem management team will host a conference call today, Thursday, March 23, 2017, at 4:30 PM (ET). The call can be accessed by dialing 1-877-341-5660 or 1-315-625-3226 five minutes prior to the start of the call and providing the passcode 89196444.

The live, listen-only webcast of the conference call can be accessed by visiting the investors section of the Company's website at www.verastem.com. A replay of the webcast will be archived on the Company's website for 90 days following the call.

About the Tumor Microenvironment

The tumor microenvironment encompasses various cellular populations and extracellular matrices within the tumor or cancer niche that support cancer cell survival. This includes immunosuppressive cell populations such as regulatory T-cells, myeloid-derived suppressor cells, M2 tumor-associated macrophages, as well as tumor-associated fibroblasts and extracellular matrix proteins which can hamper the entry and therapeutic benefit of cytotoxic immune cells and anti-cancer drugs. In addition to targeting the proliferative and survival signaling of cancer cells, Verastem's product candidates, including duvelisib and defactinib, also target the tumor microenvironment as a mechanism of action to potentially improve a patient's response to therapy.

About Duvelisib

Duvelisib is an investigational, dual inhibitor of phosphoinositide 3-kinase (PI3K)-delta and PI3K-gamma, two enzymes that are known to help support the growth and survival of malignant B-cells and T-cells. PI3K signaling may lead to the proliferation of malignant B-cells and is thought to play a role in the formation and maintenance of the supportive tumor microenvironment.^{1,2,3} Duvelisib is currently being evaluated in late- and mid-stage clinical trials, including DUO™, a randomized, Phase 3 monotherapy study in patients with relapsed or refractory CLL⁴, and DYNAMO™, a single-arm, Phase 2 monotherapy study in patients with refractory iNHL that achieved its primary endpoint of ORR upon top-line analysis of efficacy data⁵. Duvelisib is also being evaluated for the treatment of hematologic malignancies through investigator-sponsored studies, including T-cell lymphoma.⁶ Information about duvelisib clinical trials can be found on www.clinicaltrials.gov.

About Defactinib

Defactinib is an investigational inhibitor of FAK, a non-receptor tyrosine kinase encoded by the PTK-2 gene that mediates oncogenic signaling in response to cellular adhesion and growth factors.⁷ Based on the multi-faceted roles of FAK, defactinib is used to treat cancer through modulation of the tumor microenvironment, enhancement of anti-tumor immunity, and reduction of cancer stem cells.^{8,9} Defactinib is currently being evaluated in three separate clinical collaborations in combination with immunotherapeutic agents for the treatment of several different cancer types including pancreatic cancer, ovarian cancer, non-small cell lung cancer, and mesothelioma. These studies are combination clinical trials with pembrolizumab and avelumab from Merck & Co. and Pfizer/Merck KGaA, respectively.^{10,11,12} Information about these and additional clinical trials evaluating the safety and efficacy of defactinib can be found on www.clinicaltrials.gov.

About Verastem, Inc.

Verastem, Inc. (NASDAQ:VSTM) is a biopharmaceutical company focused on discovering and developing drugs to improve outcomes for patients with cancer. Verastem is currently developing duvelisib, a dual inhibitor of PI3K-delta and PI3K-gamma, which has successfully met its primary endpoint in a Phase 2 study in iNHL and is currently being evaluated in a Phase 3 clinical trial in patients with CLL. In addition, Verastem is developing the FAK inhibitor defactinib, which is currently being evaluated in three separate clinical collaborations in combination with immunotherapeutic agents for the treatment of several different cancer types, including pancreatic cancer, ovarian cancer and non-small cell lung cancer, and mesothelioma. Verastem's product candidates seek to treat cancer by modulating the local tumor microenvironment, enhancing anti-tumor immunity and reducing cancer stem cells. For more information, please visit www.verastem.com.

