SEATTLE GENETICS INC /WA
Form 10-K
February 15, 2018
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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, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 0-32405

Seattle Genetics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**91-1874389**
(State or other Jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

21823 30th Drive SE

Bothell, WA 98021

(Address of principal executive offices, including zip code)

Registrant s telephone number, including area code: **(425) 527-4000**

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

Title of class	**Name of each exchange on which registered**

Common Stock, par value $0.001	**The Nasdaq Stock Market LLC**

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 Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit 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, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Emerging growth company

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

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $4,949,017,768 as of the last business day of the registrant s most recently completed second fiscal quarter, based upon the closing sale price on The Nasdaq Global Select Market reported for such date. Excludes an aggregate of 47,329,018 shares of the registrant s common stock held as of such date by officers, directors and stockholders that the registrant has concluded are or were affiliates of the registrant. Exclusion of such shares should not be construed to indicate that the holder of any such shares possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant or that such person is controlled by or under common control with the registrant.

There were 157,951,354 shares of the registrant s Common Stock issued and outstanding as of February 8, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information by reference from the registrant s definitive proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A, not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, in connection with the Registrant s 2018 Annual Meeting of Stockholders.

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SEATTLE GENETICS, INC.

FORM 10-K

FOR THE YEAR ENDED DECEMBER 31, 2017

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are based on our management s beliefs and assumptions and on information currently available to our management. All statements other than statements of historical facts are forward-looking statements for purposes of these provisions, including those relating to future events or our future financial performance and financial guidance. In some cases, you can identify forward-looking statements by terminology such as may, might, will, should, expect, plan, anticipate, project, believe, estimate, predict, potential, intend or continue, the negative of terms like these or other comparable terminology, and other words or terms of similar meaning in connection with any discussion of future operating or financial performance. These statements are only predictions. All forward-looking statements included in this Annual Report on Form 10-K are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements, except as required by law. Any or all of our forward-looking statements in this document may turn out to be incorrect. Actual events or results may differ materially. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks, uncertainties and other factors. We discuss many of these risks, uncertainties and other factors in this Annual Report on Form 10-K in greater detail under the heading Item 1A Risk Factors. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

PART I

Item 1. Business

Overview

Seattle Genetics is a biotechnology company focused on the development and commercialization of targeted therapies for the treatment of cancer. Our marketed product ADCETRIS®, or brentuximab vedotin, is approved by the United States Food and Drug Administration, or FDA, and the European Commission for four indications, encompassing several settings for the treatment of relapsed Hodgkin lymphoma, for relapsed systemic anaplastic large cell lymphoma, or sALCL, and for certain types of cutaneous T-cell lymphoma, or CTCL. ADCETRIS is commercially available in 70 countries, including in the United States, Canada, members of the European Union and Japan. We are collaborating with Takeda Pharmaceutical Company Limited, or Takeda, to develop and commercialize ADCETRIS on a global basis. Under this collaboration, Seattle Genetics has retained commercial rights for ADCETRIS in the United States and its territories and in Canada, and Takeda has commercial rights in the rest of the world.

Beyond our current labeled indications, we have a broad development strategy for ADCETRIS, including to evaluate its therapeutic potential in newly diagnosed patients with Hodgkin lymphoma or mature T-cell lymphoma, or MTCL, also known as peripheral T-Cell lymphoma, or PTCL, including sALCL. We are also evaluating ADCETRIS in combination with a checkpoint inhibitor, or CPI. We and our partners are currently conducting these phase 3 clinical trials of ADCETRIS as described below:

ECHELON-1: In collaboration with Takeda, we are investigating ADCETRIS plus AVD (adriamycin, vinblastine, dacarbazine) versus ABVD (adriamycin, bleomycin, vinblastine, dacarbazine) as frontline combination therapy in patients with previously untreated advanced classical Hodgkin lymphoma. The ECHELON-1 trial met its primary endpoint, demonstrating that treatment with ADCETRIS plus AVD resulted in a statistically significant improvement in modified progression-free survival. Interim analysis of overall survival, the key secondary endpoint, also trended in favor of the ADCETRIS plus AVD arm. The FDA granted Breakthrough Therapy Designation, or BTD, to ADCETRIS in combination with chemotherapy for the frontline treatment of patients with advanced classical Hodgkin lymphoma. In December 2017, the FDA granted Priority Review for the supplemental Biologics License Application, or sBLA, we submitted in November 2017 seeking approval of ADCETRIS as part of a frontline

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combination chemotherapy regimen in patients with previously untreated advanced classical Hodgkin lymphoma, and the Prescription Drug User Fee Act, or PDUFA, target action date is May 1, 2018.

ECHELON-2: In collaboration with Takeda, we are evaluating ADCETRIS in combination with CHP versus CHOP (cyclophosphamide, doxorubicin, vincristine and prednisone) for the treatment of newly-diagnosed MTCL patients. In November 2016, we and Takeda completed enrollment of 452 patients in the ECHELON-2 trial, and we expect to report top-line data in 2018.

CHECKMATE 812: In collaboration with Bristol-Myers Squibb Company, or BMS, we are evaluating the combination of BMS s immunotherapy nivolumab (Opdivo) with ADCETRIS for the treatment of relapsed or refractory, or transplant-ineligible, advanced classical Hodgkin lymphoma.

ECHELON-1 and ECHELON-2 are both being conducted under Special Protocol Assessment, or SPA, agreements with the FDA and pursuant to scientific advice from the European Medicines Agency, or EMA. A SPA is an agreement with the FDA regarding the design of the clinical trial, including size and clinical endpoints, to support an efficacy claim in a new drug application or a Biologics License Application, or BLA, submission to the FDA if the trial achieves its primary endpoints.

Our clinical-stage pipeline includes two antibody-drug conjugates, or ADCs, for solid tumors with potential accelerated approval pathways. In collaboration with Astellas Pharma, Inc., or Astellas, we are developing enfortumab vedotin, formerly known as ASG-22ME. We and Astellas are conducting a pivotal phase 2 clinical trial for patients with locally advanced or metastatic urothelial cancer who have been previously treated with CPI therapy. We and Astellas also initiated a phase 1b trial of enfortumab vedotin in combination with CPI therapy for patients with first- or second-line locally advanced or metastatic urothelial cancer.

In collaboration with Genmab A/S, or Genmab, we are developing tisotumab vedotin. We and Genmab are planning to conduct a pivotal phase 2 clinical trial for patients with recurrent and/or metastatic cervical cancer. In addition, we and Genmab plan to evaluate tisotumab vedotin as part of combination therapy for first-line cervical cancer as well as in other types of solid tumors.

Our earlier-stage clinical pipeline includes six other ADC programs consisting of ladiratuzumab vedotin, or SGN-LIV1A, denintuzumab mafodotin, or SGN-CD19A, SGN-CD19B, SGN-CD123A, SGN-CD33A and SGN-CD352A, as well as two immuno-oncology agents, SEA-CD40, which is based on our sugar-engineered antibody, or SEA, technology, and SGN-2FF, which is a novel small molecule. In addition, we have multiple preclinical and research-stage programs that employ our proprietary technologies, including SGN-CD48A.

We have collaborations for our ADC technology with a number of biotechnology and pharmaceutical companies, including AbbVie Biotechnology Ltd., or AbbVie; Bayer Pharma AG, or Bayer; Celldex Therapeutics, Inc., or Celldex; Genentech, Inc., a member of the Roche Group, or Genentech; GlaxoSmithKline LLC, or GSK; Pfizer, Inc., or Pfizer; and PSMA Development Company LLC, a subsidiary of Progenics Pharmaceuticals Inc., or Progenics. In addition, we have a collaboration with Unum Therapeutics, Inc., or Unum, to develop and commercialize novel antibody-coupled T-cell receptor, or ACTR, therapies incorporating our antibodies for the treatment of cancer, and a collaboration agreement with Pieris Pharmaceuticals, Inc. and Pieris Pharmaceuticals AG, or together, Pieris, to develop multiple targeted bispecific immuno-oncology treatments for solid tumors and blood cancers.

Proposed Acquisition of Cascadian Therapeutics

On January 30, 2018, we and our wholly owned subsidiary, Valley Acquisition Sub, Inc., or Purchaser, entered into a definitive Agreement and Plan of Merger, or the Merger Agreement, with Cascadian Therapeutics, Inc., or Cascadian, a clinical-stage biopharmaceutical company based in Seattle, Washington, pursuant to which Purchaser has commenced an offer, or the Tender Offer, to acquire all of the outstanding shares of Cascadian common stock at a price of $10.00 per share net to the seller in cash, without interest, less any applicable

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withholding taxes. As soon as practicable following the consummation of the Tender Offer, and subject to the satisfaction or waiver of certain conditions set forth in the Merger Agreement, Purchaser will merge with and into Cascadian, or the Merger, and Cascadian will survive as our subsidiary. We refer to the Tender Offer and Merger together in this Annual Report on Form 10-K as the Cascadian Acquisition. We estimate that the aggregate cash amount we will pay for shares of Cascadian common stock in the Cascadian Acquisition is approximately $614.1 million. The obligations of us and Purchaser to complete the Cascadian Acquisition are subject to customary closing conditions. We expect to consummate the Cascadian Acquisition in the first quarter of 2018. Cascadian s most advanced program is tucatinib, an investigational oral, small molecule tyrosine kinase inhibitor, or TKI, that is highly selective for HER2, a growth factor receptor that is overexpressed in multiple cancers, including breast, colorectal, ovarian, and gastric. Tucatinib is currently being evaluated in a randomized global pivotal trial called HER2CLIMB for patients with HER2-positive, or HER2+, metastatic breast cancer, including patients with or without brain metastases. Tucatinib has been evaluated as a single agent and in combination with both chemotherapy and other HER2-directed agents including trastuzumab (Herceptin) and trastuzumab emtansine (Kadcyla).

Our Antibody-Drug Conjugate (ADC) Technologies

ADCETRIS and many product candidates in our pipeline of clinical-stage monoclonal antibody-based product candidates utilize our ADC technology. ADCs are monoclonal antibodies that are linked to cytotoxic or cell-killing agents. Our ADCs utilize monoclonal antibodies that internalize within target cells after binding to a specified cell-surface receptor. Enzymes present inside the cell catalyze the release of the cytotoxic agent from the monoclonal antibody, which then results in the desired activity, specific killing of the target cell.

A key component of our ADCs are the linkers that attach the cell-killing agent to the monoclonal antibody, which are designed to hold the cytotoxic agent to the monoclonal antibody until it binds to the cell surface receptor on the target cell and then to release the cytotoxic agent upon internalization within the target cell. This targeted delivery of the cell-killing agent is intended to maximize delivery of the cytotoxic agent to targeted cells while minimizing toxicity to normal tissues. Our ADCs use proprietary auristatins, which are microtubule disrupting agents, or pyrrolobenzodiazepine, or PBD, dimers, which are DNA cross-linkers, as cell-killing agents. In contrast to natural products that are often more difficult to produce and link to antibodies, the cytotoxic drugs used in our ADC s are synthetically produced and easier to scale for manufacturing. ADCETRIS, enfortumab vedotin (ASG-22ME), tisotumab vedotin, ladiratuzumab vedotin, denintuzumab mafodotin, SGN-CD19B, SGN-CD123A, SGN-CD33A and SGN-CD352A each utilize our proprietary ADC technologies. These technologies are also the basis of our corporate collaborations. In addition, we are advancing a preclinical product candidate, SGN-CD48A, which utilizes a novel linker technology, PEG-Glucuronide linker, attached to an auristatin. We own or hold exclusive or partially-exclusive licenses to multiple issued patents and patent applications covering our ADC technology. We continue to evaluate new linkers, antibody formats, and cell-killing agents for use in our ADC programs.

Our Sugar-Engineered Antibody (SEA) Technology

Our proprietary SEA technology is a method to selectively reduce fucose incorporation in monoclonal antibodies as they are produced in cell line-based manufacturing. We believe that this may result in increased effector function and antitumor activity. Our SEA technology is a novel approach to modify the activity of monoclonal antibodies that is complementary to our ADC technology.

A key feature of our SEA technology is that no genetic modification of the antibody-producing cell line is necessary and standard cell culture conditions can be used while maintaining the underlying manufacturing processes, yields and product quality. We believe the SEA approach may be simpler and more cost-effective to implement as compared to existing technologies for enhancing antibody effector function, most of which require development of new cell lines.

SEA-CD40 is a clinical-stage non-fucosylated monoclonal antibody developed using SEA technology. Enhanced binding to effector cells results in crosslinking and activation of CD40 signaling in cells of the immune

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system. We hypothesize that this increased stimulation of the patient s own immune cells may result in meaningful antitumor activity. We are developing SEA-CD40 as a novel immuno-oncology agent. A phase 1 clinical trial of SEA-CD40 for solid tumors and hematologic malignancies is ongoing.

Other Technologies

In addition, we utilize other technologies designed to maximize antitumor activity and reduce toxicity of antibody-based therapies. Genetic engineering enables us to produce antibodies that are optimized for their intended uses. For ADCs, we screen and select antibodies that bind to antigens that are differentially expressed on tumor cells versus vital normal tissues, rapidly internalized within target cells and utilize native or engineered conjugation sites to optimize drug attachment. In some cases, we evaluate the use of our monoclonal antibodies and ADCs in combination with conventional chemotherapy and other anticancer agents, which may result in increased antitumor activity.

Our Strategy

Our strategy is to become a leading developer and marketer of targeted therapies for cancer. Key elements of our strategy are to:

Successfully Execute our ADCETRIS Commercial Plan. An important near-term objective is to continue to execute our ADCETRIS commercial plan by driving market penetration and duration of therapy consistent with the current ADCETRIS label. We continue to focus our efforts on commercializing ADCETRIS in the United States and Canada through the coordinated efforts of our sales, marketing, reimbursement and market planning groups. ADCETRIS is approved by the FDA and the European Commission for four indications, encompassing several settings for the treatment of relapsed Hodgkin lymphoma, relapsed sALCL and for certain types of CTCL. In addition, as of January 2018, ADCETRIS had received marketing authorizations in relapsed Hodgkin lymphoma and sALCL from regulatory authorities in 70 countries, and we are continuing to support Takeda s efforts to obtain regulatory approvals and conduct commercial launches in additional countries worldwide.

Expand the Therapeutic Potential of ADCETRIS. We believe ADCETRIS may have applications in earlier lines of therapy for Hodgkin lymphoma and MTCL and in other types of CD30-expressing lymphomas. In this regard, during 2017 we reported data from the phase 3 ECHELON-1 trial, received BTD from the FDA and submitted a sBLA to the FDA in November 2017 seeking approval for a new indication of ADCETRIS in combination with chemotherapy for the frontline treatment of patients with advanced classical Hodgkin lymphoma. The FDA has granted Priority Review for the sBLA, and the PDUFA target action date is May 1, 2018. The phase 3 ECHELON-2 trial evaluating ADCETRIS in frontline therapy for MTCL, also known as PTCL, and the phase 3 CHECKMATE 812 trial evaluating ADCETRIS in relapsed Hodgkin lymphoma in combination with a CPI are also ongoing. Clinical trials are also being conducted by us, by our collaborators and as investigator-sponsored trials in different CD30-expressing indications, including multiple stages of Hodgkin lymphoma, novel combinations of ADCETRIS plus immuno-oncology or other anticancer agents and in other areas of medical and scientific interest.

Advance our Clinical Pipeline of Oncology Drugs. We are employing our clinical, development, regulatory and manufacturing expertise with the goal of advancing our clinical-stage product candidates towards regulatory approval and commercialization on a global basis. Our key efforts in this regard include:

Advance Enfortumab Vedotin in a Pivotal Trial for Urothelial Cancer. We and Astellas are conducting a pivotal phase 2 clinical trial of enfortumab vedotin for patients with locally advanced or metastatic urothelial cancer who have been previously treated with CPI therapy. In addition, to evaluate its potential in earlier lines of metastatic urothelial cancer, we

and Astellas initiated a phase 1b trial of enfortumab vedotin in combination with CPI therapy for patients with first- or second-line locally advanced or metastatic urothelial cancer. We also believe enfortumab vedotin

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may have application in other types of solid tumors based on the expression of Nectin-4 in cancers, such as ovarian and non-small cell lung, and are considering potential future clinical trials.

Advance Tisotumab Vedotin into a Pivotal Trial for Cervical Cancer. We and Genmab plan to initiate in the first half of 2018 a pivotal phase 2 clinical trial of tisotumab vedotin for patients with recurrent and/or metastatic cervical cancer. In addition, as part of our strategy to broadly investigate tisotumab vedotin for cancer, we and Genmab plan to evaluate tisotumab vedotin as part of combination therapy for first-line cervical cancer as well as in other types of solid tumors.

Continue to Develop our Other Pipeline Programs. We believe that it is important to maintain a diverse pipeline of product candidates to sustain our future growth. To accomplish this, we are continuing to advance the development of our other clinical product candidates as well as other preclinical and research-stage programs that employ our proprietary technologies. We are evaluating our programs as monotherapy, and in some cases in combination with other anti-cancer agents such as CPIs to broadly assess the potential of our pipeline as part of existing and emerging therapeutic regimens. In addition, we are co-developing immuno-oncology programs with each of Unum and Pieris.

Support Growth of our Pipeline through Internal Research Efforts and Strategic Transactions. We have internal research programs directed toward identifying novel antigen targets, monoclonal antibodies and other targeting molecules, creating new antibody engineering techniques and developing new classes of stable linkers and cell-killing agents for our ADC technology. In addition, we supplement these internal efforts through ongoing initiatives to identify product candidates, products and technologies to acquire or in-license from biotechnology and pharmaceutical companies and academic institutions. For example, in January 2018, we announced the Cascadian Acquisition. If we are successful in consummating the Cascadian Acquisition, we plan to advance Cascadian s most advanced program, tucatinib, in its current pivotal trial, HER2CLIMB, for patients with HER2-positive, or HER2+, metastatic breast cancer, including patients with or without brain metastases, and also to evaluate other potential development opportunities for tucatinib.

Expand Globally. We have established operations in Zug, Switzerland to support clinical trials, regulatory, medical affairs, manufacturing, and future potential commercial activities for our pipeline. In 2018, we will continue to develop our European presence in support of our global expansion.

Continue to Leverage our Industry-Leading ADC Technology. We have developed proprietary ADC technology designed to empower monoclonal antibodies. We are currently developing multiple product candidates that employ our ADC technology and we have also licensed this technology to biotechnology and pharmaceutical companies to generate collaboration revenues and funding, as well as potential milestones and potential future royalties. Presently, we have active ADC collaborations with AbbVie, Bayer, Celldex, Genentech, GSK, Pfizer, and Progenics, as well as ADC co-development agreements with Agensys (which subsequently became an affiliate of Astellas) and Genmab. These ADC collaboration and co-development agreements have generated over $375 million as of December 31, 2017 through a combination of upfront payments, research support, and other fees, milestone payments and equity purchases. Several of these collaborators are advancing ADCs using our technology in late-stage clinical development across a range of cancer types, illustrating our leadership in the field.

Enter into Strategic Product Collaborations to Supplement our Internal Resources. We have entered into collaborations to broaden and accelerate clinical trial development and potential commercialization of our product candidates. Collaborations can generate significant capital, supplement our own internal expertise in key areas such as manufacturing, regulatory affairs and clinical development, and provide us with access to our collaborators marketing, sales and distribution capabilities in specific territories.

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ADCETRIS and Lead Product Candidate Development Pipeline

The following table summarizes our ADCETRIS and lead product candidate development pipeline:

Name of Product or Product Candidate	Description	Commercial Rights	Status
ADCETRIS® (brentuximab vedotin)	Anti-CD30 ADC	Seattle Genetics in United States and Canada; Takeda in rest of world	ADCETRIS has received regular approval in the United States for the treatment of adult patients with (i) relapsed classical Hodgkin lymphoma, (ii) classical Hodgkin lymphoma at high risk of relapse or progression as post-autologous hematopoietic stem cell transplantation, or post-auto-HSCT consolidation and (iii) primary cutaneous anaplastic large cell lymphoma, or pcALCL, or CD30-expressing mycosis fungoides, or MF, who have received prior systemic therapy. ADCETRIS also has accelerated approval in the United States for the treatment of patients with relapsed sALCL. In addition, ADCETRIS has approval with conditions in Canada for the treatment of patients with relapsed or refractory Hodgkin lymphoma or sALCL, and non-conditional approval for post-autologous stem cell transplant, or ASCT, consolidation treatment of Hodgkin lymphoma patients at increased risk of relapse or progression. As of January 2018, ADCETRIS had received marketing authorizations in relapsed Hodgkin lymphoma or relapsed sALCL from regulatory authorities in 70 countries. In particular, ADCETRIS has conditional marketing authorization in the European Union for the treatment of adult patients with (i) relapsed or refractory CD30-positive Hodgkin lymphoma, (ii) relapsed or refractory sALCL, (iii) CD30-positive Hodgkin lymphoma at increased risk of relapse or progression following ASCT and (iv) CD30-positive CTCL after at least one prior systemic therapy. Ongoing trials of ADCETRIS include: The ECHELON-1 phase 3 randomized trial ongoing for patients with newly diagnosed advanced stage classical Hodgkin lymphoma comparing adriamycin, bleomycin, vinblastine and dacarbazine, or ABVD, versus AVD plus ADCETRIS. In 2017, we reported that the ECHELON-1 phase 3 trial met its primary endpoint. Based on the

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			results of the trial, in September 2017 the FDA granted BTD to ADCETRIS in combination with chemotherapy for the frontline treatment of patients with advanced classical Hodgkin lymphoma. We submitted a sBLA to the FDA in November 2017 for approval of a new indication for ADCETRIS as part of a frontline combination chemotherapy regimen in patients with previously untreated advanced classical Hodgkin lymphoma. In December 2017, the FDA granted Priority Review for the sBLA, and the PDUFA target action date is May 1, 2018.
			The ECHELON-2 phase 3 randomized trial ongoing for patients with newly diagnosed CD30-expressing MTCL, including sALCL, comparing cyclophosphamide, doxorubicin, vincristine and prednisone, or CHOP, versus CHP plus ADCETRIS. We and Takeda completed enrollment of 452 patients in November 2016, and we expect to report top-line data in 2018.
			The CHECKMATE 812 phase 3 trial ongoing evaluating ADCETRIS in combination with nivolumab for patients with relapsed or refractory, or transplant-ineligible, advanced classical Hodgkin lymphoma.
			Phase 2 trial ongoing for patients age 60 or older with newly diagnosed Hodgkin lymphoma evaluating ADCETRIS in combination with bendamustine, dacarbazine or nivolumab.
			Phase 1/2 trial ongoing for patients with relapsed or refractory Hodgkin lymphoma after failure of frontline therapy evaluating ADCETRIS in combination with nivolumab.
			Phase 1/2 trial ongoing for patients with relapsed or refractory B-cell and T-cell non-Hodgkin lymphomas, including DLBCL and other rare B-cell lymphomas, evaluating ADCETRIS in combination with nivolumab.
Enfortumab vedotin (ASG-22ME)	Anti-Nectin-4 ADC	50: 50 co-development and commercialization with Astellas	Pivotal phase 2 trial ongoing for patients with locally advanced or metastatic urothelial cancer who have been previously treated with CPI therapy.

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			Phase 1b trial for patients with first- or second-line locally advanced or metastatic urothelial cancer evaluating enfortumab vedotin in combination with CPI therapy.
			Phase 1 trial for Nectin-4-positive solid tumors, including urothelial cancers such as bladder cancer.
Tisotumab vedotin	Anti-Tissue Factor ADC	50: 50 co-development and commercialization with Genmab	Planned pivotal phase 2 clinical trial for patients with recurrent and/or metastatic cervical cancer.
			Planned phase 2 trial to evaluate tisotumab vedotin as part of combination therapy for first-line cervical cancer.
			Planned phase 2 trial in solid tumors.
			Phase 1/2 trial ongoing in solid tumors.
Ladiratuzumab vedotin (SGN-LIV1A)	Anti-LIV-1 ADC	Seattle Genetics	Phase 1 trial ongoing for patients with LIV-1-positive metastatic breast cancer, in particular triple negative disease.
			Phase 2 trial ongoing evaluating ladiratuzumab vedotin as part of neo-adjuvant therapy in patients with breast cancer (the I-SPY2 trial).
			Planned phase 1b/2 trial of ladiratuzumab vedotin in combination with pembrolizumab for first-line metastatic triple negative breast cancer.
			Planned phase 1b/2 trial of ladiratuzumab vedotin in combination with atezolizumab for second-line metastatic triple negative breast cancer (the MORPHEUS trial).

ADCETRIS

ADCETRIS is an ADC comprised of an anti-CD30 monoclonal antibody attached by a protease-cleavable linker to a proprietary microtubule disrupting agent, monomethyl auristatin E, or MMAE. ADCETRIS employs a linker system that is designed to be stable in the bloodstream and to release MMAE upon internalization into CD30-expressing cells. We believe that the CD30 antigen is an attractive target for cancer therapy because it is expressed on multiple types of cancer, but has limited expression on normal tissues. We are collaborating with Takeda on the global development and commercialization of ADCETRIS. Under this collaboration, we have rights to commercialize ADCETRIS in the United States and Canada. Takeda has exclusive rights to commercialize ADCETRIS in the rest of the world. ADCETRIS has received regulatory approvals as follows:

United States. ADCETRIS® (brentuximab vedotin) injection for intravenous infusion has received approval from the FDA for four indications: (1) regular approval for the treatment of adult patients with classical Hodgkin lymphoma after failure of auto-HSCT or after failure of at least two prior multi-agent chemotherapy regimens in patients who are not auto-HSCT candidates, (2) regular approval for the treatment of classical Hodgkin lymphoma adult patients at high risk of relapse or progression as post-auto-HSCT consolidation, (3) accelerated approval for the treatment of adult patients with sALCL after

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failure of at least one prior multi-agent chemotherapy regimen, and (4) regular approval for the treatment of adult patients with pcALCL and CD30-expressing MF who have received prior systemic therapy. The sALCL indication is approved under accelerated approval based on overall response rate. Continued approval for the sALCL indication is contingent upon verification and description of clinical benefit in a confirmatory phase 3 trial.

Canada. Health Canada has issued a Notice of Compliance with conditions, authorizing marketing of ADCETRIS for two lymphoma indications: (1) the treatment of patients with Hodgkin lymphoma after failure of ASCT, or after failure of at least two multi-agent chemotherapy regimens in patients who are not ASCT candidates, and (2) the treatment of patients with sALCL after failure of at least one multi-agent chemotherapy regimen. In addition, Health Canada granted non-conditional approval for post-ASCT consolidation treatment of Hodgkin lymphoma patients at increased risk of relapse or progression.

European Union. ADCETRIS was granted conditional marketing authorization by the European Commission in October 2012 for two indications: (1) for the treatment of adult patients with relapsed or refractory CD30-positive Hodgkin lymphoma following ASCT, or following at least two prior therapies when ASCT or multi-agent chemotherapy is not a treatment option, and (2) the treatment of adult patients with relapsed or refractory sALCL. The European Commission extended the current conditional approval of ADCETRIS and approved ADCETRIS for the treatment of adult patients with CD30-positive Hodgkin lymphoma at increased risk of relapse or progression following ASCT. In addition, in January 2018, the European Commission further extended the marketing authorization for ADCETRIS for the treatment of adult patients with CD30-positive cutaneous T-cell lymphoma (CTCL) after at least one prior systemic therapy.

Worldwide. As of January 2018, ADCETRIS is commercially available in 70 countries for relapsed or refractory Hodgkin lymphoma and relapsed or refractory sALCL.

ADCETRIS was granted approval for the treatment of patients with sALCL after failure of at least one prior multi-agent chemotherapy regimen under the FDA s accelerated approval regulations, which allows the FDA to approve products for cancer or other serious or life-threatening illnesses based on surrogate endpoints or on a clinical endpoint other than survival or irreversible morbidity. Under the FDA s accelerated approval regulations, we are subject to certain post-approval requirements that require an additional confirmatory phase 3 trial to verify and describe the clinical benefit of ADCETRIS. In addition, we are subject to extensive ongoing obligations and continued regulatory review from the FDA and other applicable regulatory agencies, such as continued adverse event reporting requirements and the requirement to have our promotional materials pre-cleared by the FDA.

In the United States, while ECHELON-2 is a required post-approval study in connection with the accelerated approval of the relapsed sALCL indication, results from either the ECHELON-1 or the ECHELON-2 trial may be sufficient to confirm the clinical benefit of ADCETRIS in relapsed sALCL and convert the approval of ADCETRIS from accelerated approval to regular approval in its currently approved relapsed sALCL indication. In Canada, the ECHELON-2 trial is a required post-approval study to remove conditions on the approval of ADCETRIS in the relapsed sALCL indication. In Europe, there are separate post-approval requirements to convert the conditional marketing authorization of ADCETRIS to a standard marketing authorization in the relapsed sALCL indication.

In addition, with respect to the accelerated approval of ADCETRIS for relapsed Hodgkin lymphoma in Canada and Europe, ECHELON-1 is a required post-approval study to remove conditions on the approval of ADCETRIS in relapsed Hodgkin lymphoma in Canada, and in Europe, there are separate post-approval requirements to convert the conditional marketing authorization of ADCETRIS to a standard marketing authorization in the relapsed Hodgkin lymphoma indication.

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Market Opportunities

According to the American Cancer Society, more than 8,200 cases of Hodgkin lymphoma were expected to be diagnosed in the United States during 2017, and an estimated 1,070 people were expected to die of the disease. Approximately 4,000 patients are diagnosed annually in the United States with a type of CD30-expressing MTCL, including sALCL. The use of combination chemotherapy as frontline therapy for malignant lymphomas has resulted in high remission rates; however, these frontline chemotherapy regimens have substantial associated toxicities and a significant number of lymphoma patients relapse and require additional treatments including other chemotherapy regimens and ASCT. For the reasons discussed in *Item 1A Risk Factors*, we may not be able to obtain regulatory approvals to market ADCETRIS for frontline Hodgkin lymphoma or MTCL, or otherwise continue to expand its labeled indications of use. An estimated 1,000 people annually have CD30-expressing mycosis fungoides or primary cutaneous ALCL requiring systemic therapy.

ADCETRIS Clinical Development Status and Plan

In collaboration with our partners, we are pursuing a broad development strategy for ADCETRIS that includes clinical trials of ADCETRIS evaluating its therapeutic potential in newly diagnosed patients with Hodgkin lymphoma, or MTCL, also known as PTCL, including sALCL. We are also evaluating ADCETRIS in combination with a CPI. These ongoing clinical trials include:

Phase 3 Frontline Hodgkin Lymphoma (ECHELON-1). In June 2017, we and Takeda announced positive top line data from the ECHELON-1 trial, a randomized, open-label, phase 3 trial investigating ADCETRIS plus AVD versus ABVD as frontline combination therapy in 1,334 patients with previously untreated advanced classical Hodgkin lymphoma. Additional data were reported at the 59th American Society of Hematology (ASH) annual meeting. The ECHELON-1 trial met its primary endpoint, demonstrating that treatment with ADCETRIS plus AVD resulted in a statistically significant improvement in modified progression-free survival, or PFS, versus the control arm as assessed by an independent review facility (hazard ratio=0.770; p-value=0.035). The two-year modified PFS rate per independent review for patients in the ADCETRIS plus AVD arm was 82.1 percent compared to 77.2 percent in the control arm. Per investigator assessment, the two-year modified PFS rate for patients in the ADCETRIS plus AVD arm was 81.0 percent compared to 74.4 percent in the control arm. All secondary endpoints trended in favor of the ADCETRIS plus AVD arm, including interim analysis of overall survival (hazard ratio=0.72; p-value=0.19), the key secondary endpoint. The safety profile of ADCETRIS plus AVD in the ECHELON-1 trial was generally consistent with that known for the single-agent components of the regimen. The most common clinically relevant adverse events of any grade that occurred in at least 15 percent of patients in the ADCETRIS plus AVD and ABVD arms were: neutropenia (58 and 45 percent, respectively), constipation (42 and 37 percent, respectively), vomiting (33 and 28 percent, respectively), fatigue (both 32 percent), peripheral sensory neuropathy (29 and 17 percent, respectively), diarrhea (27 and 18 percent, respectively), pyrexia (27 and 22 percent, respectively), peripheral neuropathy (26 and 13 percent, respectively), abdominal pain (21 and 10 percent, respectively) and stomatitis (21 and 16 percent, respectively). In both the ADCETRIS plus AVD and ABVD arms, the most common Grade 3 or 4 events were neutropenia, febrile neutropenia and neutrophil count decrease. Febrile neutropenia was reduced through the use of prophylactic growth factors (G-CSF) in a subset of patients. In the ADCETRIS plus AVD arm of the study, the rate of febrile neutropenia without the use of G-CSF was 21 percent and with the use of G-CSF was reduced to 11 percent. G-CSF primary prophylaxis with ADCETRIS plus AVD resulted in an overall comparable safety profile to ABVD, decreasing the incidence of febrile neutropenia, neutropenia and serious adverse events. Primary prophylaxis with G-CSF was used in a subset of patients enrolled in the study. In the ADCETRIS plus AVD arm, peripheral neuropathy events were observed in 67 percent of patients compared to 43 percent on the ABVD arm. In the ADCETRIS plus AVD arm, the majority of peripheral neuropathy events were Grade 1 or 2. Grade ³3 events were reported in 11 percent of patients and Grade 4 events were reported in less than 1 percent of patients. In the ABVD arm, Grade ³3 events were reported in 2 percent of patients and there were no Grade 4 events. Two-thirds of the patients with peripheral neuropathy in the ADCETRIS plus AVD arm reported resolution or improvement at last follow-up. Pulmonary toxicity, defined as events related to interstitial lung disease, was reported in 2 percent of patients in the ADCETRIS plus AVD arm versus 7 percent of patients in the ABVD arm;

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Grade ³3 events were reported in less than 1 percent versus 3 percent, in the ADCETRIS plus AVD arm and the ABVD arm, respectively. 9 on study deaths occurred in the ADCETRIS plus AVD arm, of which 7 were due to neutropenia or associated complications (all occurred in patients who had not received primary prophylaxis with G-CSF with the exception of 1 patient who entered the trial with pre-existing neutropenia). The remaining 2 deaths were due to myocardial infarction. In the ABVD arm, there were 13 on study deaths, of which 11 were due to or associated with pulmonary-related toxicity, 1 was due to cardiopulmonary failure and 1 death had unknown cause. ECHELON-1 is being conducted under a SPA agreement with the FDA and pursuant to scientific advice from the EMA.

In September 2017, the FDA granted BTD to ADCETRIS in combination with chemotherapy for the frontline treatment of patients with advanced classical Hodgkin lymphoma. In November 2017, we submitted a sBLA to the FDA seeking approval of ADCETRIS as part of a frontline combination chemotherapy regimen in patients with previously untreated advanced classical Hodgkin lymphoma. In December 2017, the FDA granted Priority Review for the sBLA, and the PDUFA target action date is May 1, 2018.

Phase 3 Frontline Mature T-Cell Lymphoma (ECHELON-2). We and Takeda have completed patient enrollment of 452 patients in a global randomized, double-blind, placebo-controlled multi-center phase 3 clinical trial known as ECHELON-2. This trial is evaluating ADCETRIS in combination with CHP versus CHOP for the treatment of newly diagnosed CD30-expressing MTCL patients, including patients with sALCL and other types of peripheral T-cell lymphomas. The primary endpoint of the trial is PFS per independent review facility assessment. Secondary endpoints include overall survival, complete remission rate and safety. Based on reviews of pooled, blinded data, we have observed a lower rate of reported PFS events than anticipated in the ECHELON-2 trial. We plan to discuss with the FDA the potential to unblind the trial prior to achieving the target number of PFS events specified in our SPA agreement. We cannot predict the outcome of those discussions or whether we would be able to reach agreement with the FDA. See *Item 1A Risk Factors Risks Related to Our Business Our near-term prospects are substantially dependent on ADCETRIS. If we and/or Takeda are unable to effectively commercialize ADCETRIS for the treatment of patients in its approved indications and to continue to expand its labeled indications of use, our ability to generate significant revenue and our prospects for profitability will be adversely affected* and *Clinical trials are expensive and time consuming, may take longer than we expect or may not be completed at all, and their outcome is uncertain.* Based on the length of follow-up and the slow rate at which PFS events are occurring, we believe the primary endpoint data will be mature and expect to report top-line data in 2018. A companion diagnostic test is being used in this trial to assess CD30-expression. We expect that concurrent approval of a CD30 companion diagnostic will be required for any approval of ADCETRIS in the frontline MTCL indication. We are developing a companion diagnostic under a collaboration agreement with Ventana Medical Systems, or Ventana, and Takeda. The ECHELON-2 trial is being conducted under a SPA agreement with the FDA and also received scientific advice from the EMA. We are required to conduct this trial as part of our ADCETRIS post-marketing requirement for the relapsed sALCL indication, and the trial is designed to be confirmatory in the United States and Canada.

Data from a phase 1 trial that evaluated ADCETRIS plus chemotherapy for frontline sALCL, which was subsequently amended to include patients with any CD30-expressing MTCL, supported our decision to initiate the ECHELON-2 trial. Among the 26 patients who received the combination regimen of ADCETRIS plus CHP, 88 percent achieved a complete remission. At the December 2017 ASH annual meeting, follow-up data were reported showing that the estimated five-year PFS rate was 52 percent, with no patients receiving a consolidative stem cell transplant in first remission. The estimated five-year overall survival rate was 80 percent. There were no progression events or deaths in the trial since the three-year follow up. 73 percent of patients (19 of 26) experienced peripheral neuropathy, the majority of which was Grade 1 or 2. 95 percent of these patients had complete resolution or some improvement of their symptoms at last follow-up with a median time to resolution of 4.2 months and a median time to improvement of symptoms of 2.6 months.

Phase 3 Relapsed/Refractory Hodgkin Lymphoma (CHECKMATE 812). We and BMS are conducting a pivotal phase 3 clinical trial, or the CHECKMATE 812 trial, to evaluate the combination of BMS s

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immunotherapy nivolumab (Opdivo) with ADCETRIS for the treatment of relapsed or refractory, or transplant-ineligible, advanced classical Hodgkin lymphoma. Nivolumab is a programmed death-1, or PD-1, immune checkpoint inhibitor that is designed to harness the body s own immune system to help restore antitumor immune response. The primary endpoint for the CHECKMATE 812 trial is PFS and targeted enrollment is 340 patients.

The CHECKMATE 812 trial is supported by interim data from a phase 1/2 trial in second-line Hodgkin lymphoma, which is one of three trials being conducted under a clinical trial collaboration agreement between us and BMS to evaluate the investigational combination of ADCETRIS and nivolumab.

Updated interim data from the phase 1/2 trial evaluating the combination of ADCETRIS and nivolumab for patients with second line Hodgkin lymphoma were presented at the 2017 ASH annual meeting. Data were reported from 62 patients with relapsed or refractory Hodgkin lymphoma who received the combination regimen of ADCETRIS plus nivolumab after failure of frontline therapy. After completion of the fourth cycle of treatment, patients were eligible to undergo an ASCT. Of 60 response-evaluable patients, 83 percent had an objective response, including 62 percent with a complete response. The estimated six-month PFS rate was 89 percent. The most common adverse events of any grade occurring prior to ASCT or subsequent salvage therapy in at least 20 percent of patients were nausea, fatigue, infusion-related reaction, or IRR, pruritus, diarrhea, headache, cough, vomiting, dyspnea, nasal congestion, pyrexia and rash. IRRs were observed in 44 percent of patients, of which the majority (41 percent) were Grade 1 or 2. No patients discontinued treatment due to an IRR.

The third ongoing trial under our clinical collaboration with BMS is evaluating the combination of ADCETRIS and nivolumab in patients with relapsed or refractory B-cell and T-cell non-Hodgkin lymphomas, including DLBCL and rare B-cell lymphomas, including gray zone and mediastinal B-cell lymphomas.

Frontline Therapy for Hodgkin Lymphoma Patients Age 60 and Over. In October 2012, we initiated a phase 2 clinical trial evaluating ADCETRIS monotherapy as a frontline therapy for patients age 60 or older with newly diagnosed Hodgkin lymphoma. The trial was subsequently amended to include the administration of ADCETRIS in combination with bendamustine or dacarbazine. In 2015, the bendamustine arm was closed because the tolerability of the combination did not meet study goals for this fragile patient population. Subsequently, the study was further expanded to evaluate the combination of ADCETRIS and nivolumab. ADCETRIS monotherapy is included in National Comprehensive Cancer Network, or NCCN, guidelines for older patients with relapsed or refractory Hodgkin lymphoma as a palliative therapy option.

Investigator-Sponsored Trials. In addition to our corporate-sponsored trials, as of December 31, 2017, there were more than 40 reported investigator-sponsored trials of ADCETRIS in the United States. In addition, we and Takeda are reviewing proposals from multiple clinical investigators and cooperative groups in the United States, Canada and Europe about potential investigator-sponsored trials of ADCETRIS. The investigator-sponsored trials to date include the use of ADCETRIS in a number of malignant hematologic indications such as CTCL, DLBCL, untreated limited stage Hodgkin lymphoma, salvage therapy for patients with Hodgkin lymphoma prior to auto-HSCT and graft versus host disease. There are also numerous other investigator-sponsored trials for the use of ADCETRIS in other CD30-expressing and select CD30-undetectable settings, and in solid tumors such as mesothelioma and testicular germ cell tumors. Several investigator-sponsored trials are currently evaluating ADCETRIS with immuno-oncology compounds in Hodgkin lymphoma, and we expect additional investigator-sponsored trials might evaluate ADCETRIS in novel combination regimens.

Enfortumab Vedotin (ASG-22ME)

Enfortumab vedotin is an ADC composed of an anti-Nectin-4 monoclonal antibody linked to a potent auristatin compound using our proprietary ADC technology. Nectin-4 is a novel target expressed in multiple cancers including urothelial cancers, such as bladder cancer, as well as ovarian and lung cancers. We are developing enfortumab vedotin as a potential treatment for solid tumors under our co-development collaboration with Astellas, and we share all costs and, if commercialized, profits for the product candidate with Astellas on a 50:50 basis.

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Approximately 15,000 people are diagnosed annually in the United States with metastatic urothelial cancer. Several CPIs have been approved for urothelial cancer in the past several years and are improving outcomes for some patients, yet the vast majority of patients do not benefit, or relapse, and require additional treatment options. There are no approved agents in the post-CPI setting, representing an unmet medical need and potential rapid development pathway.

In October 2017, we and Astellas initiated a pivotal, single-arm phase 2 clinical trial of single-agent enfortumab vedotin for locally advanced or metastatic urothelial cancer patients who have been previously treated with CPI therapy. The primary endpoint of the trial is confirmed objective response rate per independent review. The trial will also assess overall survival, PFS, safety and tolerability. The study is designed to enroll approximately 120 patients at multiple centers globally.

Data from a phase 1 trial that evaluated enfortumab vedotin in solid tumors, primarily urothelial cancer, supported our decision to initiate the pivotal phase 2 trial. In June 2017, we and Astellas reported updated data from the phase 1, open-label, dose-escalation, multi-center clinical trial of enfortumab vedotin at the American Society of Clinical Oncology, or ASCO, annual meeting. Of the 71 patients with metastatic urothelial cancer evaluated for response, 41 percent had an objective response, including 4 percent who achieved a complete response. The preliminary estimate of median duration of response for all patients was 24 weeks. In 30 patients treated at the recommended phase 2 dose of 1.25 mg/kg, 53 percent had an objective response, including 3 percent who achieved a complete response. Of the 32 patients previously treated with CPIs and evaluated for response, 44 percent had an objective response, including three percent with complete response. Among the 17 CPI-treated patients treated at the recommended phase 2 dose, 47 percent achieved a partial response. The most common treatment-related adverse events of any grade occurring in 10 percent or more of patients were nausea (36 percent), pruritus (31 percent), fatigue (30 percent) and diarrhea (28 percent). In February 2018, we and Astellas reported updated data on this trial in a poster presentation the American Society of Clinical Oncology 2018 Genitourinary Cancers Symposium. As of October 2, 2017, the data cut date for the poster, a total of 67 patients with metastatic urothelial carcinoma whose disease progressed after treatment with CPIs received the recommended phase 2 dose of 1.25 mg/kg of enfortumab vedotin once a week for three of every four-week cycle. For the 55 patients with evaluable data, the confirmed response rate was reported as 31 percent (N=17). Since October 2, 2017, an additional 6 patients have achieved a confirmed response. Updated data from these and additional patients, who continue to be enrolled in the trial, are expected to be reported at an upcoming medical meeting in 2018. In data presented, the most common treatment-emergent adverse event(s), or TEAE, of any grade for all patients were fatigue (55 percent), nausea (48 percent), decreased appetite (45 percent), and diarrhea and alopecia (43 percent each). In the presentation, 4 fatalities were reported possibly related to enfortumab vedotin treatment, two reported prior to October 2, 2017 due to respiratory failure and urinary tract obstruction and two cases after October 2, 2017 due to hyperglycemia. Since October 2, 2017, the study protocol has been amended to address the hyperglycemia finding. Hyponatremia (six percent), or low sodium in the blood, was the only Grade 3 or 4 TEAE occurring in greater than five percent of the cohort population.

As part of our effort to evaluate enfortumab vedotin in earlier lines of therapy, we and Astellas initiated in November 2017 a phase 1b trial evaluating the safety and tolerability of enfortumab vedotin in combination with pembrolizumab for first- or second-line treatment of patients with locally advanced or metastatic urothelial cancer. The single arm multi-center trial is designed to enroll up to 85 patients who are ineligible for first-line cisplatin-based chemotherapy or have progressed following treatment with a regimen containing platinum-based chemotherapy. The primary objective of the trial is to assess the safety and tolerability of enfortumab vedotin in combination with CPI therapy.

Tisotumab Vedotin

Tisotumab vedotin is an ADC composed of a human antibody that binds to tissue factor linked to a potent auristatin compound using our proprietary ADC technology. Tissue factor is expressed on many solid tumors, including cervical, ovarian, prostate and bladder. In August 2017, we exercised our option to co-develop

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tisotumab vedotin with Genmab, sharing all future costs and, if commercialized, profits for the product candidate with Genmab on a 50:50 basis.

According to the American Cancer Society, approximately 13,000 women are diagnosed annually in the United States with cervical cancer and 4,000 are expected to die. Despite improvements in detecting and preventing metastatic cervical cancer, this remains a substantial unmet medical need.

In the first half of 2018, we and Genmab plan to initiate a pivotal phase 2 clinical trial of tisotumab vedotin in patients with recurrent and/or metastatic cervical cancer. The single-arm trial is expected to enroll approximately 100 patients who have relapsed or progressed on or after platinum-containing chemotherapy and who have received or are ineligible for bevacizumab (Avastin). The primary endpoint of the study will be overall response rate as assessed by independent review. The planned trial will also assess duration of response and safety.

Data from a phase 1/2 trial that evaluated tisotumab vedotin in solid tumors, including cervical cancer, supported our decision to initiate the pivotal phase 2 trial. In September 2017, we and Genmab reported data from part 2 of the phase 1/2 trial at the European Society for Medical Oncology, or ESMO, Congress. In an expansion cohort of 34 patients with relapsed, recurrent and/or metastatic cervical cancer, 32 percent achieved a response. Median duration of confirmed responses was 8.3 months. The most common adverse events of any grade were conjunctivitis (50 percent), epistaxis, fatigue and alopecia (47 percent each) and nausea (44 percent).