Verastem forward-looking statements notice:

This press release includes forward-looking statements about Verastem's strategy, future plans and prospects, including statements regarding the development and activity of Verastem's investigational product candidates, including duvelisib and defactinib (VS-6063), and Verastem's PI3K and FAK programs generally, the structure of our planned and pending clinical trials and the timeline and indications for clinical development, including reporting top-line data, and regulatory submissions, our rights to develop or commercialize our product candidates and our ability to finance contemplated development activities and fund operations for a specified period. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include the risks that the preclinical testing of Verastem's product candidates and preliminary or interim data from clinical trials may not be predictive of the results or success of ongoing or later clinical trials; that data may not be available when expected, including for the Phase 3 DUO™ study; that enrollment of clinical trials may take longer than expected; that our product candidates will cause unexpected safety events or result in an unmanageable safety profile as compared to their level of efficacy; that duvelisib will be ineffective at treating patients with lymphoid malignancies; that Verastem will be unable to successfully initiate or complete the clinical development of its product candidates; that the development of Verastem's product candidates will take longer or cost more than planned; that Verastem may not have sufficient cash to fund its contemplated operations; that Verastem or Infinity will fail to fully perform under the duvelisib license agreement; that the transition of the duvelisib program from Infinity will not be completed; that Verastem may be unable to make additional draws under its debt facility or obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that Verastem will not pursue or submit regulatory filings for its product candidates, including for duvelisib in patients with CLL or iNHL; and that Verastem's product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients. Other risks and uncertainties include those identified under the heading "Risk Factors" in Verastem's Annual Report on Form 10-K for the year ended December 31, 2016 and in any subsequent filings with the U.S. Securities and Exchange Commission. The forward-looking statements contained in this press release reflect Verastem's views as of the date of this release, and Verastem does not undertake and specifically disclaims any obligation to update any forward-looking statements.

Verastem, Inc.

Brian Sullivan, 781-292-4214
bsullivan@verastem.com

References

- ¹ Winkler D.G., Faia K.L., DiNitto J.P. et al. PI3K-delta and PI3K-gamma inhibition by IPI-145 abrogates immune responses and suppresses activity in autoimmune and inflammatory disease models. *Chem Biol* 2013; 20:1-11.
 - ² Reif K et al. Cutting Edge: Differential Roles for Phosphoinositide 3 kinases, p110-gamma and p110-delta, in lymphocyte chemotaxis and homing. *J Immunol* 2004;173:2236-2240.
 - ³ Schmid M et al. Receptor Tyrosine Kinases and TLR/IL1Rs Unexpectedly activate myeloid cell PI3K, a single convergent point promoting tumor inflammation and progression. *Cancer Cell* 2011;19:715-727.
 - ⁴ www.clinicaltrials.gov, NCT02004522
 - ⁵ www.clinicaltrials.gov, NCT01882803
 - ⁶ www.clinicaltrials.gov, NCT02783625, NCT02783625, NCT02158091
 - ⁷ Schaller MD and Parsons JT. Focal adhesion kinase: an integrin-linked protein tyrosine kinase. *Trends Cell Biol.* 1993 3: 258-62.
 - ⁸ Jiang H et al. Targeting focal adhesion kinase renders pancreatic cancers responsive to checkpoint immunotherapy. *Nat Med* 2016; Aug 22(8) 851-60.
 - ⁹ Sulzmaier FJ et al. FAK in cancer: mechanistic findings and clinical applications. *Nature Rev Cancer.* 2014 14: 598-610.
 - ¹⁰ www.clinicaltrials.gov, NCT02546531
 - ¹¹ www.clinicaltrials.gov, NCT02943317
 - ¹² www.clinicaltrials.gov, NCT02758587
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Verastem, Inc.
Unaudited Selected Consolidated Balance Sheets
(in thousands)

	December 31, 2016	December 31, 2015
Cash, cash equivalents and investments	\$ 80,897	\$ 110,258
Prepaid expenses and other current assets	398	585
Property and equipment, net	1,417	2,048
Other assets	917	203
Total assets	\$ 83,629	\$ 113,094
Accounts payable and accrued expenses	\$ 10,991	\$ 10,040
Other liabilities	341	585
Stockholders' equity	72,297	102,469
Total liabilities and stockholders' equity	\$ 83,629	\$ 113,094

Verastem, Inc.
Unaudited Condensed Consolidated Statements of Operations
(in thousands, except per share amounts)

	Year ended December 31,	
	2016	2015
Operating expenses:		
Research and development	\$ 19,779	\$ 40,565
General and administrative	17,223	17,634
Total operating expenses	37,002	58,199
Loss from operations	(37,002)	(58,199)
Interest income	562	334
Net loss	\$ (36,440)	\$ (57,865)
Net loss per share—basic and diluted	\$ (0.99)	\$ (1.61)
Weighted-average number of common shares used in net loss per share- basic and diluted	36,988	35,932