Beyond recurrent and/or metastatic cervical cancer, we believe there may be opportunities for tisotumab vedotin in earlier lines of cervical cancer and in other solid tumors that express tissue factor. In 2018, we and Genmab also plan to initiate at least two additional clinical trials of tisotumab vedotin. One trial will evaluate tisotumab vedotin as part of a combination regimen for first-line cervical cancer. The second trial will evaluate tisotumab vedotin in other types of solid tumors.

Ladiratuzumab Vedotin (SGN-LIV1A)

Ladiratuzumab vedotin is an ADC composed of an anti-LIV-1 monoclonal antibody linked to a potent auristatin compound using our proprietary ADC technology, and is being developed as a potential treatment of metastatic breast cancer.

In October 2013 we initiated a phase 1, open-label, dose-escalation clinical trial to evaluate the safety and antitumor activity of ladiratuzumab vedotin in patients with LIV-1-positive metastatic breast cancer. At the December 2017 San Antonio Breast Cancer Symposium annual meeting, updated interim data were reported showing that among the 60 efficacy-evaluable patients with metastatic triple negative breast cancer, 25 percent achieved a partial response. At the recommended dose, 29 percent of patients achieved a partial response. The median PFS and median duration of response for patients treated across all dose levels were 11 weeks and 13.3 weeks, respectively. In 19 patients treated at the recommended dose, the median PFS was 12.1 weeks, and the median duration of response was 17.4 weeks. Of the 81 patients treated in the study, peripheral neuropathy events occurred in 20 percent and were generally low grade (Grades 1/2) and manageable. Grades 3/4 adverse events included neutropenia and anemia. Enrollment continues for patients with metastatic triple negative breast cancer at the recommended dose of 2.5 mg/kg, with a maximum dose of 200 mg per cycle.

Ladiratuzumab vedotin is also being evaluated in several other settings for metastatic breast cancer. In mid-2018, we plan to initiate a phase 1b/2 clinical trial in combination with pembrolizumab (Keytruda) in patients with locally advanced or metastatic triple negative breast cancer. This single arm, open label multicenter study will be conducted under a collaboration agreement with Merck and is anticipated to enroll up to 72

patients.

Ladiratuzumab vedotin is also being evaluated in the I-SPY 2 trial, a phase 2 trial being conducted by a consortium that includes major cancer research centers and receives support from multiple industry partners. In

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this trial, ladiratuzumab vedotin followed by standard chemotherapy as a neo-adjuvant treatment (prior to surgery) is being evaluated for women with newly diagnosed, locally advanced Stage 2 or 3 HER2-negative breast cancer. This trial is anticipated to enroll up to 75 patients in the ladiratuzumab vedotin treatment arm.

Under a clinical collaboration with Genentech, ladiratuzumab vedotin will be evaluated in combination with atezolizumab (Tecentriq) as part of the MORPHEUS trial. The planned phase 1b/2 MORPHEUS trial will evaluate the combination as second-line therapy in patients with metastatic triple negative breast cancer who have not been previously treated with immunotherapy. This multi-arm study is anticipated to enroll up to 45 patients in the ladiratuzumab vedotin arm.

Additional Product Candidates

Our earlier stage clinical pipeline includes five other ADC programs consisting of denintuzumab mafodotin, or SGN-CD19A, SGN-CD19B, SGN-CD123A, SGN-CD352A and SGN-CD33A as well as two immuno-oncology agents, SEA-CD40 and SGN-2FF. We continue to evaluate these product candidates and will advance them into further development as we determine appropriate based on clinical data and resource prioritization.

In June 2017, we announced that we were discontinuing the phase 3 CASCADE clinical trial of SGN-CD33A, or vadastuximab talirine, in frontline older AML patients, and suspending patient enrollment and treatment in all other SGN-CD33A trials. We took this action following consultation with the Independent Data Monitoring Committee, or IDMC, and after reviewing unblinded data from the CASCADE trail which indicated a higher rate of deaths, including fatal infections, in the SGN-CD33A-containing arm versus the control arm of the trial. In addition, the Investigational New Drug application, or IND, for SGN-CD33A has been placed on hold, and no clinical trials may resume under the IND until the FDA lifts the clinical hold. We are continuing to review data for the SGN-CD33A program; however, at this time we have no plans to initiate additional clinical trials of SGN-CD33A.

Research Programs

In addition to our pipeline of product candidates and antibody-based and SEA technologies, we have internal research programs directed toward developing new classes of potent, cell-killing agents and stable linkers, identifying novel antigen targets, monoclonal antibodies and other targeting molecules, and advancing our antibody engineering initiatives.

New Cell-Killing Agents. We continue to study new cell-killing agents that can be linked to antibodies, such as the auristatins and PBDs that we currently use in our ADC technology, and new classes of cell-killing agents.

New Stable Linkers. We are conducting research with the intent to develop new linker systems that are more stable in the bloodstream and more effective at releasing the cell-killing agent once inside targeted cancer cells.

Novel Monoclonal Antibodies and Antigen Targets. We are actively engaged in internal efforts to identify and develop monoclonal antibodies and other targeting molecules and ADCs with novel specificities and activities against selected antigen targets. We focus on antigen targets that are highly expressed on the surface of cancer cells that may serve as targets for monoclonal antibodies or ADCs. We may then create and screen panels of cancer-reactive monoclonal antibodies in our laboratories to identify those with the desired specificity. We supplement these internal efforts by evaluating opportunities to in-license targets and antibodies from academic groups and other biotechnology and pharmaceutical companies, such as our ongoing co-development collaborations with Astellas and Genmab.

Antibody Engineering. We have substantial internal expertise in antibody engineering, both for antibody humanization and non-fucosylation, as well as engineering of antibodies to improve drug linkage sites for use

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with our ADC technology. By modifying the number and type of drug-linkage sites found on our antibodies, we believe that we can improve the robustness and cost-effectiveness of our manufacturing processes for conjugation of ADCs.

Research and Development Expense

Since inception, we have devoted a significant amount of resources to develop ADCETRIS, our product candidates and our antibody-based technologies. For the years ended December 31, 2017, 2016, and 2015, we recorded $456.7 million, $379.3 million, and $294.5 million, respectively, in research and development expenses.

Corporate Collaborations

We enter into collaborations with biotechnology and pharmaceutical companies to advance the development and commercialization of our product candidates and to supplement our internal pipeline. We seek collaborations that will allow us to retain significant future participation in product sales through either profit-sharing or royalties paid on net sales. We also have licensed our ADC technology to collaborators to be developed with their own antibodies. These ADC collaborations benefit us in many ways, including generating cash flow and revenues that partially offset expenditures on our internal research and development programs, expanding our knowledge base regarding ADCs across multiple targets and antibodies provided by our collaborators and providing us with future pipeline opportunities through co-development or opt-in rights to new ADC product candidates.

Takeda ADCETRIS Collaboration

In 2009, we entered into a collaboration agreement with Takeda to develop and commercialize ADCETRIS, under which Seattle Genetics retains commercial rights in the United States and its territories and in Canada, and Takeda and its affiliates have commercial rights in the rest of the world. As of December 31, 2017, we had received an upfront payment of $60 million and had achieved milestone payments totaling $70 million related to regulatory and commercial progress by Takeda. As of December 31, 2017, we were entitled to receive additional progress- and sales-dependent milestone payments of up to $165 million based on Takeda s achievement of significant events under the collaboration in addition to tiered royalties with percentages ranging from the mid-teens and to the mid-twenties based on net sales of ADCETRIS within Takeda s licensed territories. Takeda also bears a portion of third-party royalty costs owed on sales of ADCETRIS in its territory. We and Takeda equally co-fund the cost of selected development activities conducted under the collaboration. Although we are funding half of the development activities conducted under the collaboration, Takeda is responsible for the achievement of the progress- and sales-dependent milestone payments that we may receive. Either party may terminate the collaboration agreement if the other party materially breaches the agreement and such breach remains uncured. Takeda may terminate the collaboration agreement for any reason upon prior written notice to us and we may terminate the collaboration agreement in certain circumstances. The collaboration agreement can also be terminated by mutual written consent of the parties. If neither party terminates the collaboration agreement, then the agreement automatically terminates on the expiration of all payment obligations.

Astellas Co-Development Collaboration

In 2007, we entered into an agreement with Agensys, which subsequently became an affiliate of Astellas, to jointly research, develop and commercialize ADCs for the treatment of several types of cancer. The collaboration encompasses combinations of our ADC technology with

fully-human antibodies developed by Astellas to proprietary cancer targets.

Under this collaboration, we and Astellas are co-funding all development and commercialization costs for enfortumab vedotin and will share on a 50:50 basis in any profits that may come from this product candidate if successfully commercialized. Costs associated with co-development activities are included in research and development expense. Either party may opt out of co-development and profit-sharing in return for receiving milestones and royalties from the continuing party. The agreement contemplates that the parties will enter into supplemental agreements pursuant to which they will allocate responsibilities.

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Either party may terminate the collaboration agreement if the other party becomes insolvent or the other party materially breaches the agreement and such breach remains uncured. Subject to certain restrictions, either party may terminate the collaboration agreement for any reason upon prior written notice to the other party. The collaboration agreement can also be terminated by mutual written consent of the parties. If neither party exercises its option to terminate the collaboration agreement, then the agreement will automatically terminate on the later of (a) the expiration of all payment obligations pursuant to the collaboration agreement, or (b) the day upon which we and Astellas cease to develop and commercialize products under the agreement.

Genmab Co-Development Collaboration

In 2011, we entered into an ADC research collaboration agreement with Genmab. Under the agreement, Genmab has rights to utilize our ADC technology with its HuMax-TF antibody targeting the Tissue Factor, or TF, antigen, which is expressed on numerous types of solid tumors.

Under this agreement, we exercised a co-development option for tisotumab vedotin in August 2017. We and Genmab will share all future costs and profits for development and commercialization of tisotumab vedotin on a 50:50 basis. Costs associated with co-development activities are included in research and development expense. We will be responsible for tisotumab vedotin commercialization activities in the U.S., Canada, and Mexico, while Genmab will be responsible for commercialization activities in all other territories. Each party has the option to co-promote up to a specified percentage of the sales effort in the other party s territories. Either party may opt out of co-development and profit-sharing in return for receiving milestones and royalties from the continuing party.

Either party may terminate the collaboration agreement if the other party becomes insolvent or materially breaches the agreement and such breach remains uncured. In addition, either party may terminate the collaboration agreement if such party s patent rights subject to the agreement are challenged by the other party or its sublicensees.

Unum Therapeutics Collaboration

In June 2015, we entered into a collaboration agreement with Unum to develop and commercialize novel ACTR therapies incorporating our antibodies for the treatment of cancer. Unum s proprietary ACTR technology enables programming of a patient s T-cells to attack tumor cells when co-administered with tumor-specific therapeutic antibodies. Under the terms of the agreement, we and Unum are developing two ACTR product candidates that combine Unum s ACTR technology with our antibodies. Unum is obligated to conduct preclinical research and clinical development activities through phase 1 clinical trials, and we are obligated to provide funding for these activities. The agreement calls for us to work together to co-develop and jointly fund programs after phase 1 clinical trials unless either company opts out. We and Unum would co-commercialize any successfully developed product candidates and share any profits 50:50 on any co-developed programs in the United States. We retain exclusive commercial rights outside of the United States, paying Unum a royalty that is a high single digit to mid-teens percentage of ex-U.S. sales. The potential future licensing and progress-dependent milestone payments to Unum under the collaboration may total up to $400 million between the two ACTR programs, payment of which is triggered by the achievement of development, regulatory and commercial milestones.

Pieris Pharmaceuticals Collaboration

In February 2018, we entered into a license and collaboration agreement and related platform technology license agreement with Pieris to develop novel bispecifics incorporating our antibodies and Pieris proprietary Anticalin proteins for the treatment of cancer. The agreements provide for an upfront payment totaling $30 million to Pieris. Under the terms of the license and collaboration agreement, Pieris is obligated to conduct preclinical research, and we are obligated to provide funding for these activities. Following this initial research phase, we will have the option to select up to three product candidates for further development. We would then develop the product candidates independently, subject to a limited opt in right held by Pieris. Prior to the initiation of pivotal trials with respect to the first product candidate developed,

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we may in our discretion provide Pieris the option to co-develop that product candidate. Unless Pieris elects to co-develop the first product candidate, we are required to provide Pieris the option to co-develop the second product candidate. Regardless of any prior elections made by Pieris, we have no obligation to provide Pieris with a right to opt in to the development of the third product candidate. In the event Pieris does elect to opt in to the development of the first or second product candidate, Pieris would be required to reimburse us 100% of milestone payments received as of the date of exercise and 50% of post-GLP toxicology development costs. We and Pieris would share costs and profits associated with the co-developed product candidate on a 50:50 basis. Pieris would be responsible for commercialization in the U.S. and we would be responsible for commercialization activities in all other territories. With respect to the other two product candidates, or all three if Pieris does not exercise its right to opt-in, we would have sole responsibility for development, funding and commercialization and would owe Pieris development and sales milestones and royalties on sales in the mid-single digits to low double digits. The potential future licensing and progress-dependent milestone payments to Pieris under the collaboration for the three product candidates total up to $1.2 billion based on the achievement of development, regulatory and commercial milestones. We also have the right to select additional candidates for further development subject to the payment of additional fees, milestone payments and royalties.

Other ADC Collaborations

We have other active collaborations with a number of companies to allow them to use our proprietary ADC technology. Under these ADC collaborations, which we have entered into in the ordinary course of business, we typically receive or are entitled to receive upfront cash payments, progress- and sales-dependent milestones and royalties on net sales of products incorporating our ADC technology, as well as annual maintenance fees and support fees for research and development services and materials provided under the agreements. Our ADC collaborators are solely responsible for research, product development, manufacturing and commercialization of any product candidates under these collaborations, which includes the achievement of the potential milestones.

Our current ADC collaborations are at various stages of clinical and preclinical development. Our ability to generate significant future revenues from our current ADC collaboration agreements will largely depend on a product that incorporates our ADC technology entering late-stage clinical development and receiving marketing approval from the FDA at which point the milestone payments, royalties or other rights and benefits would become more substantial and material to our company.

License Agreements

We have in-licensed antibodies, targets and enabling technologies from pharmaceutical and biotechnology companies and academic institutions for use in our pipeline programs and ADC technology, including the following:

Bristol-Myers Squibb License. In March 1998, we obtained rights to some of our technologies and product candidates, portions of which are exclusive, through a license agreement with Bristol-Myers Squibb. Through this license, we secured rights to use various targeting technologies. Under the terms of the license agreement, we are required to pay royalties in the low single digits on net sales of products, including ADCETRIS, which incorporate various technologies owned by Bristol-Myers Squibb.

University of Miami License. In September 1999, we entered into an exclusive license agreement with the University of Miami, Florida, covering an anti-CD30 monoclonal antibody that is the basis for the antibody component of ADCETRIS. Under the terms of this license, we made an upfront payment and progress-dependent milestone payments. We are required to pay annual maintenance fees and royalties in the low single digits on net sales of products, including ADCETRIS, incorporating technology licensed from the University of Miami.

Patents and Proprietary Technology

Our owned and licensed patents and patent applications are directed to ADCETRIS, our product candidates, monoclonal antibodies, our ADC and SEA technologies and other antibody-based and/or enabling technologies. We commonly seek patent claims directed to compositions of matter, including antibodies, ADCs, and drug-

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linkers containing highly potent cell-killing agents, as well as methods of using such compositions. When appropriate, we also seek claims to related technologies, such as methods of using certain sugar analogs utilized in our SEA technology. For ADCETRIS and each of our product candidates, we have filed or expect to file multiple patent applications. We maintain patents and prosecute applications worldwide for technologies that we have out-licensed, such as our ADC technology. Similarly, for partnered products and product candidates, such as ADCETRIS, enfortumab vedotin and tisotumab vedotin, we seek to work closely with our development partners to coordinate patent efforts, including patent application filings, prosecution, term extension, defense and enforcement. As ADCETRIS and our development product candidates advance through research and development, we seek to diligently identify and protect new inventions, such as combination therapies, improvements to methods of manufacturing, and methods of treatment. We also work closely with our scientific personnel to identify and protect new inventions that could eventually add to our development pipeline.

We have the following patents relating to ADCETRIS and our pipeline:

For ADCETRIS and our related ADC technology, we own ten patents in the United States and Europe that will expire between 2020 and 2031.

For enfortumab vedotin and our related ADC technology, we own, co-own or have licensed rights to ten patents in the United States and Europe that will expire between 2022 and 2031. Of these patents, we own or co-own eight patents and have licensed rights to two patents.

For tisotumab vedotin and our related ADC technology, we own, co-own or have licensed rights to ten patents in the United States and Europe that will expire between 2022 and 2032. Of these patents, we own or co-own five patents and have licensed rights to five patents.

For ladiratuzumab vedotin and our related ADC technology, we own, co-own or have licensed rights to nine patents in the United States and Europe that will expire between 2020 and 2032. Of these patents, we own or co-own rights to seven patents and have licensed rights to two patents.

For denintuzumab mafodotin and our related ADC technology, we own or co-own eleven patents in the United States and Europe that will expire between 2024 and 2029.

For SEA-CD40 and our related SEA technology, we own, co-own or have licensed rights to twelve patents in the United States and Europe that will expire between 2019 and 2030. Of these patents, we own or co-own nine patents and have licensed rights to three patents.

The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage as determined by the patent office or courts in the country, and the availability of legal remedies in the country. This list above does not identify all patents that may be related to ADCETRIS and our product candidates. For example, in addition to the listed patents, we have patents on platform technologies (that relate to certain general classes of products or methods), as well as patents that relate to methods of using, manufacturing or administering a product or product candidate, that may confer additional patent protection. We also have pending patent applications that may give rise to new patents related to one or more of these agents.

The information in the above list is based on our current assessment of patents that we own or control or have exclusively licensed. The information is subject to revision, for example, in the event of changes in the law or legal rulings affecting our patents or if we become aware of new information. Significant legal issues remain unresolved as to the extent and scope of available patent protection for biotechnology products and processes in the U.S. and other important markets outside the U.S. We expect that litigation will likely be necessary to determine the term,

validity, enforceability, and/or scope of certain of our patents and other proprietary rights. An adverse decision or ruling with respect to one or more of our patents could result in the loss of patent protection for a product and, in turn, the introduction of competitor products or follow-on biologics to the market earlier than anticipated, and could force us to either obtain third-party licenses at a material cost or cease using a technology or commercializing a product.

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Patents expire, on a country by country basis, at various times depending on various factors, including the filing date of the corresponding patent application(s), the availability of patent term extension and supplemental protection certificates and requirements for terminal disclaimers. Although we believe our owned and licensed patents and patent applications provide us with a competitive advantage, the patent positions of biotechnology and pharmaceutical companies can be uncertain and involve complex legal and factual questions. We and our corporate collaborators may not be able to develop patentable products or processes or obtain patents from pending patent applications. Even if patent claims are allowed, the claims may not issue. In the event of issuance, the patents may not be sufficient to protect the proprietary technology owned by or licensed to us or our corporate collaborators. Our or our collaborators current patents, or patents that issue on pending applications, may be challenged, invalidated, infringed or circumvented. In addition, changes to patent laws in the United States or in other countries may limit our ability to defend or enforce our patents, or may apply retroactively to affect the term and/or scope of our patents. Our patents have been and may in the future be challenged by third parties in post-issuance administrative proceedings or in litigation as invalid, not infringed or unenforceable under U.S. or foreign laws, or they may be infringed by third parties. As a result, we are or may be from time to time involved in the defense and enforcement of our patent or other intellectual property rights in a court of law and administrative tribunals, such as in U.S. Patent and Trademark Office inter partes review or reexamination proceedings, foreign opposition proceedings or related legal and administrative proceedings in the United States and elsewhere. The costs of defending our patents or enforcing our proprietary rights in post-issuance administrative proceedings or litigation may be substantial and the outcome can be uncertain. An adverse outcome may allow third parties to use our proprietary technologies without a license from us or our collaborators. Our and our collaborators patents may also be circumvented, which may allow third parties to use similar technologies without a license from us or our collaborators.

Our commercial success depends significantly on our ability to operate without infringing patents and proprietary rights of third parties. Organizations such as pharmaceutical and biotechnology companies, universities and research institutions may have filed patent applications or may have been granted patents that cover technologies similar to the technologies owned or licensed to us or to our collaborators. In addition, we are monitoring the progress of multiple pending patent applications of other organizations that, if granted, may require us to license or challenge their validity or enforceability in order to continue commercializing ADCETRIS or to commercialize our product candidates. Our challenges to patents of other organizations may not be successful, which may affect our ability to commercialize ADCETRIS or our product candidates. We cannot determine with certainty whether patents or patent applications of other parties may materially affect our or our collaborators ability to make, use or sell ADCETRIS or any other products or product candidates.

We require our scientific personnel to maintain laboratory notebooks and other research records in accordance with our policies, which are designed to strengthen and support our intellectual property protection. In addition to our patented intellectual property, we also rely on trade secrets and other proprietary information, especially when we do not believe that patent protection is appropriate or can be obtained. Our policy is to require each of our employees, consultants and advisors to execute a proprietary information and inventions assignment agreement before beginning their employment, consulting or advisory relationship with us. These agreements provide that the individual must keep confidential and not disclose to other parties any confidential information developed or learned by the individual during the course of their relationship with us except in limited circumstances. These agreements also provide that we will own all inventions conceived or reduced to practice by the individual in the course of rendering services to us. Our agreements with collaborators require them to have a similar policy and agreements with their employees, consultants and advisors. Our policy and agreements and those of our collaborators may not sufficiently protect our confidential information, or third parties may independently develop equivalent information.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, pre-market approval, manufacture, marketing

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and distribution of biopharmaceutical products. These agencies and other regulatory agencies regulate research and development activities and the testing, approval, manufacture, quality control, safety, efficacy, labeling, storage, distribution, import, export, recordkeeping, advertising and promotion of products and product candidates. Failure to comply with applicable FDA or other requirements may result in Warning Letters, civil or criminal penalties, suspension or delays in clinical development, recall or seizure of products, partial or total suspension of production or withdrawal of a product from the market. The development and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all. We must obtain approval of our product candidates from the FDA before we can begin marketing them in the United States. Similar approvals are also required in other countries.

Product development and approval within this regulatory framework is uncertain, can take many years and requires the expenditure of substantial resources. The nature and extent of the governmental review process for our product candidates will vary, depending on the regulatory categorization of particular product candidates and various other factors.

The necessary steps before a new biopharmaceutical product may be sold in the United States ordinarily include:

- preclinical *in vitro* and *in vivo* tests, some of which must comply with Good Laboratory Practices, or GLP;
- submission to the FDA of an IND which must become effective before clinical trials may commence, and which must be updated at least annually with a report on development;
- development of a drug formulation and manufacture of the drug product for clinical trials, and commercial sale, if approved;
- completion of adequate and well controlled human clinical trials to establish the safety and efficacy of the product candidate for its intended use;
- submission to the FDA of a marketing authorization application in the form of a BLA, which must be accompanied by a substantial user fee unless the fee is waived;
- FDA pre-approval inspection of manufacturing facilities for current Good Manufacturing Practices, or GMP, compliance and FDA inspection of select clinical trial sites for Good Clinical Practice, or GCP, compliance; and
- FDA review and approval of the marketing authorization application and product prescribing information prior to any commercial sale.

The results of preclinical tests (which include laboratory evaluation as well as preclinical GLP studies to evaluate toxicity) for a particular product candidate, together with related manufacturing information and analytical data, and a clinical protocol are submitted as part of an IND to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30 day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. IND submissions may be authorized by the FDA, for example, to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Further, an independent institutional review board, or IRB, for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that center and it must monitor the study until completed. The FDA, the IRB or the sponsor may suspend a clinical trial at any time on various

grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Clinical testing also must satisfy extensive GCP regulations and regulations for informed consent and privacy of individually-identifiable information.

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Clinical trials generally are conducted in three sequential phases that may overlap or in some instances, be skipped. In phase 1, the initial introduction of the product into humans, the product candidate is tested to assess safety, metabolism, pharmacokinetics and pharmacological actions associated with increasing doses. Phase 2 usually involves trials in a limited patient population to evaluate the efficacy of the potential product for specific, targeted indications, determine dosage tolerance and optimum dosage and further identify possible adverse reactions and safety risks. Phase 3 and pivotal trials are undertaken to evaluate further clinical efficacy and safety often in comparison to standard therapies within a broader patient population, generally at geographically dispersed clinical sites. Phase 4, or post-marketing, trials may be required as a condition of commercial approval by the FDA and may also be voluntarily initiated by us or our collaborators. Since we received accelerated approval for ADCETRIS from the FDA for the relapsed sALCL indication, we are subject to certain post-approval requirements pursuant to which we are conducting an additional confirmatory phase 3 trial, the ECHELON-2 trial, to verify and describe the clinical benefit of ADCETRIS in the relapsed sALCL indication. Results from either the ECHELON-1 trial or the ECHELON-2 trial could fulfill this requirement in the United States. Phase 1, phase 2 or phase 3 testing may not be completed successfully within any specific period of time, if at all, with respect to any of our product candidates. Similarly, suggestions of safety, tolerability or efficacy in earlier stage trials do not necessarily predict findings of safety and efficacy in subsequent trials. Furthermore, the FDA, an IRB or we may suspend a clinical trial at any time for various reasons, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Clinical trials are subject to central registration and results reporting requirements, such as on www.clinicaltrials.gov.

The results of preclinical studies, pharmaceutical development and clinical trials, together with information on a product s chemistry, manufacturing, and controls, are submitted to the FDA in the form of a BLA, for approval of the manufacture, marketing and commercial shipment of the pharmaceutical product. Data from clinical trials are not always conclusive and the FDA may interpret data differently than we or our collaborators interpret data. The FDA may also convene an Advisory Committee of external advisors to answer questions regarding the approvability and labeling of an application. The FDA is not obligated to follow the Advisory Committee s recommendation. The submission of a BLA is required to be accompanied by a substantial user fee, with few exceptions or waivers. The user fee is administered under PDUFA, which sets goals for the timeliness of the FDA s review. A standard review period is twelve months from submission of the application, while priority review is eight months from submission of the application. The testing and approval process is likely to require substantial time, effort and resources, and there can be no assurance that any approval will be granted on a timely basis, if at all. The FDA may deny review of an application by refusing to file the application or not approve an application by issuance of a complete response letter if applicable regulatory criteria are not satisfied, require additional testing or information, or require post-market testing and surveillance to monitor the safety or efficacy of the product. Approval may occur with significant Risk Evaluation and Mitigation Strategies, or REMS, that limit the clinical use in the prescribing information, distribution or promotion of a product. Once an approval is issued, the FDA may require safety-related labeling changes or withdraw product approval if ongoing regulatory requirements are not met or if safety problems occur after the product reaches the market. In addition, the FDA may require further testing of ADCETRIS, including phase 4 clinical trials, and surveillance programs to monitor the safety of ADCETRIS, and the FDA has the power to prevent or limit further marketing of ADCETRIS based on the results of these post-marketing programs or other information.

Products manufactured or distributed pursuant to FDA approvals are subject to continuing regulation by the FDA, including manufacture, labeling, distribution, advertising, promotion, recordkeeping, annual product quality review and reporting requirements. Adverse event experience with the product must be reported to the FDA in a timely fashion and pharmacovigilance programs to proactively look for these adverse events are mandated by the FDA. Manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Following such inspections, the FDA may issue notices on Form FDA 483 and Warning Letters that could cause us to modify certain activities. A Form FDA 483 notice, if issued at the conclusion of an FDA inspection, can list conditions

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the FDA investigators believe may have violated cGMP or other FDA regulations or guidance. Failure to adequately and promptly correct the observations(s) can result in further regulatory enforcement action. In addition to Form FDA 483 notices and Warning Letters, failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If we or our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, not approve our products, require us to recall a product from distribution or withdraw approval of the BLA for that product. Failure to comply with ongoing regulatory obligations can result in delay of approval or Warning Letters, product seizures, criminal penalties, and withdrawal of approved products, among other enforcement remedies.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. These regulations include standards and restrictions for direct-to-consumer advertising, industry-sponsored scientific and educational activities, promotional activities involving the internet, and off-label promotion. While physicians may prescribe products for off label uses, manufacturers may only promote products for the approved indications and in accordance with the provisions of the approved label. The FDA has very broad enforcement authority under the Federal Food, Drug and Cosmetic Act, and failure to abide by these regulations can result in penalties, including the issuance of a Warning Letter directing entities to correct deviations from FDA standards, and state and federal civil and criminal investigations and prosecutions.

FDA Regulation of Companion Diagnostics

ADCETRIS and certain of our product candidates may rely upon in vitro companion diagnostics for use in selecting the patients that we believe will respond to our therapeutics. If safe and effective use of a therapeutic product depends on an in vitro diagnostic, the FDA generally will require approval or clearance of a reproducible, validated diagnostic test to be used with our therapeutic product at the same time that FDA approves the therapeutic product. This policy is described in an August 2014 FDA guidance document. The review of these in vitro companion diagnostics in conjunction with the review of our cancer treatments involves coordination of review by FDA s Center for Drug Evaluation and Research and by FDA s Center for Devices and Radiological Health. The FDA s premarket approval, or PMA, process is costly, lengthy, and uncertain. The receipt and timing of PMA approval may have a significant effect on the receipt and timing of commercial approval for ADCETRIS or our product candidates. Human diagnostic products are subject to pervasive and ongoing regulatory obligations, including the submission of medical device reports, adherence to the Quality Systems Regulation, recordkeeping and product labeling, as enforced by the FDA and comparable state authorities. We and Takeda have formed a collaboration with Ventana under which Ventana is working to develop, manufacture and commercialize a companion diagnostic test with the goal of identifying patients who might respond to treatment with ADCETRIS based on CD30 expression levels in their tissue specimens. In this regard, we expect that concurrent approval of a CD30 companion diagnostic will be required for any approval of ADCETRIS in the frontline MTCL indication.

Regulation Outside of the United States

In addition to regulations in the U.S., we and our collaborators are and will be subject to regulations of other countries governing clinical trials and commercial sales, manufacturing and distribution of our products. We must obtain approval by the regulatory authorities of countries outside of the U.S. before we can commence clinical trials in such countries and approval of the regulators of such countries or economic areas, such as Canada, before we may market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval.

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Healthcare Regulation

Federal and state healthcare laws and regulations, including fraud and abuse and health information privacy and security laws and regulations, may also be applicable to our business. If we fail to comply with those laws, we could face substantial penalties and our business, results of operations, financial condition and prospects could be adversely affected. The healthcare laws and regulations that may affect our ability to operate include, without limitation, anti-kickback and false claims laws, data privacy and security laws, as well as transparency laws regarding payments or other items of value provided to healthcare providers.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, purchasing, leasing, ordering, or arranging for or recommending the purchase, lease, or order of any good, facility, item, or service reimbursable, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. The term remuneration has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have interpreted the statute s intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Anti-Kickback Statute has been violated. Additionally, the intent standard under the Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, collectively PPACA, to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, PPACA codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

The federal civil and criminal false claims laws, including the federal civil False Claims Act, prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment to or approval by the federal government, including the Medicare, and Medicaid programs, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim or to avoid, decrease, or conceal an obligation to pay money to the federal government.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other actions, knowingly and willfully executing or attempting to execute a scheme to defraud any healthcare benefit program, including private third party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items, or services. Like the Anti-Kickback Statute, PPACA amended the intent standard for certain healthcare fraud under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

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

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, imposes certain requirements on certain types of individuals and

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entities relating to the privacy and security of individually identifiable health information. Among other things, HITECH makes HIPAA s security standards directly applicable to business associates, independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys fees and costs associated with pursuing federal civil actions.

The federal Physician Payments Sunshine Act, created under PPACA and its implementing regulations, requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid, or the Children s Health Insurance Program to annually report information related to certain payments or other transfers of value provided to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals, and to report annually certain ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties of up to an aggregate of $150,000 per year and up to an aggregate of $1 million per year for knowing failures. Covered manufacturers are required to submit reports on aggregate payment data to the Secretary of the U.S. Department of Health and Human Services on an annual basis.

Many states have similar statutes or regulations to the above federal laws and regulations that may be broader in scope than the aforementioned federal versions and apply regardless of payor, and many of which differ from each other in significant ways and may not have the same effect, further complicating compliance efforts. Additionally, our business operations in foreign countries and jurisdictions, including Canada and the European Union, may subject us to additional regulation.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available under such laws, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the health regulatory laws described above or any other laws that apply to us, we may be subject to penalties, including potentially significant criminal and civil and/or administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government healthcare programs, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Coverage and Reimbursement

Sales of ADCETRIS and any future products depend, in significant part, on the extent to which the costs of our products will be covered by third-party payors, such as government health programs, commercial insurance and managed healthcare organizations. Patients who are prescribed treatment for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients and providers are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Pharmaceutical products are typically reimbursed based on FDA labeled indications, recognized compendia listings, available medical literature, evidence of favorable clinical outcomes, determination of medical necessity and cost effectiveness.

Additionally, a third-party payor s decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. Decisions regarding the extent of coverage and amount of

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reimbursement to be provided for each of our product candidates is individual to each insurer, can vary based on provider contract, and will be affected by state and federal laws providing for reimbursement formulas based on acquisition cost. Third party payors continue to work diligently to control their spending on prescription drugs and medical service. The containment of healthcare costs has become a priority of the U.S. government and abroad, and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net sales and negatively impact our operating results. Payors, commercial and public in the U.S. and abroad, must review the therapeutics value of our products before extending coverage under their plans to reimburse our products. If third-party payors do not find a product to be of therapeutic value, they may not cover it or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

Many of the patients in the U.S. who seek treatment with ADCETRIS may be eligible for Medicare or Medicaid benefits. The Medicare and Medicaid programs are administered by the Centers for Medicare and Medicaid Services, or CMS, and coverage and reimbursement for products and services under these programs are subject to changes in CMS regulations and interpretive policy determinations, in addition to statutory changes made by Congress. For example, PPACA increased the mandated Medicaid rebate from 15.1% to 23.1%, expanded the rebate to Medicaid managed care utilization and increased the types of entities eligible for the federal 340B drug discount program. In January 2017, the White House Office of Management and Budget withdrew the draft August 2015 Omnibus Guidance document that was issued by the Department of Health and Human Services Health Resources and Services Administration, or HRSA, that addressed a broad range of topics including, among other items, the definition of a patient s eligibility for 340B drug pricing. Federal budget decisions have and may result in reduced Medicare payment rates. Federal budget decisions have and may result in reduced Medicare payment rates. In addition, as a condition of federal funds being made available to cover our products under Medicaid, we are required to participate in the Medicaid drug rebate program. The rebate amount under this program varies by quarter, and is based on pricing data we report to CMS. In addition, because we participate in the Medicaid drug rebate program, we must make ADCETRIS available to authorized users of the Federal Supply Schedule of the General Services Administration. This requires compliance with additional laws and requirements, including offering ADCETRIS at a reduced price to federal agencies including the United States Department of Veterans Affairs and United States Department of Defense, the Public Health Service and the Indian Health Service. We are also required to offer discounted pricing to certain eligible not for profit entities that are eligible for 340B pricing under the Public Health Services Act. Participation in these programs requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations and the guidance governing such calculations is not always clear. Compliance with such requirements can require significant investment in personnel, systems and resources, but failure to properly calculate our prices, or offer required discounts or rebates could subject us to substantial criminal, civil and/or administrative penalties, as well as, administrative burdens and exclusion from or contract termination regarding these programs. The terms of these government programs could change in the future which may increase the discounts or rebates we are required to offer, possibly reducing the revenue derived from sales of ADCETRIS to these entities.

The requirements governing drug pricing vary widely from country to country. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Healthcare Reform

PPACA substantially changes the way healthcare is financed by both governmental and private insurers and significantly affects the pharmaceutical industry. PPACA aims to, among other things, expand coverage for the

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uninsured while at the same time containing overall healthcare costs. With regard to biopharmaceutical products, PPACA is expected to, among other things, expand and increase industry rebates for products covered under Medicaid programs and make changes to the coverage requirements under the Medicare Part D program. We cannot yet predict the full impact of PPACA at this time for many reasons including that many of its provisions require the promulgation of detailed implementing regulations, which are subject to review and revision.

Many provisions of PPACA may impact the biopharmaceutical industry, including that in order for a biopharmaceutical product to receive federal reimbursement under the Medicare Part B and Medicaid programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the drug pricing program under the Public Health Services Act, or PHS. The required PHS discount on a given product is calculated based on the Average Manufacturers Price, or AMP, and Medicaid rebate amounts reported by the manufacturer. PPACA expanded the types of entities eligible to receive discounted PHS pricing, although, under the current state of the law, with the exception of children s hospitals, these newly eligible entities will not be eligible to receive discounted PHS pricing on orphan drugs when used for the orphan indication. In addition, as PHS drug pricing is determined based on AMP and Medicaid rebate data, revisions, including the recently published AMP rule, to the Medicaid rebate formula and AMP definition described above could cause the required PHS discount to increase.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of PPACA. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law; however, it was widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. The potential impact of these efforts to repeal or defer and delay enforcement of PPACA on our business remains unclear. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed. While Congress has not passed repeal or replace legislation, the tax reform legislation signed into law on December 22, 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the individual mandate. Because of the continued uncertainty about the implementation of the PPACA, including the potential for further legal challenges or repeal of PPACA, we cannot quantify or predict with any certainty the likely impact of the PPACA or its repeal on our business, prospects, financial condition or results of operations.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. The Budget Control Act of 2011, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation s automatic reduction to several government programs. This includes reductions to Medicare payments to providers, which went into effect in April 2013 and, following passage of the Bipartisan Budget Act of 2015, will remain in effect through 2025 unless additional congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, the recently enacted Drug Supply Chain Security Act imposes on manufacturers of certain pharmaceutical products new obligations related to product tracking and tracing, among others, which will be phased in over several years beginning in 2015. Among the requirements of this legislation, manufacturers subject to this federal law will be required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding the drug product. The transfer of information to subsequent product owners by

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manufacturers will eventually be required to be done electronically. Covered manufacturers will also be required to verify that purchasers of the manufacturers products are appropriately licensed. Further, under this new legislation, covered manufacturers will have drug product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

Additionally, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs.

We cannot predict what healthcare reform initiatives may be adopted in the future. However, we anticipate that Congress, state legislatures, and third-party payors may continue to review and assess alternative healthcare delivery and payment systems and may in the future propose and adopt legislation or policy changes or implementations effecting additional fundamental changes in the healthcare delivery system. We also expect ongoing legislative and regulatory initiatives to increase pressure on drug pricing. We cannot assure you as to the ultimate content, timing, or effect of changes, nor is it possible at this time to estimate the impact of any such potential legislation; however, such changes or the ultimate impact of changes could negatively affect our revenue or sales of ADCETRIS or any future approved products.

Competition

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Many third parties compete with us in developing various approaches to treating cancer. They include pharmaceutical companies, biotechnology companies, academic institutions and other research organizations.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approval and marketing than we do. In addition, many of these competitors are active in seeking patent protection and licensing arrangements in anticipation of collecting royalties for use of technology that they have developed. Smaller or 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, as well as in acquiring technologies complementary to our programs.

With respect to ADCETRIS, there are several other FDA-approved drugs for its approved indications. Bristol-Myers Squibb s nivolumab (Opdivo) and Merck s pembrolizumab (Keytruda) are approved for the treatment of certain patients with relapsed or refractory classical Hodgkin lymphoma, and Celgene s romidepsin (Istodax) and Spectrum Pharmaceuticals pralatrexate (Folotyn) and belinostat (Beleodaq) are approved for relapsed or refractory sALCL among other T-cell lymphomas. The competition ADCETRIS faces from these and other therapies is intensifying. Additionally, Merck is conducting a phase 3 clinical trial in relapsed or refractory classical Hodgkin lymphoma comparing pembrolizumab (Keytruda) with ADCETRIS. If this clinical trial demonstrates that pembrolizumab is more effective than ADCETRIS in that treatment setting, our sales of ADCETRIS would be negatively impacted. We are also aware of multiple investigational agents that are currently being studied, including Roche s atezolizumab, Pfizer s avelumab, and Kyowa s mogamulizumab, which, if successful, may compete with ADCETRIS in the future. Data have also been presented on several developing technologies, including bispecific antibodies and CAR modified T-cell therapies that may compete with ADCETRIS in the future. Further, there are many competing approaches used in the treatment of patients in ADCETRIS four approved indications, including auto-HSCT, allogeneic stem cell transplant, combination chemotherapy, clinical trials with experimental agents and single-agent regimens.

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With respect to enfortumab vedotin, treatment in second line metastatic urothelial cancer is limited to CPI monotherapy or generic chemotherapy. There are other investigational agents that, if approved, could be competitive with enfortumab vedotin, including Immunomedics sacituzumab govitecan and Lilly s ramucirumab.

With respect to tisotumab vedotin, we are aware of other companies that currently have products in development for the treatment of late-stage cervical cancer which could be competitive with tisotumab vedotin, including Agenus, Astrazeneca, Bristol-Myers Squibb, Immunomedics, Innovent Biologics, Merck, and Roche. In addition, several CPIs that are FDA-approved in other treatment settings are being explored for the treatment of late-stage cervical cancer in ongoing phase 2 clinical trials.

Many other pharmaceutical and biotechnology companies are developing and/or marketing therapies for the same types of cancer that our product candidates are designed and being developed to treat. For example, we believe that companies including AbbVie, ADC Therapeutics, Affimed, Agios, Amgen, Astellas, Bayer, Biogen, Bristol-Myers Squibb, Celgene, Eisai, Genentech, GSK, Gilead, ImmunoGen, Immunomedics, Infinity, Karyopharm, MedImmune, MEI Pharma, Merck, Novartis, Pfizer, Sanofi-Aventis, Spectrum Pharmaceuticals, Takeda, Teva, and Xencor are developing and/or marketing products or technologies that may compete with ours. In addition, our ADC collaborators may develop compounds utilizing our technology that may compete with product candidates that we are developing.

We are aware of other companies that have technologies that may be competitive with ours, including Astellas, AstraZeneca, Bristol-Myers Squibb, ImmunoGen, Immunomedics, MedImmune, Mersana and Pfizer, all of which have ADC technology. ImmunoGen has several ADCs in development that may compete with our product candidates. ImmunoGen has also established partnerships with other pharmaceutical and biotechnology companies to allow those other companies to utilize ImmunoGen s technology, including Sanofi-Aventis, Genentech, Novartis, Takeda and Lilly. We are also aware of a number of companies developing monoclonal antibodies directed at the same antigen targets or for the treatment of the same diseases as our product candidates. For example, we believe Amgen and Xencor have anti-CD19 programs that may be competitive with our product candidates.

In addition, in the United States, the Biologics Price Competition and Innovation Act of 2009 created an abbreviated approval pathway for biological products that are demonstrated to be highly similar or biosimilar to or interchangeable with an FDA-approved biological product. This pathway allows competitors to reference the FDA s prior approvals regarding innovative biological products and data submitted with a BLA to obtain approval of a biosimilar application 12 years after the time of approval of the innovative biological product. The 12-year exclusivity period runs from the initial approval of the innovator product and not from approval of a new indication. In addition, the 12-year exclusivity period does not prevent another company from independently developing a product that is highly similar to the innovative product, generating all the data necessary for a full BLA and seeking approval. Exclusivity only assures that another company cannot rely on the FDA s prior approvals in approving a BLA for an innovator s biological product to support the biosimilar product s approval. Further, under the FDA s current interpretation, it is possible that a biosimilar applicant could obtain approval for one or more of the indications approved for the innovator product by extrapolating clinical data from one indication to support approval for other indications. The FDA approved the first biosimilar product in the United States in May 2015. In the European Union, the European Commission has granted marketing authorizations for several biosimilars pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued since 2005. We are aware of many pharmaceutical and biotechnology and other companies that are actively engaged in research and development of biosimilars or interchangeable products.

It is possible that our competitors will succeed in developing technologies that are more effective than ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates or that would render our technology obsolete or noncompetitive, or will succeed in developing biosimilar or interchangeable products for ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates. We anticipate that we will

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continue to face increasing competition in the future as new companies enter our market and scientific developments surrounding biosimilars and other cancer therapies continue to accelerate. We cannot predict to what extent the entry of biosimilars or other competing products will impact potential future sales of ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates.

With respect to our current and potential future product candidates, we believe that our ability to compete effectively and develop products that can be manufactured cost-effectively and marketed successfully will depend on our ability to:

- advance our technology platforms;
- license additional technology;
- complete clinical trials which position our products for regulatory and commercial success;
- maintain a proprietary position in our technologies and products;
- obtain required government and other public and private approvals on a timely basis;
- attract and retain key personnel;
- commercialize effectively;
- obtain reimbursement for our products in approved indications;
- comply with applicable laws, regulations and regulatory requirements and restrictions with respect to the commercialization of our products, including with respect to any changed or increased regulatory restrictions; and
- enter into additional collaborations to advance the development and commercialization of our product candidates.

Manufacturing

We do not currently manufacture the drug products that we sell or need to conduct our clinical trials, and we therefore rely on corporate collaborators and contract manufacturing organizations to supply drug product for commercial supply and our IND-enabling studies and clinical trials. For the monoclonal antibody used in ADCETRIS, we have contracted with AbbVie for clinical and commercial supplies. For the drug linker used in ADCETRIS, we have contracted with Sigma Aldrich Fine Chemicals, or SAFC, for clinical and commercial supplies. We have multiple contract manufacturers for conjugating the drug linker to the antibody and producing the ADCETRIS product. For our ADC product candidates, multiple contract manufacturers, including AbbVie and SAFC, perform antibody and drug-linker manufacturing and several other contract manufacturers perform conjugation of the drug-linker to the antibody and fill/finish of the drug product. In addition, we rely on other third parties to perform additional steps in the manufacturing process, including shipping and storage of ADCETRIS and our product candidates.

We established our commercial scale supply chain for ADCETRIS prior to commercial launch. For the foreseeable future, we expect to continue to rely on contract manufacturers and other third parties to produce, vial and store sufficient quantities of ADCETRIS for use in our clinical trials and for commercial sale. In addition, we depend on outside vendors for the supply of raw materials used to produce ADCETRIS. For our pipeline programs, we believe that our existing supplies of drug product and our contract manufacturing relationships will be sufficient to accommodate clinical trials through phase 3. However, we may need to obtain additional manufacturing arrangements or increase our own manufacturing capability to meet our future commercial needs, both of which could require significant capital investment. In addition, we have committed to provide Takeda with their needs of certain parts of the ADCETRIS supply chain for a limited period of time, which may require us to arrange for additional manufacturing supply. We may also enter into collaborations with pharmaceutical or larger biotechnology companies to enhance the manufacturing capabilities for our product candidates.

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AbbVie Biotechnology. In 2004, we entered into a development and supply agreement with AbbVie (formerly a part of Abbott Laboratories) to manufacture developmental, clinical and commercial quantities of anti-CD30 monoclonal antibody, which is a component of ADCETRIS. The agreement generally provides for the supply by AbbVie and the purchase by us of such anti-CD30 monoclonal antibody. Under terms of the supply agreement, we may purchase a portion of our required anti-CD30 monoclonal antibody from a second source third-party supplier. We are required to make a minimum annual purchase. The anti-CD30 monoclonal antibody is purchased by us based upon a rolling forecast. The supply agreement will continue until 2025 with an automatic one-year term extension unless either party provides written termination notice to the other party. Either party has the right to terminate the supply agreement if the other party materially breaches its obligations thereunder.

SAFC. In 2010, we entered into a commercial supply agreement with SAFC to manufacture commercial quantities of drug linker that is a component of ADCETRIS. The agreement generally provides for the supply by SAFC and the purchase by us of drug linker. Under terms of the supply agreement, we may purchase a portion of our required drug linker from a second source third-party supplier. We are required to make a minimum annual purchase. The drug linker is purchased by us based upon a rolling forecast. The supply agreement will continue until the completion of the tenth contract year following the initial commercial order with automatic term extension unless either party provides written termination notice to the other party. Either party has the right to terminate the supply agreement if the other party materially breaches its obligations thereunder.

In October 2017, we acquired a biologics manufacturing facility located in Bothell, Washington. At that time, we also entered into a clinical manufacturing services agreement with Bristol Myers Squibb Company, or BMS, under which we agreed to manufacture certain BMS clinical product candidates in accordance with prescribed production schedules and quantities through the later of December 31, 2018 or when certain technical transfer activities have been completed, and to maintain personnel, equipment and expertise sufficient to perform the agreed upon services. BMS compensates us for services rendered under the clinical manufacturing services agreement based on an agreed upon rate for use of the facility and employees. Following the completion of the clinical manufacturing services agreement, we plan to use the facility to support our clinical supply needs. However, we nonetheless expect to continue to rely on corporate collaborators and contract manufacturing organizations to supply drug product and intermediates for commercial supply and our IND-enabling studies and clinical trials.

Commercial Operations and Information about Geographic Areas

We have allocated commercial resources, including sales, marketing, supply chain management and reimbursement capabilities, to commercialize ADCETRIS in the United States and Canada. We believe the U.S. and Canadian markets for ADCETRIS in the approved indications are addressable with a targeted sales and marketing organization, and we intend to continue promoting ADCETRIS ourselves in the United States and Canada for these and any additional indications we may obtain in the future. Takeda has commercial rights in the rest of the world. As of January 2018, we and Takeda had received marketing authorizations by regulatory authorities in 70 countries, and Takeda continues to pursue marketing authorizations in multiple other countries.

We sell ADCETRIS through a limited number of pharmaceutical distributors. Health care providers order ADCETRIS through these distributors. We receive orders from distributors and generally ship product directly to the health care provider. Three of our major distributors, together with entities under their common control AmerisourceBergen Corporation, Cardinal Health, Inc., and McKesson Corporation each accounted for 10% or more of our total revenue in 2017, 2016 and 2015. Our net product sales of ADCETRIS in 2017, 2016, and 2015 were $307.6 million, $265.8 million, and $226.1 million, respectively. Revenues generated outside the United States as determined by customer location were less than 10% of total revenues in 2017, 2016 and 2015. Substantially all of our long-lived assets are located in the United States.

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Employees

As of December 31, 2017, we had 1,100 employees. Of these employees, 783 were engaged in or support research, development and clinical activities, 169 were in administrative and business related positions, and 148 were in sales and marketing. Each of our employees has signed confidentiality and inventions assignment agreements and none are covered by a collective bargaining agreement. We have never experienced employment-related work stoppages and consider our employee relations to be good.

Corporate Information

We were incorporated in Delaware on July 15, 1997. Our principal executive offices are located at 21823 30th Drive SE, Bothell, Washington 98021. Our telephone number is (425) 527-4000. Seattle Genetics®, ADCETRIS® and are our registered trademarks in the United States. All other trademarks, tradenames and service marks included in this Annual Report on Form 10-K are the property of their respective owners.

We file electronically with the Securities and Exchange Commission our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. We make available on our website at www.seattlegenetics.com, free of charge, through a hyperlink on our website, copies of these reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to, the Securities and Exchange Commission. Information found on, or accessible through, our website is not part of, and is not incorporated into, this Annual Report on Form 10-K.

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Item 1A. Risk Factors

You should carefully consider the following risk factors, in addition to the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. If any of the events described in the following risk factors occur, our business, operating results and financial condition could be seriously harmed. This Annual Report on Form 10-K also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this Annual Report on Form 10-K.

Risks Related to the Cascadian Acquisition

The completion of the Cascadian Acquisition is subject to conditions and if these conditions are not satisfied or waived, the Cascadian Acquisition will not be completed. Failure to consummate the Cascadian Acquisition could negatively impact our stock price and our future business and financial results.

The obligations of us and Purchaser to complete the Tender Offer are subject to customary closing conditions, including (i) there being validly tendered and not validly withdrawn prior to the expiration date of the Tender Offer, at least a majority of the outstanding shares of Cascadian common stock on a fully-diluted basis, (ii) the expiration or termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended, or the HSR Act, (iii) the absence of any legal restraint or prohibition that prevents or prohibits the consummation of the Tender Offer or the Merger, (iv) the accuracy of Cascadian s representations and warranties under the Merger Agreement subject to the materiality standards set forth in the Merger Agreement, (v) the performance by Cascadian of its obligations under the Merger Agreement in all material respects and (vi) since the date of the Merger Agreement, that there will not have occurred (and be continuing) a Company Material Adverse Effect. Completion of the Merger is conditioned on the absence of any legal restraint or prohibition that prevents or prohibits the consummation of the Merger and that Purchaser (or we on Purchaser s behalf) have accepted for payment and paid for all shares of Cascadian common stock validly tendered (and not validly withdrawn) pursuant to the Tender Offer. Neither the Tender Offer nor the Merger is subject to a financing condition. We and Cascadian may terminate the Merger Agreement upon mutual consent, and either we or Cascadian may, subject to certain exceptions set forth in the Merger Agreement, terminate the Merger Agreement if the Tender Offer has not been consummated on or before June 30, 2018, the date agreed by us and Cascadian to be the last permissible date of acceptance of the Tender Offer.

The failure of one or more of the required conditions to be satisfied could delay the completion of the Cascadian Acquisition for a significant period of time or prevent it from occurring, and we cannot otherwise guarantee that we will be able to complete the Cascadian Acquisition. In addition, on February 13, 2018, a securities class action lawsuit was filed against Cascadian and its board of directors in the United States District Court for the District of Delaware. Among other things, the complaint seeks to enjoin the closing of the Tender Offer and consummation of the Merger as well as compensatory damages of an undisclosed amount. It is possible that additional lawsuits will be filed, or allegations received from Cascadian stockholders, with respect to these same matters. We cannot predict the timing or outcome of this lawsuit or potential similar lawsuits, or the impact they may have on the closing of the Tender Offer and consummation of the Merger. If the Cascadian Acquisition is not completed for any reason, our ongoing business may be adversely affected and, without realizing any of the benefits of having completed the Cascadian Acquisition, we will be subject to a number of risks, including the following:

- the price of our common stock may reflect a market assumption that the Cascadian Acquisition will occur, meaning that a failure to complete the Cascadian Acquisition could result in a decline in the price of our common stock;

- time and resources, financial and other, committed by our management to matters relating to the Cascadian Acquisition could otherwise have been devoted to pursuing other potentially beneficial opportunities for our company;

we may experience negative reactions from the financial markets or from our customers or employees; and

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we will be required to pay our respective costs relating to the Cascadian Acquisition, including legal, accounting, financial advisory, financing and printing fees, whether or not the Cascadian Acquisition is completed subject to our rights to receive certain payments in the event the Merger Agreement is terminated under certain circumstances.

We also could be subject to litigation related to any failure to complete the Cascadian Acquisition or to perform our obligations under the Merger Agreement, or related to any enforcement proceeding commenced against us. If the Cascadian Acquisition is not consummated, these risks may materialize and may adversely affect our business, financial results and stock price.

Obtaining required regulatory approvals may prevent or delay consummation of the Tender Offer or reduce the anticipated benefits of the Cascadian Acquisition or may require changes to the structure or terms of the Cascadian Acquisition.

Consummation of the Tender Offer is conditioned upon, among other things, the expiration or termination of the waiting period (and any extensions thereof) applicable to the Tender Offer under the HSR Act. At any time before or after the Tender Offer is consummated, governmental authorities, including the Department of Justice, the Federal Trade Commission or U.S. state Attorneys General, could take action under the antitrust laws in opposition to the Cascadian Acquisition, including seeking to enjoin completion of the Cascadian Acquisition, imposing additional requirements, limitations or costs on the Cascadian Acquisition, condition completion of the Cascadian Acquisition upon the divestiture of assets of Seattle Genetics, Cascadian, our or its subsidiaries or impose restrictions on our post-acquisition operations. If any such requirements, limitations or costs are imposed and the Cascadian Acquisition is completed, then these could negatively affect our results of operations and financial condition following completion of the Cascadian Acquisition. Any such requirements or restrictions may delay or prevent consummation of the Tender Offer or may reduce the anticipated benefits of the Cascadian Acquisition, which could also have an adverse effect on our business, financial condition and results of operations. No assurance can be given that the required regulatory approvals will be obtained or that the required conditions to closing will be satisfied, and, even if all such approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of the approvals.

Cascadian will be subject to business uncertainties and contractual restrictions while the Cascadian Acquisition is pending.

Uncertainty about the effect of the Cascadian Acquisition on employees and counterparties may have an adverse effect on Cascadian. These uncertainties may impair Cascadian s ability to retain and motivate key personnel and could cause entities dealing with Cascadian to defer entering into contracts with Cascadian or making other decisions concerning Cascadian or seek to change existing business relationships with Cascadian. If the Cascadian Acquisition is completed, such changes could negatively affect our results of operations and financing condition and adversely affect our ability to realize benefits from the Cascadian Acquisition. In addition, if key employees of Cascadian or the Company depart because of uncertainty about their future roles or otherwise, our business could be harmed. These risks may be exacerbated by delays or other adverse developments with respect to the completion of the Cascadian Acquisition.

We and Cascadian will incur substantial direct and indirect costs as a result of the Cascadian Acquisition.

We and Cascadian will incur substantial expenses in connection with and as a result of completing the Cascadian Acquisition and, over a period of time following the completion of the Cascadian Acquisition, we expect to incur substantial additional expenses in connection with coordinating the businesses, operations, policies and procedures of the combined company. While we have assumed that a certain level of transaction expenses will be incurred, factors beyond our control could affect the total amount or the timing of these expenses. Many of the expenses that will be incurred, by their nature, are difficult to estimate accurately.

Combining the two companies may be more difficult, costly or time consuming than we anticipate and we may not realize the intended benefits of the Cascadian Acquisition.

Cascadian has operated, and until the completion of the Cascadian Acquisition, will continue to operate independently of us, with its own business, corporate culture, location, employees and systems. The success of

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the Cascadian Acquisition, including anticipated benefits, will depend, in part, on our ability to successfully combine and integrate our business with the business of Cascadian. As a result of the Cascadian Acquisition, we will operate our existing business, along with the business of Cascadian, as one combined organization utilizing common information and communication systems, operating procedures, financial controls and human resources practices. There may be substantial difficulties, costs and delays involved in the integration of our business with Cascadian, including as a result of challenges relating to the diversion of management s attention from our ongoing business, the possibility of faulty assumptions underlying expectations regarding the integration process, retaining and attracting business and operational relationships, eliminating duplicative operations and inconsistent standards and procedures and increased or unforeseen liabilities or costs relating to the Cascadian Acquisition or the Cascadian business. If we experience difficulties with the integration process, the anticipated benefits of the Cascadian Acquisition may not be realized fully or at all, or may take longer to realize than expected, which could materially and adversely affect our business, financial condition and results of operations.

If goodwill or other intangible assets that we record in connection with the Cascadian Acquisition become impaired, our financial position in future periods could be negatively impacted.

In connection with the accounting for the Cascadian Acquisition, it is expected that we will record a significant amount of intangible assets and may also record goodwill. Under GAAP, we must assess, at least annually and potentially more frequently, whether the value of goodwill and other indefinite-lived intangible assets has been impaired. Amortizing intangible assets will be assessed for impairment in the event of an impairment indicator. Events giving rise to impairment are an inherent risk in the pharmaceutical industry and cannot be predicted. Our results of operations and financial position in future periods could be negatively impacted should future impairments of intangible assets or goodwill occur.

Our and Cascadian s actual financial positions and results of operations may differ materially from the unaudited pro forma financial information that we filed as exhibit 99.2 to our current report on Form 8-K, filed with the SEC on January 31, 2018, or the January Form 8-K.

The pro forma financial information that we filed as exhibit 99.2 to the January Form 8-K was presented for illustrative purposes only and may not be an indication of what our financial position or results of operations would have been had the transactions been completed on the dates indicated. The pro forma financial information has been derived from our and Cascadian s historical financial statements and certain adjustments and assumptions have been made regarding the combined company after giving effect to the indicated transactions. The assets and liabilities of Cascadian have been measured at fair value based on various preliminary estimates using assumptions that our management believes are reasonable utilizing information currently available. The process for estimating the fair value of acquired assets and assumed liabilities requires the use of judgment in determining the appropriate assumptions and estimates. These estimates may be revised as additional information becomes available and as additional analyses are performed. In particular, the pro forma financial information that we filed as exhibit 99.2 to the January Form 8-K assumes that we utilize a senior secured bridge loan facility, or the Bridge Facility, to finance a portion of the costs of the Cascadian Acquisition; however, we intend to use the net proceeds from our public offering of our common stock that we completed in February 2018 to fund a portion of the costs of the Cascadian Acquisition in lieu of any borrowing pursuant to the Bridge Facility. Accordingly, the pro forma financial information does not reflect the actual financing of the Cascadian Acquisition. Differences between preliminary estimates in the pro forma financial information and the final acquisition accounting, as well as between the assumed and actual financing sources and terms, will occur and could have a material impact on the pro forma financial information and the combined company s financial position and future results of operations.

Other assumptions used in preparing the pro forma financial information may not prove to be accurate, and other factors may affect our financial condition or results of operations following the closing of the Cascadian Acquisition and related transactions. Any potential decline in our financial condition or results of operations may cause significant variations in the price of our common stock.

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Cascadian has a limited operating history and no history of commercializing drug products, and risks and uncertainties related to its business may cause the combined company to underperform relative to expectations.

Cascadian is a clinical-stage biopharmaceutical company with a limited operating history and does not have any products approved for commercial sale, which makes it difficult to evaluate the success of its current business and assess the combined company s future viability. In addition, Cascadian has incurred significant research and development and other expenses related to its ongoing operations resulting in net losses in every year since its inception other than the year ended December 31, 2008. We anticipate that Cascadian will continue to incur net losses in the future as a result of continued expenditures related to the development and commercialization of its lead product candidate, tucatinib, and additional research and development expenditures related to the development and regulatory approval of its other existing and future product candidates. Because Cascadian does not generate any revenue from product sales, following the consummation of the Cascadian Acquisition, we expect to invest significant time, resources and capital to support the expenditures and on-going operations of the acquired Cascadian business. Such investments would reduce our cash available for our existing operations and other uses and divert significant attention of management that may otherwise be focused on development of our existing business. If we are unable to obtain regulatory approval for Cascadian s product candidates and effectively commercialize its product candidates, we may not realize any benefit from the Cascadian Acquisition, resulting in possible impairments or other charges or losses which may materially and adversely affect our results of operations and financial condition. Additionally, the business operations of Cascadian differ from our business operations, and the combined business will have a different business mix than our business prior to the Cascadian Acquisition, presenting different operational risks and challenges. We expect to rely on the experience and expertise of Cascadian s existing management team and other key personnel in the development and commercialization of Cascadian s product candidates. If we were to lose the services of a significant portion or key individuals of this team, such development and commercialization and our financial results could be adversely affected.

The Cascadian business may also face additional risks, including risks relating to (i) the ability to advance the development of tucatinib and Cascadian s other product candidates through regulatory approval, (ii) competition with companies with more experience and resources in the oncology space and with companies developing other novel targeted therapies for cancers and (iii) maintaining and obtaining intellectual property protection for Cascadian s product candidates. In particular, clinical data from the pivotal HER2CLIMB clinical trial may fail to establish that tucatinib is effective in treating HER2+ breast cancer or associated brain metastases or may indicate safety profile concerns not indicated by earlier clinical data, in which case, we may not realize any benefit from the Cascadian Acquisition.

Moreover, Cascadian relies on agreements with third parties for its product candidate technology development, manufacture, packaging, supply, and clinical trials. The termination of any of these agreements by the third parties would have an adverse impact on the combined company s ability to develop and manufacture Cascadian s product candidates. For example, Cascadian has entered into an exclusive license agreement with Array BioPharma, Inc. for its tucatinib technology. If Array BioPharma were to terminate the license agreement or if the combined company is unable to maintain the exclusivity of that license agreement, the combined company may be unable to continue to develop tucatinib. Additionally, an adverse result in potential future disputes with Cascadian s licensors and partners, including Array BioPharma, may require the combined company to enter into additional licenses or to incur additional costs in litigation or settlement. Finally, continued development and commercialization of Cascadian s product candidates may require the combined company to secure licenses to additional technologies, which it may not be able to do on commercially reasonable terms, if at all.

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Risks Related to Our Business

Our near-term prospects are substantially dependent on ADCETRIS. If we and/or Takeda are unable to effectively commercialize ADCETRIS for the treatment of patients in its approved indications and to continue to expand its labeled indications of use, our ability to generate significant revenue and our prospects for profitability will be adversely affected.

ADCETRIS is now approved by the FDA and the European Commission for four indications, encompassing several settings for the treatment of relapsed Hodgkin lymphoma, for relapsed sALCL, and for certain types of CTCL. ADCETRIS is our only product approved for marketing and our ability to generate revenue from product sales and our prospects for profitability are substantially dependent on our continued ability to effectively commercialize ADCETRIS for the treatment of patients in its approved indications and our ability to continue to expand its labeled indications of use. We may not be able to fully realize the commercial potential of ADCETRIS for a number of reasons, including:

- we and/or Takeda may not be able to obtain and maintain regulatory approvals to market ADCETRIS for any additional indications in our respective territories, including for frontline Hodgkin lymphoma or frontline MTCL, or to otherwise continue to expand its labeled indications of use;

- we and/or Takeda may fail to obtain regulatory approvals for ADCETRIS in the ECHELON-1 treatment setting in our respective territories, notwithstanding the positive data we reported from the ECHELON-1 trial, and even if approved, we and/or Takeda may fail to commercialize ADCETRIS in the ECHELON-1 treatment setting, which would limit our sales of, and the commercial potential of, ADCETRIS;

- negative or inconclusive results in, or delays in, our ECHELON-2 trial, which would negatively impact, or preclude altogether, our and Takeda s ability to obtain regulatory approvals and commercialize ADCETRIS in the frontline MTCL indication in our respective territories and which would also limit our sales of, and the commercial potential of, ADCETRIS;

- results from the ECHELON-1 trial or the ECHELON-2 trial, either of which could be considered confirmatory by the FDA for the relapsed sALCL indication, may fail to sufficiently confirm the clinical benefit of ADCETRIS in relapsed sALCL, which could result in the withdrawal of approval of ADCETRIS in the relapsed sALCL indication and negatively impact our potential future product sales for the relapsed sALCL indication;

- new competitive therapies, including immuno-oncology agents such as PD-1 inhibitors (e.g., nivolumab and pembrolizumab), have been approved by regulatory authorities or may be submitted in the near term to regulatory authorities for approval in ADCETRIS labeled indications, and these competitive products could negatively impact our commercial sales of ADCETRIS;

- our commercial sales of ADCETRIS could be lower than our projections due to a lower market penetration rate, increased competition by alternative products or biosimilars, or a shorter duration of therapy in patients in ADCETRIS approved indications;

- we may be unable to effectively commercialize ADCETRIS in any new indications for which we receive marketing approval, including in the pcALCL and CD30-expressing MF indication that was approved in November 2017;

- there may be additional changes to the label for ADCETRIS, including ADCETRIS boxed warning, that further restrict how we market and sell ADCETRIS, including as a result of data collected from our required post-approval study, or as the result of adverse events observed in that study or in other studies, including investigator-sponsored studies and in the post-approval confirmatory

studies that Takeda is required to conduct as a condition to the conditional marketing authorization of ADCETRIS granted by the European Commission;

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we may not be able to establish or demonstrate in the medical community the safety, efficacy, or value of ADCETRIS and its potential advantages compared to existing and future therapeutics in the frontline Hodgkin lymphoma setting and other settings;

physicians may be reluctant to prescribe ADCETRIS due to side effects associated with its use or until results from our required post-approval study are available or other long term efficacy and safety data exist;

the estimated incidence rate of new patients in ADCETRIS approved indications may be lower than our projections;

there may be adverse results or events reported in any of the clinical trials that we and/or Takeda are conducting or may in the future conduct for ADCETRIS;

we may be unable to continue to effectively market, sell and distribute ADCETRIS;

ADCETRIS may be impacted by adverse reimbursement and coverage policies from government and private payers such as Medicare, Medicaid, insurance companies, health maintenance organizations and other plan administrators, or may be subject to pricing pressures enacted by industry organizations or state and federal governments, including as a result of increased scrutiny over pharmaceutical pricing or otherwise;

the relative price of ADCETRIS may be higher than alternative treatment options, and therefore its reimbursement may be limited by private and governmental insurers;

there may be changed or increased regulatory restrictions;

we may not have adequate financial or other resources to effectively commercialize ADCETRIS; and

we may not be able to obtain adequate commercial supplies of ADCETRIS to meet demand or at an acceptable cost.

In 2009, we entered into an agreement with Takeda to develop and commercialize ADCETRIS, under which we have commercial rights in the United States and its territories and Canada, and Takeda has commercial rights in the rest of the world. The success of this collaboration and the activities of Takeda will significantly impact the commercialization of ADCETRIS in countries other than the United States and in Canada. In October 2012, Takeda announced that it had received conditional marketing authorization for ADCETRIS from the European Commission for patients with relapsed Hodgkin lymphoma or relapsed sALCL, and has since obtained marketing approvals for ADCETRIS in many other countries. Conditional marketing authorization by the European Commission includes obligations to provide additional clinical data at a later stage to confirm the positive benefit-risk balance. In July 2016, Takeda announced that it had received marketing authorization for ADCETRIS from the European Commission for the treatment of adult patients with CD30-positive Hodgkin lymphoma at increased risk of relapse or progression following autologous stem cell transplant, and in January 2018, Takeda announced that it had received marketing authorization for ADCETRIS from the European Commission for the treatment of adult patients with CD30-positive CTCL after at least one prior systemic therapy. We cannot control the amount and timing of resources that Takeda dedicates to the commercialization of ADCETRIS, or to its marketing and distribution, and our ability to generate revenues from ADCETRIS product sales by Takeda depends on Takeda s ability to achieve market acceptance of, and to otherwise effectively market, ADCETRIS for its approved indications in Takeda s territory.

While ADCETRIS product sales have grown over time, and our future plans assume that sales of ADCETRIS will increase, we cannot assure you that, even with the recent expansion to the prescribing label for ADCETRIS in the United States, which now includes the treatment of adult patients with pcALCL and CD30-expressing MF who have received prior systemic therapy, ADCETRIS sales will continue to grow or that we

can maintain sales of ADCETRIS at or near current levels. We believe that the level of our ongoing ADCETRIS sales in the United States is largely attributable to the incidence flow of patients eligible for treatment with

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ADCETRIS. We also believe that the incidence rate of new patients in ADCETRIS approved indications is relatively low, particularly when compared to many other oncology indications. In addition, we expect only modest sales growth in the near term as a result of the November 2017 FDA approval of ADCETRIS for the treatment of adult patients with pcALCL and CD30-expressing MF who have received prior systemic therapy, subject to our ability to effectively commercialize ADCETRIS in this indication. For these and other reasons, we expect that our ability to accelerate ADCETRIS sales growth, if at all, will depend primarily on our ability to continue to expand ADCETRIS labeled indications of use, particularly with respect to the frontline Hodgkin lymphoma and frontline MTCL indications. Accordingly, we are exploring the use of ADCETRIS as a single agent and in combination therapy regimens earlier in the treatment of Hodgkin lymphoma and MTCL, including sALCL, and in a range of CD30-expressing hematologic lymphomas. This will continue to require additional time and investment in clinical trials, and there can be no assurance that we and/or Takeda will obtain and maintain the necessary regulatory approvals to market ADCETRIS for any additional indications.

In particular, although we reported positive top line data in the ECHELON-1 trial in June 2017, there can be no assurance that either we or Takeda will ultimately obtain regulatory approvals of ADCETRIS in the ECHELON-1 treatment setting in our respective territories, which would limit our sales of, and the commercial potential of, ADCETRIS. Likewise, we may fail to commercialize ADCETRIS in pcALCL and CD30-expressing MF patients or in the ECHELON-1 treatment setting if our sBLA that we submitted in November 2017 is approved by the FDA, either of which would limit our sales of, and the commercial potential of, ADCETRIS. In addition, negative or inconclusive results in our ECHELON-2 trial would negatively impact, or preclude altogether, our and Takeda s ability to obtain regulatory approvals in the frontline MTCL indication in our respective territories, which would also limit our sales of, and the commercial potential of, ADCETRIS. Moreover, the SPA agreement for the ECHELON-2 trial requires that the trial continue until a specified number of PFS events designated for the trial occurs. Based on reviews of pooled, blinded data, we have observed a lower rate of reported PFS events in the ECHELON-2 trial than anticipated. We plan to discuss with the FDA the potential to unblind the trial prior to achieving the target number of PFS events specified in the SPA agreement. We cannot predict the outcome of those discussions or whether we would be able to reach agreement with the FDA. If we are unable to reach agreement with the FDA and determine to unblind the trial prior to achieving the target number of PFS events as specified in the SPA agreement, the FDA could treat the SPA agreement for ECHELON-2 trial as rescinded. In that event, we would no longer have commitments from the FDA regarding the appropriate design, size and endpoints of the study for regulatory approval, making our ability to obtain regulatory approval of ADCETRIS in the ECHELON-2 treatment setting more uncertain. In addition, earlier unblinding in the ECHELON-2 trial could also negatively impact the likelihood of achieving positive results in the trial sufficient to support regulatory approval. Alternatively, if we are unable to reach agreement with the FDA, we could determine to continue the ECHELON-2 trial until the target number of PFS events specified in the SPA agreement is achieved, which could result in a substantial delay in our ability to conduct the final data analysis from the ECHELON-2 trial.

We and Takeda have formed a collaboration with Ventana under which Ventana is working to develop, manufacture and commercialize a companion diagnostic test with the goal of identifying patients who might respond to treatment with ADCETRIS based on CD30 expression levels in their tissue specimens. The FDA and similar regulatory authorities outside the United States regulate companion diagnostics. Companion diagnostics require separate or coordinated regulatory approval prior to commercialization of the related therapeutic product. In this regard, we expect that concurrent approval of a CD30 companion diagnostic will be required for any approval of ADCETRIS in the frontline MTCL indication. However, Ventana may not be able to successfully develop and obtain regulatory approval for a companion diagnostic to support regulatory approval of ADCETRIS in the frontline MTCL indication in a timely manner or at all. If Ventana is unable to successfully develop a companion diagnostic, or experiences delays in doing so, the development of ADCETRIS in the frontline MTCL indication may be adversely affected, we may fail to receive regulatory approval for ADCETRIS in the frontline MTCL indication and we may not realize the full commercial potential of ADCETRIS. Further, if a companion diagnostic requirement were included in the ADCETRIS label, such a requirement may limit our ability to

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commercialize ADCETRIS in the applicable setting due to potential label requirements, prescriber practices, constraints on availability of the diagnostic, or other factors.

Even if we and Takeda receive the required regulatory approvals to market ADCETRIS for any additional indications or in additional jurisdictions, we and Takeda may not be able to effectively commercialize ADCETRIS, including for the reasons set forth above. Our ability to grow ADCETRIS product sales in future periods is also dependent on price increases and we periodically increase the price of ADCETRIS. Price increases on ADCETRIS and negative publicity regarding drug pricing and price increases generally, whether on ADCETRIS or products distributed by other pharmaceutical companies, could negatively affect market acceptance of, and sales of, ADCETRIS. In any event, we cannot assure you that price increases we have taken or may take in the future will not in the future negatively affect ADCETRIS sales.

Reports of adverse events or safety concerns involving ADCETRIS or our product candidates could delay or prevent us from obtaining or maintaining regulatory approvals, or could negatively impact sales of ADCETRIS or the prospects for our product candidates.

Reports of adverse events or safety concerns involving ADCETRIS could interrupt, delay or halt clinical trials of ADCETRIS, including the ongoing FDA-required ADCETRIS post-approval confirmatory study as well as the post-approval confirmatory studies that Takeda is required to conduct as a condition to the conditional marketing authorization of ADCETRIS by the European Commission. For example, during 2013 concerns regarding pancreatitis caused an investigator conducting an independent study involving ADCETRIS to temporarily halt enrollment in the trial and to amend the eligibility criteria and monitoring for the trial. Subsequently, we have revised our prescribing information to add pancreatitis as a known adverse event. In addition, reports of adverse events or safety concerns involving ADCETRIS could result in regulatory authorities limiting, denying or withdrawing approval of ADCETRIS for any or all indications, including the use of ADCETRIS for the treatment of patients in its approved indications. For example, there was an increased incidence of febrile neutropenia and peripheral neuropathy in the ADCETRIS plus AVD arm of the ECHELON-1 trial, which could limit, narrow or preclude any approval by the FDA, or could limit prescribing of ADCETRIS in the ECHELON-1 treatment setting if approved by the FDA, both of which could negatively impact sales of ADCETRIS or adversely affect ADCETRIS acceptance in the market. There are no assurances that patients receiving ADCETRIS will not experience serious adverse events in the future. Further, there are no assurances that patients receiving ADCETRIS with co-morbid diseases not previously studied, such as autoimmune diseases, will not experience new or different serious adverse events in the future.

Adverse events may negatively impact the sales of ADCETRIS. We may be required to further update the ADCETRIS prescribing information, including boxed warnings, based on reports of adverse events or safety concerns or implement a Risk Evaluation and Mitigation Strategy, or REMS, which could adversely affect ADCETRIS acceptance in the market, make competition easier or make it more difficult or expensive for us to distribute ADCETRIS. For example, the prescribing information for ADCETRIS includes pancreatitis, impaired hepatic function, impaired renal function, pulmonary toxicity, and gastrointestinal complications as known adverse events as well as a boxed warning related to the risk that JC virus infection resulting in progressive multifocal leukoencephalopathy, or PML, and death can occur in patients receiving ADCETRIS. Further, based on the identification of future adverse events, we may be required to further revise the prescribing information, including ADCETRIS boxed warning, which could negatively impact sales of ADCETRIS or adversely affect ADCETRIS acceptance in the market.

Likewise, reports of adverse events or safety concerns involving ADCETRIS or our product candidates could interrupt, delay or halt clinical trials of such product candidates, or could result in our inability to obtain regulatory approvals for any of our product candidates. For example, in June 2017, we discontinued the phase 3 CASCADE clinical trial of SGN-CD33A based on unexpected adverse events following a higher rate of deaths in the SGN-CD33A containing arm versus the control arm of this trial, and the Investigational New Drug application, or IND, for SGN-CD33A was subsequently placed on hold by the FDA. At this time, we have no

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plans to initiate additional clinical trials of SGN-CD33A. In the future, we may determine to discontinue our SGN-CD33A program altogether, in which case we will not receive any return on our investment in SGN-CD33A. In addition, we are planning or conducting pivotal trials for enfortumab vedotin and tisotumab vedotin based on only limited phase 1 clinical data. There may be important facts about the safety, efficacy, and risk versus benefit of these product candidates that are not known to us at this time which may negatively impact our ability to develop and commercialize these product candidates. In addition, in response to safety events observed in our ongoing clinical trials of enfortumab vedotin and tisotumab vedotin, including patient deaths, we have in the past, and may in the future, institute additional precautionary safety measures such as dosing caps and delays, enhanced monitoring for side effects, and modified patient inclusion and exclusion criteria. Additional and/or unexpected safety events could be observed in these pivotal or other later stage trials that could delay or prevent us from advancing the clinical development of either enfortumab vedotin or tisotumab vedotin and may adversely affect our business, results of operations and prospects.

Concerns regarding the safety of ADCETRIS or our product candidates as a result of undesirable side effects identified during clinical testing or otherwise could cause the FDA to order us to cease further development or commercialization of ADCETRIS or the applicable product candidate. Undesirable side effects caused by ADCETRIS or our product candidates could also result in denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications, the requirement of additional trials or the inclusion of unfavorable information in our product labeling, and in turn delay or prevent us from commercializing ADCETRIS or the applicable product candidate. In addition, actual or potential drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete a trial for ADCETRIS or our product candidates or result in potential product liability claims. Any of these events could prevent us from developing or commercializing ADCETRIS or the particular product candidate, and could significantly harm our business, results of operations and prospects.

Even though we and Takeda have obtained regulatory approvals to market ADCETRIS, we and Takeda are subject to extensive ongoing regulatory obligations and review, including post-approval requirements that could result in the withdrawal of ADCETRIS from certain geographic markets in certain indications if such requirements are not met.

ADCETRIS is approved for treating patients in the relapsed sALCL indication under accelerated approval regulations in the U.S., approved with conditions in relapsed Hodgkin lymphoma and sALCL in Canada, and approved under conditional marketing authorization in relapsed Hodgkin lymphoma and sALCL in Europe, in each case under regulations which allow for approval of products for cancer or other serious or life threatening illnesses based on a surrogate endpoint or on a clinical endpoint other than survival or irreversible morbidity. Under these types of approvals, we are subject to certain post-approval requirements, including the requirement to conduct clinical trials to confirm clinical benefit. In the U.S., either the ECHELON-1 trial or the ECHELON-2 trial results may be sufficient to confirm the clinical benefit of ADCETRIS in relapsed sALCL and thereby convert the relapsed sALCL accelerated approval to regular approval. In Canada, the ECHELON-1 results may be sufficient to confirm the clinical benefit of ADCETRIS in relapsed Hodgkin lymphoma, and the ECHELON-2 results may be sufficient to confirm the clinical benefit of ADCETRIS in relapsed sALCL. In Europe, there are other post approval requirements to convert the conditional marketing authorization for ADCETRIS in relapsed Hodgkin lymphoma and relapsed sALCL into a standard marketing authorization. Our failure to complete a required post-approval study, including the ECHELON-2 trial, or to confirm a clinical benefit could result in the withdrawal of approval of ADCETRIS in the indications for which approval is conditional which would seriously harm our business. Similarly, Takeda s failure to provide these additional clinical data from confirmatory studies could result in the European Commission withdrawing approval of ADCETRIS in the European Union for certain indications, which would negatively impact anticipated royalty revenue from ADCETRIS sales by Takeda in the European Union and could adversely affect our results of operations.

In addition, we are subject to extensive ongoing obligations and continued regulatory review from applicable regulatory agencies with respect to any product for which we have obtained regulatory approval,

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including ADCETRIS in each of its approved indications, such as continued adverse event reporting requirements and the requirement to have some of our promotional materials pre-cleared by the FDA. There may also be additional post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize ADCETRIS in the United States, Canada or potentially other jurisdictions.

We and the manufacturers of ADCETRIS are also required to comply with current Good Manufacturing Practices, or cGMP, regulations, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Further, regulatory agencies must approve these manufacturing facilities before they can be used to manufacture ADCETRIS, and these facilities are subject to ongoing regulatory inspections. In addition, regulatory agencies subject an approved product, its manufacturer and the manufacturer s facilities to continual review and inspections, including periodic unannounced inspections. The subsequent discovery of previously unknown problems with ADCETRIS, including adverse events of unanticipated severity or frequency, or problems with the facilities where ADCETRIS is manufactured, may result in restrictions on the marketing of ADCETRIS, up to and including withdrawal of ADCETRIS from the market. If our manufacturing facilities or those of our suppliers fail to comply with applicable regulatory requirements, such noncompliance could result in regulatory action and additional costs to us.

Failure to comply with applicable FDA and other regulatory requirements may subject us to administrative or judicially imposed sanctions, including:

- issuance of Form FDA 483 notices or Warning Letters by the FDA or other regulatory agencies;
- imposition of fines and other civil penalties;
- criminal prosecutions;
- injunctions, suspensions or revocations of regulatory approvals;
- suspension of any ongoing clinical trials;
- total or partial suspension of manufacturing;
- delays in commercialization;
- refusal by the FDA to approve pending applications or supplements to approved applications submitted by us;
- refusals to permit drugs to be imported into or exported from the United States;
- restrictions on operations, including costly new manufacturing requirements; and
- product recalls or seizures.

The policies of the FDA and other regulatory agencies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of ADCETRIS in any additional indications or further restrict or regulate post-approval activities. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we or Takeda might not be permitted to market ADCETRIS and our business would suffer.

If we or our collaborators are not able to obtain or maintain required regulatory approvals, we or our collaborators will not be able to successfully commercialize ADCETRIS or our product candidates.

The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. Neither we nor our collaborators are permitted to market our product candidates in the United States or foreign countries until we obtain marketing approval from the FDA or other foreign regulatory authorities, and we or our collaborators may never receive regulatory

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approval for the commercial sale of any of our product candidates. In addition, part of our strategy is to continue to explore the use of ADCETRIS earlier in the treatment of Hodgkin lymphoma and MTCL and in other CD30-expressing lymphomas, and we are currently conducting multiple clinical trials for ADCETRIS. However, we and/or Takeda may be unable to obtain or maintain any regulatory approvals for the commercial sale of ADCETRIS for any additional indications. Obtaining marketing approval is a lengthy, expensive and uncertain process and approval is never assured, and we have only limited experience in preparing and submitting the applications necessary to gain regulatory approvals. Further, the FDA and other foreign regulatory agencies have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any product candidate we develop, including any regulatory approvals for the potential commercial sale of ADCETRIS in additional indications or in any additional territories. In this regard, even if we believe the data collected from clinical trials of ADCETRIS and our product candidates are promising, such data may not be sufficient to support approval by the FDA or any other foreign regulatory authority. In addition, the FDA or their advisors may disagree with our interpretations of data from preclinical studies and clinical trials. For example, based on the positive data we reported from the ECHELON-1 trial, we have submitted an sBLA to the FDA for approval of ADCETRIS as part of a frontline combination chemotherapy regimen in patients with previously untreated advanced classical Hodgkin lymphoma. However, even though our sBLA was accepted by the FDA for Priority Review, the FDA may disagree with our interpretations of the data from the ECHELON-1 trial and/or may otherwise determine not to approve our sBLA submission in a timely manner or at all. Moreover, even though our ECHELON-1 and ECHELON-2 trials are being conducted under SPA agreements with the FDA, this is not a guarantee or indication of approval, and we cannot be certain that the design of, or data collected from, any of our current or potential future clinical trials that were or are being conducted under SPA agreements with the FDA will be sufficient to support FDA approval. Further, a SPA agreement is not binding on the FDA if public health concerns unrecognized at the time the SPA agreement is entered into become evident, other new scientific concerns regarding product safety or efficacy arise, new drugs are approved in the same indication, or if we have failed to comply with the agreed upon trial protocols, including as a result of completing a clinical trial with fewer events than planned. In addition, a SPA agreement may be changed by us or the FDA on written agreement of both parties, and the FDA retains significant latitude and discretion in interpreting the terms of a SPA agreement and the data and results from the applicable clinical trial. For example, even though we believe that the data from the ECHELON-1 trial are supportive of approval of ADCETRIS in the ECHELON-1 treatment setting, our SPA agreement with the FDA covering the ECHELON-1 trial is not a guarantee or indication of approval of ADCETRIS in the ECHELON-1 treatment setting or in any other indications. Regulatory agencies also may approve a product candidate for fewer indications than requested or may grant approval subject to the performance of post-approval studies or REMS for a product candidate. Similarly, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of ADCETRIS in additional indications, including any indications in the ECHELON-1 treatment setting. For example, there was an increased incidence of febrile neutropenia and peripheral neuropathy in the ADCETRIS plus AVD arm of the ECHELON-1 trial, which could limit, narrow or preclude any approval by the FDA, or could limit prescribing of ADCETRIS in the ECHELON-1 treatment setting if approved by the FDA, both of which could negatively impact sales of ADCETRIS or adversely affect ADCETRIS acceptance in the market.

In addition, changes in regulatory requirements and guidance may occur and we may need to amend clinical trial protocols and/or related SPA agreements to reflect these changes. Amendments may require us to resubmit our clinical trial protocols to institutional review boards, or IRBs, for reexamination, which may impact the costs, timing or successful completion of a clinical trial. In addition, as part of the U.S. Prescription Drug User Fee Act, or PDUFA, the FDA has a goal to review and act on a percentage of all regulatory submissions in a given time frame. In this regard, the sBLA that we submitted to the FDA in November 2017 to seek approval of ADCETRIS as part of a frontline combination chemotherapy regimen in patients with previously untreated advanced classical Hodgkin lymphoma was accepted for filing and designated for priority review with a PDUFA targeted action date of May 1, 2018. However, the FDA does not always meet its PDUFA targeted action dates and if the FDA were to fail to meet the PDUFA targeted action date for our November 2017 sBLA submission or fail to meet future PDUFA targeted action dates established for ADCETRIS or any of our product candidates, if any, the commercialization of the affected product candidate or of ADCETRIS in any additional indications could be

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delayed or impaired. Due to these and other factors, ADCETRIS and our product candidates could take a significantly longer time to gain regulatory approvals than we expect or may never gain new regulatory approvals, which could delay or eliminate any potential product revenue from sales of our product candidates or of ADCETRIS in any additional indications, which could significantly delay or prevent us from achieving profitability.

The successful commercialization of ADCETRIS and our product candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage and reimbursement levels and pricing policies.

Successful sales of ADCETRIS and any future products will depend, in part, on the extent to which coverage and reimbursement for our products will be available from government and health administration authorities, private health insurers and other third-party payors. To manage healthcare costs, many governments and third-party payors increasingly scrutinize the pricing of new products and require greater levels of evidence of favorable clinical outcomes and cost-effectiveness before extending coverage. In light of such challenges to prices, we cannot be sure that we will achieve and continue to have coverage available for ADCETRIS and any other product candidate that we commercialize and, if available, that the reimbursement rates will be adequate. If we are unable to obtain adequate levels of coverage and reimbursement for our product candidates, their marketability will be negatively and materially impacted. For example, even if we are able to obtain approval of our sBLA submission to the FDA to expand the labeled indications of use for ADCETRIS to the frontline advanced Hodgkin lymphoma setting based on our ECHELON-1 trial data, we cannot be certain that third-party payors will provide reimbursement for ADCETRIS in that indication based on the relative price or perceived benefit of ADCETRIS as compared to alternative treatment options, which may materially harm our ability to maintain or increase sales of ADCETRIS or may otherwise negatively affect future ADCETRIS sales.

Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. In addition, obtaining and maintaining adequate coverage and reimbursement status is time-consuming and costly. Third-party payors may deny coverage and reimbursement status altogether of a given drug product, or cover the product but may also establish prices at levels that are too low to enable us to realize an appropriate return on our investment in product development. Further, one payor s determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Because the rules and regulations regarding coverage and reimbursement change frequently, in some cases at short notice, even when there is favorable coverage and reimbursement, future changes may occur that adversely impact the favorable status.

The unavailability or inadequacy of third-party coverage and reimbursement could have a material adverse effect on the market acceptance of ADCETRIS and any of our future products and the future revenues we may expect to receive from those products. In addition, we are unable to predict what additional legislation or regulation relating to the healthcare industry or third-party coverage and reimbursement may be enacted in the future, or what effect such legislation or regulation would have on our business. Continuing negative publicity regarding pharmaceutical pricing practices and ongoing presidential and congressional focus on this issue create significant uncertainty regarding regulation of the healthcare industry and third-party coverage and reimbursement. If healthcare policies or reforms intended to curb healthcare costs are adopted or if we experience negative publicity with respect to pricing of ADCETRIS or the pricing of pharmaceutical products generally, the prices that we charge for ADCETRIS and any future approved products may be limited, our commercial opportunity may be limited and/or our revenues from sales of ADCETRIS and any future approved products may be negatively impacted.

We do not have sole control of the development and commercialization of enfortumab vedotin and tisotumab vedotin, and we have limited data on the safety and efficacy of these drug candidates

We and our collaborators, Astellas and Genmab respectively, have elected to pursue accelerated development and approval pathways for enfortumab vedotin and tisotumab vedotin. We have initiated a pivotal

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clinical trial for enfortumab vedotin and intend to initiate a pivotal clinical trial for tisotumab vedotin, in each case based on only limited phase 1 clinical data. There may be important facts about the safety, efficacy, and risk versus benefit of these product candidates that are not known to us at this time which may negatively impact our ability to develop and commercialize these product candidates. In response to safety events observed in our ongoing clinical trials of enfortumab vedotin and tisotumab vedotin, including patient deaths, we have in the past, and may in the future, institute additional precautionary safety measures such as dosing caps and delays, enhanced monitoring for side effects, and modified patient inclusion and exclusion criteria. In addition, enfortumab vedotin and tisotumab vedotin may fail to demonstrate sufficient efficacy in our pivotal trials despite the results observed in previous trials. Additional and/or unexpected safety events or our failure to generate additional efficacy data in our clinical trials that support registration could significantly impact the value of enfortumab vedotin and tisotumab vedotin to our business. Moreover, because control of development and commercialization is shared with our collaborators, we do not have sole discretion and control over the development and commercialization of these product candidates.

Healthcare law and policy changes may have a material adverse effect on us

In March 2010, the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively PPACA, became law in the United States. PPACA substantially changed the way healthcare is financed by both governmental and private insurers and significantly affects the pharmaceutical industry. The provisions of PPACA of greatest importance to the pharmaceutical industry include increased Medicaid rebates, expanded Medicaid eligibility, extension of Public Health Service eligibility, annual fees payable by manufacturers and importers of branded prescription drugs, annual reporting of financial relationships with physicians and teaching hospitals, and a new Patient-Centered Outcomes Research Institute. Many of these provisions have had the effect of reducing the revenue generated by our sales of ADCETRIS and will have the effect of reducing any revenue generated by sales of any future commercial products we may have.

Certain provisions of the PPACA have been subject to judicial and Congressional challenges, as well as efforts by the Trump administration to repeal or replace certain aspects of the PPACA. For example, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. In Congress, the U.S. House of Representatives passed PPACA replacement legislation known as the American Health Care Act of 2017 in May 2017, which was not introduced in the Senate. More recently, the Senate Republicans have proposed multiple bills to repeal or repeal and replace portions of the PPACA. Although none of these measures have been enacted, Congress may consider other legislation to repeal or replace certain elements of the PPACA. While Congress has not passed repeal or replace legislation, the tax reform legislation signed into law on December 22, 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the individual mandate. On October 12, 2017, President Trump signed another Executive Order directing certain federal agencies to propose regulations or guidelines to permit small businesses to form association health plans, expand the availability of short-term, limited duration insurance, and expand the use of health reimbursement arrangements, which may circumvent some of the requirements for health insurance mandated by the PPACA. In addition, citing legal guidance from the U.S. Department of Justice, the U.S. Department of Health and Human Services, has concluded that cost-sharing reduction, or CSR, payments to insurance companies required under the PPACA have not received necessary appropriations from Congress and announced that it will discontinue these payments immediately until such appropriations are made. The loss of the CSR payments is expected to increase premiums on certain policies issued by qualified health plans under the PPACA. While Congress is considering legislation to appropriate funds for CSR payments the future of that legislation is uncertain. We continue to evaluate the effect that the PPCCA and its possible repeal and replacement has on our business.

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In addition, we anticipate that the PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and an additional downward pressure on the price that we receive for ADCETRIS or any future approved product, which may harm our business. For example, increased discounts, rebates or chargebacks may be mandated by governmental or private insurers or fee caps and pricing pressures could be enacted by industry organizations or state and federal governments, any of which could significantly affect the revenue generated by sales of our products, including ADCETRIS. In addition, drug-pricing by pharmaceutical companies has come under increased scrutiny. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing by requiring drug companies to notify insurers and government regulators of price increases and to provide an explanation as to the reasons for the increase, reduce the out-of-pocket cost of prescription drugs, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs. We expect further federal and state legislation and healthcare reforms to continue to be proposed to control increasing healthcare costs and to control the rising cost of prescription drugs. These proposals, if implemented, could limit the price for ADCETRIS or any future approved products. Commercial opportunity could be negatively impacted by legislative action that controls pricing, mandates price negotiations, or increases government discounts and rebates.

Also, price increases on ADCETRIS and negative publicity regarding drug pricing and price increases generally, whether on ADCETRIS or products distributed by other pharmaceutical companies, could negatively affect market acceptance of, and sales of, ADCETRIS. In addition, although ADCETRIS is approved in the European Union, Japan and other countries outside of the United States, government austerity measures or further healthcare reform measures and pricing pressures in other countries could adversely affect demand and pricing for ADCETRIS, which would negatively impact anticipated royalty revenue from ADCETRIS sales by Takeda.

Other legislative changes have also been proposed and adopted since PPACA was enacted. The Budget Control Act of 2011, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation s automatic reduction to several government programs. This includes a 2% reduction in Medicare provider payments paid under Medicare Part B to physicians for physician-administered drugs, such as certain oral oncology drugs, which went into effect in April 2013 and, following passage of the Bipartisan Budget Act of 2015, will remain in effect through 2025 unless additional congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In addition, legislation has been proposed to shorten the period of biologic data and market exclusivity granted by the FDA. If such legislation is enacted, we may face competition from biosimilars of ADCETRIS or any future approved products earlier than otherwise would have occurred. Increased competition may negatively impact coverage and pricing of ADCETRIS, which could negatively affect our financial condition or results of operations.

We expect to experience pricing pressures in connection with the sale of ADCETRIS due to the trend toward managed healthcare, and additional legislative proposals. For example, the PPACA increased the mandated Medicaid rebate from 15.1% to 23.1%, expanded the rebate to Medicaid managed care utilization and increased the types of entities eligible for the federal 340B drug discount program. On January 30, 2017, the White House Office of Management and Budget withdrew the draft August 2015 Omnibus Guidance document that was issued by the Department of Health and Human Services Health Resources and Services Administration, or HRSA, that addressed a broad range of topics including, among other items, the definition of a patient s eligibility for 340B drug pricing. However, as concerns continue to grow over the need for tighter oversight, there remains the possibility that HRSA or other agency under the Department of Health and Human Services, or HHS, will propose a similar regulation or that Congress will explore changes to the 340B program through legislation. For example, the Centers for Medicare & Medicaid Services has issued a proposed rule that would

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revise the Medicare hospital outpatient prospective payment system, including a new reimbursement methodology for drugs purchased under the 340B program for Medicare patients. In addition, HHS has currently set July 1, 2018 for implementation of the final rule setting forth the calculation of the ceiling price and application of civil monetary penalties under the 340B program. A significant portion of ADCETRIS purchases are eligible for 340B drug pricing, and therefore an expansion of the 340B program or reduction in 340B pricing, whether in the form of the final rule or otherwise, would likely have a negative impact on our net sales of ADCETRIS.

We cannot predict what healthcare reform initiatives may be adopted in the future. However, we anticipate that Congress, state legislatures, and third-party payors may continue to review and assess alternative healthcare delivery and payment systems and may in the future propose and adopt legislation or policy changes or implementations effecting additional fundamental changes in the healthcare delivery system. We also expect ongoing initiatives to increase pressure on drug pricing. We cannot assure you as to the ultimate content, timing, or effect of changes, nor is it possible at this time to estimate the impact of any such potential legislation; however, such changes or the ultimate impact of changes could negatively affect our revenue or sales of ADCETRIS or any potential future approved products.

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

To help patients afford our products, we have a patient assistance program and also occasionally make donations to independent charitable foundations that help financially needy patients. These types of programs designed to assist patients in affording pharmaceuticals have become the subject of scrutiny. In recent years, some pharmaceutical manufacturers were named in class action lawsuits challenging the legality of their patient assistance programs and support of independent charitable patient support foundations under a variety of federal and state laws. At least one insurer also has directed its network pharmacies to no longer accept manufacturer co-payment coupons for certain specialty drugs the insurer identified. Our patient assistance program and support of independent charitable foundations could become the target of similar litigation.

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

Clinical trials are expensive and time consuming, may take longer than we expect or may not be completed at all, and their outcome is uncertain.

We are currently conducting multiple clinical trials for ADCETRIS and our product candidates and we plan to commence additional trials of ADCETRIS and our product candidates in the future. We are also conducting a

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pivotal phase 2 trial of enfortumab vedotin with Astellas for locally advanced or metastatic urothelial cancer patients who have been previously treated with checkpoint inhibitor therapy, and are planning to conduct a pivotal phase 2 trial of tisotumab vedotin with Genmab in patients with recurrent and/or metastatic cervical cancer, in each case based on only limited phase 1 clinical data. Neither enfortumab vedotin nor tisotumab vedotin have previously been evaluated in later stage clinical trials and we cannot be certain that the design of, or data collected from, these trials will be adequate to demonstrate the safety and efficacy of enfortumab vedotin or tisotumab vedotin, or will otherwise be sufficient to support FDA or any foreign regulatory approvals.

Each of our clinical trials requires the investment of substantial expense and time and the timing of the commencement, continuation and completion of these clinical trials may be subject to significant delays relating to various causes, including scheduling conflicts with participating clinicians and clinical institutions, difficulties in identifying and enrolling patients who meet trial eligibility criteria, failure of patients to complete the clinical trial, delays in accumulating the required number of clinical events for data analyses, delay or failure to obtain IRB approval to conduct a clinical trial at a prospective site, and shortages of available drug supply. For example, the SPA agreement for the ECHELON-2 trial requires that the trial continue until a specified number of PFS events designated for the trial occurs. Based on reviews of pooled, blinded data, we have observed a lower rate of reported PFS events than anticipated. We plan to discuss with the FDA the potential to unblind the trial prior to achieving the target number of PFS events specified in the SPA agreement. We cannot predict the outcome of those discussions or whether we would be able to reach agreement with the FDA. If we are unable to reach agreement with the FDA and determine to unblind the trial prior to achieving the target number of PFS events as specified in the SPA agreement, the FDA could treat the SPA agreement for ECHELON-2 trial as rescinded. In that event, we would no longer have commitments from the FDA regarding the appropriate design, size and endpoints of the study for regulatory approval, making our ability to obtain regulatory approval of ADCETRIS in the ECHELON-2 treatment setting more uncertain. In addition, earlier unblinding in the ECHELON-2 trial could also negatively impact the likelihood of achieving positive results in the trial sufficient to support regulatory approval. Alternatively, if we are unable to reach agreement with the FDA, we could determine to continue the ECHELON-2 trial until the target number of PFS events specified in the SPA agreement is achieved, which could result in a substantial delay in our ability to conduct the final data analysis from the ECHELON-2 trial.

Additionally, patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the existence of competing clinical trials, perceived side effects and the availability of alternative or new treatments. Many of our future and ongoing clinical trials are being or will be coordinated or conducted with Takeda, Astellas, Genmab and other collaborators, which may delay the commencement or affect the continuation or completion of these trials. From time to time, we have experienced enrollment-related delays in clinical trials and we will likely continue to experience similar delays in our current and future trials. We depend on medical institutions and clinical research organizations, or CROs, to conduct some of our clinical trials in compliance with Good Clinical Practice, or GCP, and to the extent they fail to enroll patients for our clinical trials, fail to conduct our trials in accordance with GCP, or are delayed for a significant time in achieving full enrollment, we may be affected by increased costs, program delays or both, which may harm our business. In addition, we conduct clinical trials in foreign countries which may subject us to further delays and expenses as a result of increased drug shipment costs, additional regulatory requirements and the engagement of foreign CROs, as well as expose us to risks associated with less experienced clinical investigators who are unknown to the FDA, different standards of medical care, and foreign currency transactions insofar as changes in the relative value of the U.S. dollar to the foreign currency where the trial is being conducted may impact our actual costs.

Clinical trials must be conducted in accordance with FDA or other applicable foreign government guidelines and are subject to oversight by the FDA, other foreign governmental agencies, the data safety monitoring boards for such trials and the IRBs or Ethics Committees for the institutions in which such trials are being conducted. In addition, clinical trials must be conducted with supplies of ADCETRIS or our product candidates produced under cGMP and other requirements in foreign countries, and may require large numbers of test patients. We or our collaborators, the FDA, other foreign governmental agencies or the applicable data safety monitoring boards,

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IRBs and Ethics Committees could delay, suspend, halt or modify our clinical trials of ADCETRIS or any of our product candidates, and we, our collaborators and/or the FDA could terminate or modify any related SPA agreements, for numerous reasons, including:

- ADCETRIS or the applicable product candidate may have unforeseen safety issues or adverse side effects, including fatalities, or a determination may be made that a clinical trial presents unacceptable health risks;
- deficiencies in the conduct of the clinical trial, including failure to conduct the clinical trial in accordance with regulatory requirements, GCP or clinical protocols;
- problems, errors or other deficiencies with respect to data collection, data processing and analysis;
- deficiencies in the clinical trial operations or trial sites resulting in the imposition of a clinical hold;
- the time required to determine whether ADCETRIS or the applicable product candidate is effective may be longer than expected;
- fatalities or other adverse events arising during a clinical trial due to medical problems that may not be related to clinical trial treatments;
- ADCETRIS or the applicable product candidate may not appear to be more effective than current therapies;
- the quality or stability of ADCETRIS or the applicable product candidate may fall below acceptable standards;
- our inability and the inability of our collaborators to produce or obtain sufficient quantities of ADCETRIS or the applicable product candidate to complete the trials;
- our inability and the inability of our collaborators to reach agreement on acceptable terms with prospective CROs and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- our inability and the inability of our collaborators to obtain IRB or Ethics Committee approval to conduct a clinical trial at a prospective site;
- changes in governmental regulations or administrative actions that adversely affect our ability and the ability of our collaborators to continue to conduct or to complete clinical trials;
- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional trials and studies and increased expenses associated with the services of our CROs and other third parties;
- our inability and the inability of our collaborators to recruit and enroll patients to participate in clinical trials for reasons including competition from other clinical trial programs for the same or similar indications;

our inability and the inability of our collaborators to retain patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow-up; or

our inability and the inability of our collaborators to ensure adequate statistical power to detect statistically significant treatment effects, whether through our inability to enroll or retain patients in trials or because the specified number of events designated for a completed trial have not occurred.

In addition, we or our collaborators may experience significant setbacks in advanced clinical trials, even after promising results in earlier trials, including unexpected adverse events that may occur when our product candidates are combined with other therapies. For example, in June 2017, we suspended patient enrollment and treatment in all SGN-CD33A trials and discontinued the phase 3 CASCADE clinical trial of SGN-CD33A in

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frontline older acute myeloid leukemia, or AML, patients, following a higher rate of deaths in the SGN-CD33A containing arm versus the control arm of this trial, and the IND for SGN-CD33A was subsequently placed on hold by the FDA. At this time, we have no plans to initiate additional clinical trials of SGN-CD33A. In the future, we may determine to discontinue our SGN-CD33A program altogether, in which case we will not receive any return on our investment in SGN-CD33A.

Negative or inconclusive clinical trial results could adversely affect our ability and the ability of our collaborators to obtain regulatory approvals of our product candidates or to market ADCETRIS and/or expand ADCETRIS into additional indications. In particular, negative or inconclusive results in our ECHELON-2 trial would negatively impact or preclude altogether, our and Takeda s ability to obtain regulatory approvals in the frontline MTCL indication in our respective territories, which would limit our sales of, and the commercial potential of, ADCETRIS. In addition, clinical trial results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. For example, although we reported positive top line data in our ECHELON-1 trial, regulatory agencies, including the FDA, or their advisors, may disagree with our interpretations of data from the ECHELON-1 trial and may not approve the expansion of ADCETRIS labeled indications of use based on the results of the ECHELON-1 trial or any other of our clinical trials. Adverse medical events during a clinical trial, including patient fatalities, could cause a trial to be redone or terminated, require us to cease development of a product candidate or the further development or commercialization of ADCETRIS, result in our failure to expand ADCETRIS into additional indications, adversely affect our ability to market ADCETRIS, and may result in other negative consequences to us, including the inclusion of unfavorable information in our product labeling. Further, some of our clinical trials are overseen by an IDMC, and an IDMC may determine to delay or suspend one or more of these trials due to safety or futility findings based on events occurring during a clinical trial. In addition, we may be required to implement additional risk mitigation measures that could require us to suspend our clinical trials if certain safety events occur.

We depend on collaborative relationships with other companies to assist in the research and development of ADCETRIS and for the development and commercialization of product candidates utilizing or incorporating our technologies. If we are not able to locate suitable collaborators or if our collaborators do not perform as expected, this may negatively affect our ability to commercialize ADCETRIS, develop other product candidates and/or generate revenues through technology licensing, or may otherwise negatively affect our business.

We have established collaborations with third parties to develop and market ADCETRIS and some of our current and future product candidates. For example, we entered into a collaboration agreement with Takeda in December 2009 that granted Takeda rights to develop and commercialize ADCETRIS outside of the United States and Canada. In addition, we have entered into 50:50 co-development collaborations with Astellas for the development of enfortumab vedotin, and with Genmab for the development of tisotumab vedotin. We are also collaborating with BMS with respect to the CHECKMATE 812 pivotal phase 3 clinical trial evaluating the combination of Opdivo (nivolumab) with ADCETRIS for the treatment of relapsed or refractory, or transplant-ineligible, advanced classical Hodgkin lymphoma. In addition, we have ADC collaborations with AbbVie, Bayer, Celldex, Genentech, GSK, Pfizer and Progenics, and we have entered into a collaboration agreement with Unum to develop and commercialize novel ACTR therapies incorporating our antibodies for the treatment of cancer and with Pieris to develop targeted bispecific immuno-oncology therapies for the treatment of cancer. Our dependence on collaborative arrangements to assist in the development and commercialization of ADCETRIS and for the development and commercialization of product candidates utilizing or incorporating our technologies subjects us to a number of risks, including:

- we are not able to control the amount and timing of resources that our collaborators devote to the development or commercialization of products and product candidates utilizing or incorporating our technologies, or to their marketing and distribution;

- disputes may arise between us and our collaborators that result in the delay or termination of the research, development or commercialization of the applicable products and product candidates or that result in costly litigation or arbitration that diverts management s attention and resources;

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with respect to collaborations under which we have an active role, such as our ADCETRIS collaboration and our 50:50 co-development agreements with Astellas and Genmab, we may have differing opinions or priorities than our collaborators, or we may encounter challenges in joint decision making, which may result in the delay or termination of the research, development or commercialization of the applicable products and product candidates, including ADCETRIS, enfortumab vedotin and tisotumab vedotin;

our current and potential future 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;

significant delays in the development of product candidates by current and potential collaborators could allow competitors to bring products to market before product candidates utilizing or incorporating our technologies are approved and impair the ability of current and potential future collaborators to effectively commercialize these product candidates;

our relationships with our collaborators may divert significant time and effort of our scientific staff and management team and require the effective allocation of our resources to multiple internal collaborative projects;

our current and potential future collaborators may not be successful in their efforts to obtain regulatory approvals in a timely manner, or at all;

our current and potential future collaborators may receive regulatory sanctions relating to other aspects of their business that could adversely affect the development, approval or commercialization of the applicable products or product candidates;

our current and potential future 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;

business combinations or significant changes in a collaborator s business strategy may adversely affect such party s willingness or ability to complete its obligations under any arrangement;

a collaborator could independently move forward with competing products, therapeutic approaches or technologies to develop treatments for the diseases targeted by us or our collaborators that are developed by such collaborator either independently or in collaboration with others, including our competitors;

our current and potential collaborators may experience financial difficulties; and

our collaborations may be terminated, breached or allowed to expire, or our collaborators may reduce the scope of our agreements with them, which could have a material adverse effect on our financial position by reducing or eliminating the potential for us to receive technology access and license fees, milestones and royalties, and/or reimbursement of development costs, and which could require us to devote additional efforts and to incur the additional costs associated with pursuing internal development and commercialization of the applicable products and product candidates.

If our collaborative arrangements are not successful as a result of any of the above factors, or any other factors, then our ability to advance the development and commercialization of the applicable products and product candidates and to otherwise generate revenue from these arrangements and to become profitable will be adversely affected, and our business and business prospects may be materially harmed. In particular, if Takeda were to terminate the ADCETRIS collaboration, which it may do for any reason upon prior written notice to us, we would

not receive milestone payments, co-funded development payments or royalties for the sale of ADCETRIS outside the United States and Canada. As a result of such termination, we may have to engage another collaborator to complete the ADCETRIS development process and to commercialize ADCETRIS outside the United States and Canada, or to complete the development process and undertake commercializing ADCETRIS outside the United States and Canada ourselves, either of which could significantly delay the

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continued development and commercialization of ADCETRIS and increase our costs. Similarly, both Astellas and Genmab have the right to opt-out of their co-development obligations relating to enfortumab vedotin and tisotumab vedotin, respectively. If either Astellas or Genmab were to opt-out of their co-development collaborations with us, this would significantly delay the development of the impacted product candidate and increase our costs. Any of these events could significantly harm our financial position, adversely affect our stock price and require us to incur all the costs of developing and commercializing ADCETRIS, enfortumab vedotin or tisotumab vedotin, which are now being co-funded by our collaboration partners. In the future, we may not be able to locate third-party collaborators to develop and market products and product candidates utilizing or incorporating our technologies, and we may lack the capital and resources necessary to develop and market these products and product candidates alone.

We face intense competition and rapid technological change, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Many third parties compete with us in developing various approaches to treating cancer. They include pharmaceutical companies, biotechnology companies, academic institutions and other research organizations.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approval and marketing than we do. In addition, many of these competitors are active in seeking patent protection and licensing arrangements in anticipation of collecting royalties for use of technology that they have developed. Smaller or 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, as well as in acquiring technologies complementary to our programs.

With respect to ADCETRIS, there are several other FDA-approved drugs for its approved indications. Bristol-Myers Squibb s nivolumab (Opdivo) and Merck s pembrolizumab (Keytruda) are approved for the treatment of certain patients with relapsed or refractory classical Hodgkin lymphoma, and Celgene s romidepsin (Istodax) and Spectrum Pharmaceuticals pralatrexate (Folotyn) and belinostat (Beleodaq) are approved for relapsed or refractory sALCL among other T-cell lymphomas. The competition ADCETRIS faces from these and other therapies is intensifying. Additionally, Merck is conducting a phase 3 clinical trial in relapsed or refractory classical Hodgkin lymphoma comparing pembrolizumab (Keytruda) with ADCETRIS. If this clinical trial demonstrates that pembrolizumab is more effective than ADCETRIS in that treatment setting, our sales of ADCETRIS would be negatively impacted. We are also aware of multiple investigational agents that are currently being studied, including Roche s atezolizumab, Pfizer s avelumab, and Kyowa s mogamulizumab, which, if successful, may compete with ADCETRIS in the future. Data have also been presented on several developing technologies, including bispecific antibodies and CAR modified T-cell therapies that may compete with ADCETRIS in the future. Further, there are many competing approaches used in the treatment of patients in ADCETRIS four approved indications, including autologous hematopoietic stem cell transplant, allogeneic stem cell transplant, combination chemotherapy, clinical trials with experimental agents and single-agent regimens.

With respect to enfortumab vedotin, treatment in second line metastatic urothelial cancer is limited to CPI monotherapy or generic chemotherapy. There are other investigational agents that, if approved, could be competitive with enfortumab vedotin, including Immunomedics sacituzumab govitecan and Lilly s ramucirumab.

With respect to tisotumab vedotin, we are aware of other companies that currently have products in development for the treatment of late-stage cervical cancer which could be competitive with tisotumab vedotin, including Agenus, Astrazeneca, Bristol-Myers Squibb, Immunomedics, Innovent Biologics, Merck, and Roche.

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In addition, several CPIs that are FDA-approved in other treatment settings are being explored for the treatment of late-stage cervical cancer in ongoing phase 2 clinical trials.

Many other pharmaceutical and biotechnology companies are developing and/or marketing therapies for the same types of cancer that our product candidates are designed and being developed to treat. For example, we believe that companies including AbbVie, ADC Therapeutics, Affimed, Agios, Amgen, Astellas, Bayer, Biogen, Bristol-Myers Squibb, Celgene, Eisai, Genentech, GSK, Gilead, ImmunoGen, Immunomedics, Infinity, Karyopharm, MedImmune, MEI Pharma, Merck, Novartis, Pfizer, Sanofi-Aventis, Spectrum Pharmaceuticals, Takeda, Teva, and Xencor are developing and/or marketing products or technologies that may compete with ours. In addition, our ADC collaborators may develop compounds utilizing our technology that may compete with product candidates that we are developing.

We are aware of other companies that have technologies that may be competitive with ours, including Astellas, AstraZeneca, Bristol-Myers Squibb, ImmunoGen, Immunomedics, MedImmune, Mersana and Pfizer, all of which have ADC technology. ImmunoGen has several ADCs in development that may compete with our product candidates. ImmunoGen has also established partnerships with other pharmaceutical and biotechnology companies to allow those other companies to utilize ImmunoGen s technology, including Sanofi-Aventis, Genentech, Novartis, Takeda and Lilly. We are also aware of a number of companies developing monoclonal antibodies directed at the same antigen targets or for the treatment of the same diseases as our product candidates. For example, we believe Amgen and Xencor have anti-CD19 programs that may be competitive with our product candidates.

In addition, in the United States, the Biologics Price Competition and Innovation Act of 2009 created an abbreviated approval pathway for biological products that are demonstrated to be highly similar or biosimilar to or interchangeable with an FDA-approved biological product. This pathway allows competitors to reference the FDA s prior approvals regarding innovative biological products and data submitted with a BLA to obtain approval of a biosimilar application 12 years after the time of approval of the innovative biological product. The 12-year exclusivity period runs from the initial approval of the innovator product and not from approval of a new indication. In addition, the 12-year exclusivity period does not prevent another company from independently developing a product that is highly similar to the innovative product, generating all the data necessary for a full BLA and seeking approval. Exclusivity only assures that another company cannot rely on the FDA s prior approvals in approving a BLA for an innovator s biological product to support the biosimilar product s approval. Further, under the FDA s current interpretation, it is possible that a biosimilar applicant could obtain approval for one or more of the indications approved for the innovator product by extrapolating clinical data from one indication to support approval for other indications. The FDA approved the first biosimilar product in the United States in May 2015. In the European Union, the European Commission has granted marketing authorizations for several biosimilars pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued since 2005. We are aware of many pharmaceutical and biotechnology and other companies that are actively engaged in research and development of biosimilars or interchangeable products.

It is possible that our competitors will succeed in developing technologies that are more effective than ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates or that would render our technology obsolete or noncompetitive, or will succeed in developing biosimilar or interchangeable products for ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates. We anticipate that we will continue to face increasing competition in the future as new companies enter our market and scientific developments surrounding biosimilars and other cancer therapies continue to accelerate. We cannot predict to what extent the entry of biosimilars or other competing products will impact potential future sales of ADCETRIS, enfortumab vedotin, tisotumab vedotin or our other product candidates.

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Our operating results are difficult to predict and may fluctuate. If our operating results are below the expectations of securities analysts or investors, the trading price of our stock could decline.

Our operating results are difficult to predict and may fluctuate significantly from quarter to quarter and year to year. In addition, although we provide sales guidance for ADCETRIS from time to time, you should not rely on ADCETRIS sales results in any period as being indicative of future performance. Such guidance is based on assumptions that may be incorrect or that may change from quarter to quarter. Sales of ADCETRIS have, on occasion, been below the expectations of securities analysts and investors and have been below prior period sales, and sales of ADCETRIS in the future may also be below prior period sales, our own guidance and/or the expectations of securities analysts and investors. To the extent that we do not meet our guidance or the expectations of analysts or investors, our stock price may be adversely impacted, perhaps significantly. We believe that our quarterly and annual results of operations may be affected by a variety of factors, including:

customer ordering patterns for ADCETRIS, which may vary significantly from period to period;

the overall level of demand for ADCETRIS, including the impact of any competitive or biosimilar products and the duration of therapy for patients receiving ADCETRIS;

the extent to which coverage and reimbursement for ADCETRIS is available from government and health administration authorities, private health insurers, managed care programs and other third-party payers;

changes in the amount of deductions from gross sales, including government-mandated rebates, chargebacks and discounts that can vary because of changes to the government discount percentage, including increases in the government discount percentage resulting from price increases we have taken or may take in the future, or due to different levels of utilization by entities entitled to government rebates and discounts and changes in patient demographics;

increases in the scope of eligibility for customers to purchase ADCETRIS at the discounted government price or to obtain government-mandated rebates on purchases of ADCETRIS;

changes in our cost of sales;

the incidence rate of new patients in ADCETRIS approved indications;

the timing, cost and level of investment in our sales and marketing efforts to support ADCETRIS sales;

the timing, cost and level of investment in our research and development and other activities involving ADCETRIS, enfortumab vedotin, tisotumab vedotin and our product candidates by us or our collaborators;

changes in the price of the common stock of Immunomedics that affect the valuation of the Immunomedics common stock that we hold; and

expenditures we will or may incur to develop and/or commercialize any additional products, product candidates, or technologies that we may develop, in-license, or acquire.

In addition, we have entered into licensing and collaboration agreements with other companies that include development funding and milestone payments to us, and we expect that amounts earned from our collaboration agreements will continue to be an important source of our revenues. Accordingly, our revenues will also depend on development funding and the achievement of development and clinical milestones under our existing collaboration and license agreements, including, in particular, our ADCETRIS collaboration with Takeda, as well as entering into potential new collaboration and license agreements. These upfront and milestone payments may vary significantly from quarter to quarter and any such variance could cause a significant fluctuation in our operating results from one quarter to the next.

Further, changes in our operations, such as increased development, manufacturing and clinical trial expenses in connection with our expanding pipeline programs, or our undertaking of additional programs, business

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activities, the anticipated completion of the Cascadian Acquisition and the integration of Cascadian s business into our existing operations, or entry into strategic transactions, including potential future acquisitions of products, technologies or businesses may also cause significant fluctuations in our expenses. In addition, we measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award, and recognize the cost as an expense over the employee s requisite service period. As the variables that we use as a basis for valuing these awards change over time, including our underlying stock price, the magnitude of the expense that we must recognize may vary significantly. Additionally, we have implemented long-term incentive plans for our employees, and the incentives provided under these plans are contingent upon the achievement of certain regulatory milestones. Costs of performance-based compensation under our long-term incentive plans are not recorded as an expense until the achievement of the applicable milestones is deemed probable of being met, which may result in large fluctuations to the expense we must recognize in any particular period.

Additionally, as of December 31, 2017, we held 11.7 million shares of Immunomedics common stock. Beginning on January 1, 2018, we adopted ASU 2016-01 Financial Instruments: Overall, and as a result, we will record changes in the fair value of equity securities, including the Immunomedics common stock, in net income or loss, which is expected to increase the volatility of net income or loss to the extent that we continue to hold Immunomedics common stock or other equity securities.

For these and other reasons, it is difficult for us to accurately forecast future sales of ADCETRIS, collaboration and license agreement revenues, royalty revenues, operating expenses or future profits or losses. As a result, our operating results in future periods could be below our guidance or the expectations of securities analysts or investors, which could cause the trading price of our common stock to decline, perhaps substantially.

We have a history of net losses. We expect to continue to incur net losses and may not achieve future profitability for some time, if at all.

We have incurred substantial net losses in each of our years of operation. We have incurred these losses principally from costs incurred in our research and development programs and from our selling, general and administrative expenses. We expect to continue to spend substantial amounts on research and development, including amounts for conducting required post-approval and other clinical trials of, and seeking additional regulatory approvals for, ADCETRIS as well as commercializing ADCETRIS for the treatment of patients in its four approved indications. In addition, we expect to make substantial expenditures to further develop and potentially commercialize enfortumab vedotin, tisotumab vedotin and our product candidates. Likewise, in connection with the anticipated consummation of the Cascadian Acquisition, we have incurred and expect to incur substantial expenses, including to further develop and potentially commercialize tucatinib. Accordingly, we expect to continue to incur net losses and may not achieve profitability in the future for some time, if at all. Although we recognize revenue from ADCETRIS product sales and we continue to earn amounts under our collaboration agreements, our revenue and profit potential is unproven and our limited commercialization history makes our future operating results difficult to predict. Even if we do achieve profitability in the future, we may not be able to sustain or increase profitability on a quarterly or annual basis. If we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

We have engaged in, and may in the future engage in strategic transactions that increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We actively evaluate various strategic transactions on an ongoing basis, including licensing or otherwise acquiring complementary products, technologies or businesses, and we recently announced the Cascadian Acquisition. Any potential acquisitions or in-licensing transactions, including the Cascadian Acquisition, may entail numerous risks, including but not limited to:

- risks associated with satisfying the closing conditions relating to such transactions and realizing their anticipated benefits;

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- increased operating expenses and cash requirements;
- difficulty integrating acquired technologies, products, operations, and personnel with our existing business;
- diversion of management s attention in connection with both negotiating the acquisition or license and integrating the business, technology or product;
- retention of key employees;
- uncertainties in our ability to maintain key business relationships of any acquired entities;
- strain on managerial and operational resources;
- difficulty implementing and maintaining effective internal control over financial reporting at businesses that we acquire, particularly if they are not located near our existing operations;
- exposure to unforeseen liabilities of acquired companies or companies in which we invest; and
- potential costly and time-consuming litigation, including stockholder lawsuits.

As a result of these or other problems and risks, businesses, technologies or products we acquire or invest in or obtain licenses to may not produce the revenues, earnings or business synergies that we anticipated, acquired or licensed technologies may not result in regulatory approvals, and acquired or licensed products may not perform as expected. As a result, we may incur higher costs and realize lower revenues than we had anticipated. We cannot assure you that any acquisitions or investments we have made or may make in the future, including the Cascadian Acquisition, will be completed or that, if completed, the acquired business, licenses, investments, products, or technologies will generate sufficient revenue to offset the negative costs or other negative effects on our business. Failure to manage effectively our growth through acquisition or in-licensing transactions could adversely affect our growth prospects, business, results of operations, financial condition, and cash flow.

In addition, we may spend significant amounts, issue dilutive securities, assume or incur significant debt obligations, incur large one-time expenses and acquire intangible assets in connection with acquisitions and in-licensing transactions that could result in significant future amortization expense and write-offs. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business. Other pharmaceutical companies, many of which may have substantially greater financial, marketing and sales resources, compete with us for these opportunities. Even if appropriate opportunities are available, we may not be able to successfully identify them or we may not have the financial resources necessary to pursue them, and if pursued, we may be unable to structure and execute transactions in the anticipated timeframe, or at all.

Even if we are able to successfully identify and acquire complementary products, technologies or businesses, we cannot assure you that we will be able to successfully manage the risks associated with integrating acquired products, technologies or businesses or the risks arising from anticipated and unanticipated problems in connection with an acquisition or in-licensing transaction. Further, while we seek to mitigate risks and liabilities of potential acquisitions and in-licensing transactions through, among other things, due diligence, there may be risks and liabilities that such due diligence efforts fail to discover, that are not disclosed to us, or that we inadequately assess. Any failure in identifying and managing

these risks and uncertainties effectively, including in connection with the Cascadian Acquisition, would have a material adverse effect on our business. Additionally, we may not realize the anticipated benefits of such transactions, including the possibility that expected synergies and accretion will not be realized or will not be realized within the expected time frame.

Our current product candidates are in various stages of development, and it is possible that none of our product candidates will ever become commercial products.

Our clinical-stage product candidates include eight ADC programs, which consist of enfortumab vedotin, tisotumab vedotin, ladiratuzumab vedotin, or SGN-LIV1A, denintuzumab mafodotin, or SGN-CD19A,

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SGN-CD19B, SGN-CD123A, SGN-CD33A and SGN-CD352A, as well as two immuno-oncology agents, SEA-CD40, which is based on our sugar-engineered antibody, or SEA, technology, and SGN-2FF, which is a novel small molecule. Other than enfortumab vedotin and tisotumab vedotin, which are in or expected to enter pivotal trials based on only limited phase 1 clinical data, our current product candidates are in relatively early stages of development. All of our product candidates will require significant further development, financial resources and personnel to obtain regulatory approval and develop into commercially viable products, if at all.

If a product candidate fails at any stage of development or we or our collaborators otherwise determine to discontinue development of that product candidate, we will not have the anticipated revenues from that product candidate to fund our operations, and we may not receive any return on our investment in that product candidate. Moreover, we still have only limited data from our early trials of our product candidates. In this regard, preclinical studies and any encouraging or positive preliminary and interim data from our clinical trials of our product candidates may not be predictive of the results of ongoing or later clinical trials. Even if we or our collaborators are able to complete our planned clinical trials of our product candidates according to our current development timeline, the encouraging or positive results from clinical trials of our product candidates in earlier stage trials may not be replicated in subsequent clinical trial results. As a result, we and our collaborators may conduct lengthy and expensive clinical trials of our product candidates only to learn that a product candidate is not an effective treatment or is not superior to existing approved therapies, or has an unacceptable safety profile, which could prevent or significantly delay regulatory approval for such product candidate or could cause us to discontinue the development of such product candidate. Also, 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 earlier stage clinical trials. For example, we are conducting a pivotal phase 2 trial of enfortumab vedotin with Astellas for locally advanced or metastatic urothelial cancer patients who have been previously treated with checkpoint inhibitor therapy, and are planning to conduct a pivotal phase 2 trial of tisotumab vedotin with Genmab in patients with recurrent and/or metastatic cervical cancer, in each case based on only limited phase 1 clinical data. Neither enfortumab vedotin nor tisotumab vedotin have previously been evaluated in later stage clinical trials and we cannot be certain that the design of, or data collected from, these trials will be adequate to demonstrate the safety and efficacy of enfortumab vedotin or tisotumab vedotin, or will otherwise be sufficient to support FDA or any foreign regulatory approvals. Differences in earlier and later stage clinical trials 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 encouraging or positive results in early-stage development. We cannot be certain that we will not face similar setbacks in our ongoing or planned clinical trials, including in the ongoing and planned pivotal phase 2 trials for enfortumab vedotin and tisotumab vedotin. We have not yet completed any late-stage clinical trials for our current product candidates, and if we or our collaborators fail to produce positive results in our ongoing or 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.

Due to the uncertain and time-consuming clinical development and regulatory approval process, we may not successfully develop any of our product candidates, or we may choose to discontinue the development of product candidates for a variety of reasons such as due to safety, risk versus benefit profile, exclusivity, competitive landscape, or prioritization of our resources. It is possible that none of our current product candidates will ever become commercial products. In addition, we expect that much of our effort and many of our expenditures over the next few years will be devoted to the additional clinical development of and commercialization activities associated with ADCETRIS, which may restrict or delay our ability to develop our clinical and preclinical product candidates. Likewise, we have to make decisions about which clinical stage and pre-clinical product candidates to develop and advance, and we may not have the resources to invest in all of our current product candidates, particularly if we are successful in completing the Cascadian Acquisition, or clinical data and other development considerations may not support the advancement of one or more product candidates. Decision-making about which product candidates to prioritize involves inherent uncertainty, and our development program decision-making and resource prioritization decisions may not improve our results of operations or prospects or

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enhance the value of our common stock. Our failure to effectively advance our development programs could have a material adverse effect on our business and prospects, and cause the price of our common stock to decline.

To date, we have depended on a small number of collaborators for a substantial portion of our revenue. The loss of any one of these collaborators or changes in their product development or business strategy could result in a material decline in our revenue.

We have collaborations with a limited number of companies. To date, a substantial portion of our revenue has resulted from payments made under agreements with our corporate collaborators, and although ADCETRIS sales currently comprise a greater proportion of our revenue, we expect that a portion of our revenue will continue to come from corporate collaborations. Even though we market ADCETRIS in the United States and Canada, our revenues still depend in part on Takeda s ability and willingness to market ADCETRIS outside of the United States and Canada. The loss of our collaborators, especially Takeda, changes in product development or business strategies of our collaborators, or the failure of our collaborators to perform their obligations under their agreements with us for any reason, including paying license or technology fees, milestone payments, royalties or reimbursements, could have a material adverse effect on our financial performance. Payments under our existing and potential future collaboration agreements are also subject to significant fluctuations in both timing and amount, which could cause our revenue to fall below the expectations of securities analysts and investors and cause a decrease in our stock price.

We are dependent upon a small number of distributors for a significant portion of our net sales, and the loss of, or significant reduction or cancellation in sales to, any one of these distributors could adversely affect our operations and financial condition.

In the United States and Canada, we sell ADCETRIS through a limited number of pharmaceutical distributors. Customers order ADCETRIS through these distributors. We generally receive orders from distributors and ship product directly to the customer. We do not promote ADCETRIS to these distributors and they do not set or determine demand for ADCETRIS; however, our ability to effectively commercialize ADCETRIS will depend, in part, on the performance of these distributors. Although we believe we can find alternative distributors on relatively short notice, the loss of a major distributor could materially and adversely affect our results of operations and financial condition.

We currently rely on third-party manufacturers and other third parties for production of our drug products and our dependence on these manufacturers may impair the continued development and commercialization of ADCETRIS and our product candidates.

Although we recently acquired a biologics manufacturing facility located in Bothell, Washington, we rely and expect to continue to rely on corporate collaborators and contract manufacturing organizations to supply drug product or intermediates for commercial supply and our IND-enabling studies and clinical trials. For the monoclonal antibody used in ADCETRIS, we have contracted with AbbVie for clinical and commercial supplies. For the drug linker used in ADCETRIS, we have contracted with Sigma Aldrich Fine Chemicals, or SAFC, for clinical and commercial supplies. We have multiple contract manufacturers for conjugating the drug linker to the antibody and producing the ADCETRIS product. For our ADC product candidates, multiple contract manufacturers, including AbbVie and SAFC, perform antibody and drug-linker manufacturing and several other contract manufacturers perform conjugation of the drug-linker to the antibody and fill/finish of the drug product. In addition, we rely on other third parties to perform additional steps in the manufacturing process, including shipping and storage of ADCETRIS and our product candidates. For the foreseeable future, we expect to continue to rely on contract manufacturers and other third parties to produce, vial and store sufficient quantities of ADCETRIS for use in our clinical trials and for commercial sale. If our contract manufacturers or other third parties fail to deliver ADCETRIS for clinical use or sale on a timely basis, with sufficient quality, and at commercially reasonable prices, and we fail to find replacement manufacturers or to develop our own manufacturing capabilities, we may be required to delay or suspend clinical trials or otherwise discontinue development, production and sale of ADCETRIS. Moreover, contract manufacturers have a limited number of

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facilities in which ADCETRIS can be produced and any interruption of the operation of those facilities due to events such as equipment malfunction or failure or damage to the facility by natural disasters or as the result of regulatory actions could result in the cancellation of shipments, loss of product in the manufacturing process, a shortfall in ADCETRIS supply, or the inability to sell our products in the U.S. or abroad. In addition, we have committed to provide Takeda with their needs of certain parts of the ADCETRIS supply chain for a limited period of time, which may require us to arrange for additional manufacturing supply. Moreover, we depend on outside vendors for the supply of raw materials used to produce ADCETRIS. If the third-party suppliers were to cease production or otherwise fail to supply us with quality raw materials and we were unable to contract on acceptable terms for these raw materials with alternative suppliers, our ability to have ADCETRIS manufactured to meet commercial and clinical requirements would be adversely affected.

We are planning to use our own manufacturing facility to support our growing pipeline. As an organization, we have no prior experience operating a manufacturing facility.

In October 2017, we acquired a biologics manufacturing facility located in Bothell, Washington, which facility we intend to use to support our clinical supply needs. Under the terms of this acquisition, we are required to operate the facility and produce certain clinical drug product components for BMS under a transitional services agreement for a period of time. As an organization, we have no prior experience manufacturing for ourselves or other parties, and operating this facility requires us to comply with complex regulations and to continue to hire and retain experienced scientific, quality control, quality assurance and manufacturing personnel. We could encounter challenges in operating the manufacturing facility in compliance with cGMP, regulatory or other applicable requirements, resulting in potential negative consequences, including regulatory actions, which could undermine our ability to utilize this facility for our own manufacturing needs and/or result in a breach of our contractual manufacturing obligations to BMS. Any of these risks, if actualized, could materially and adversely affect our business and financial position. In addition, despite the acquisition of this facility, we nonetheless expect to continue to rely on corporate collaborators and contract manufacturing organizations to supply drug product and intermediates for commercial supply and our IND-enabling studies and clinical trials. Our continuing dependence on these manufacturers may impair the continued development and commercialization of ADCETRIS and our product candidates.

We are subject to various state and federal laws and regulations, including healthcare laws and regulations, that may impact our business and could subject us to significant fines and penalties or other negative consequences.

Our operations may be directly or indirectly subject to various state and federal healthcare laws, including, without limitation, the federal Anti-Kickback Statute, federal civil and criminal false claims laws, HIPAA/HITECH, the federal civil monetary penalties statute, and the federal transparency requirements under the PPACA. These laws may impact, among other things, the sales, marketing and education programs for ADCETRIS.

The federal Anti-Kickback Statute prohibits persons and entities from knowingly and willingly soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. Several courts have interpreted the statute s intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. Additionally, PPACA amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs.

The federal civil and criminal false claims laws, including the civil False Claims Act, prohibit, among other things, persons or entities from knowingly presenting, or causing to be presented, a false claim to, or the knowing

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use of false statements to obtain payment from or approval by the federal government, including the Medicare and Medicaid programs, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim or to avoid, decrease, or conceal an obligation to pay money to the federal government. PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act. Suits filed under the civil False Claims Act, known as qui tam actions, can be brought by any individual on behalf of the government and such individuals, commonly known as whistleblowers, may share in any amounts paid by the entity to the government in fines or settlement. Many pharmaceutical and other healthcare companies have recently been investigated or subject to lawsuits by whistleblowers and have reached substantial financial settlements with the federal government under the False Claims Act for a variety of alleged improper marketing or other activities, including providing free product to customers with the expectation that the customers would bill federal programs for the product; providing consulting fees, grants, free travel, and other benefits to physicians to induce them to prescribe the company s products; and inflating prices reported to private price publication services, which are used to set drug reimbursement rates under government healthcare programs.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false, fictitious, or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items, or services. Similar to the Anti-Kickback Statute, PPACA amended the intent requirement of the criminal healthcare fraud statutes such that a person or entity no longer needs to have actual knowledge of the statute or intent to violate it.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, governs certain types of individuals and entities with respect to the conduct of certain electronic healthcare transactions and imposes certain obligations with respect to the security and privacy of protected health information.

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

The federal transparency requirements under PPACA, the Physician Payments Sunshine Act, require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children s Health Insurance Program to annually report to the U.S. Department of Health and Human Services Centers for Medicare & Medicaid Services information related to payments and other transfers of value to physicians and teaching hospitals, and physician ownership and investment interests.

There are foreign and state law equivalents of these laws and regulations, such as anti-kickback, false claims, and data privacy and security laws, to which we are currently and/or may in the future, be subject. We may also be subject to state laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. Many of these state laws differ from each other in significant ways, thus complicating compliance efforts.

The FDA and other governmental authorities also actively investigate allegations of off-label promotion activities in order to enforce regulations prohibiting these types of activities. In recent years, private whistleblowers have also pursued False Claims Act cases against a number of pharmaceutical companies for causing false claims to be submitted as a result of off-label promotion. If we are found to have promoted an approved product, including ADCETRIS, for off-label uses we may be subject to significant liability, including

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civil and administrative financial penalties and other remedies as well as criminal financial penalties and other sanctions. Even when a company is not determined to have engaged in off-label promotion, the allegation from government authorities or market participants that a company has engaged in such activities could have a significant impact on the company s sales, business and financial condition. The U.S. government has also required companies to enter into complex corporate integrity agreements and/or non-prosecution agreements that impose significant reporting and other burdens on the affected companies.

We are also subject to numerous other laws and regulations that are not specific to the healthcare industry. For instance, the U.S. Foreign Corrupt Practices Act, or FCPA, prohibits companies and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under the FCPA, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, governmental staff members, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls.

The number and complexity of both U.S. federal and state laws continue to increase. In addition to enforcement by governmental agencies, we also expect a continuation of the trend of private plaintiff lawsuits against pharmaceutical manufacturers under the whistleblower provisions of the False Claims Act and state equivalents or other laws and regulations such as securities rules and the evolution of new theories of liability under those statutes. Government agencies will likely continue to intervene in such private whistleblower lawsuits and such intervention typically raises the company s cost significantly. For example, federal enforcement agencies have recently scrutinized product and patient assistance programs, including manufacturer reimbursement support services as well as relationships with specialty pharmacies. Several investigations have resulted in government enforcement authorities intervening in related whistleblower lawsuits and obtaining significant civil and criminal settlements.

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

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As we expand our operations internationally, we are subject to an increased risk of conducting activities in a manner that violates applicable anti-bribery or anti-corruption laws. We are also subject to foreign laws and regulations covering data privacy and the protection of health-related and other personal information. These laws and regulations could create liability for us or increase our cost of doing business, any of which could have a material adverse effect on our business, results of operations and growth prospects.

We are expanding our operations internationally, and we currently have subsidiaries in the U.K., Switzerland and Canada. Though we are at an early stage with our international expansion, our business activities outside of the United States are subject to the FCPA, which is described above, and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we currently and may in the future operate, including the U.K. Bribery Act. The U.K. Bribery Act prohibits giving, offering, or promising bribes to any person, including non-U.K. government officials and private persons, as well as requesting, agreeing to receive, or accepting bribes from any person. In addition, under the U.K. Bribery Act, companies which carry on a business or part of a business in the U.K. may be held liable for bribes given, offered or promised to any person, including non-U.K. government officials and private persons, by employees and persons associated with such company in order to obtain or retain business or a business advantage for such company. In the course of expanding our operations internationally, we will need to establish and expand business relationships with various third parties, such as independent contractors, distributors, vendors, advocacy groups and physicians, and we will interact more frequently with foreign officials, including regulatory authorities and physicians employed by state-run healthcare institutions who may be deemed to be foreign officials under the FCPA, U.K. Bribery Act or similar laws of other countries that may govern our activities. Any interactions with any such parties or individuals where compensation is provided that are found to be in violation of such laws could result in substantial fines and penalties and could materially harm our business. Furthermore, any finding of a violation under one country s laws may increase the likelihood that we will be prosecuted and be found to have violated another country s laws. If our business practices outside the United States are found to be in violation of the FCPA, U.K. Bribery Act or other similar laws, we may be subject to significant civil and criminal penalties which could have a material adverse effect on our business, results of operations and growth prospects. We are also subject to foreign laws and regulations covering data privacy and the protection of health-related and other personal information. In this regard, European Union, or EU, member states and other foreign jurisdictions, including Switzerland, have adopted data protection laws and regulations which impose significant compliance obligations. Failure to comply with these laws could lead to government enforcement actions and significant penalties against us, which could have a material adverse effect on our business, results of operations and growth prospects. In December 2015, a proposal for an EU General Data Protection Regulation, intended to replace the current EU Data Protection Directive, was agreed between the European Parliament, the Council of the European Union and the European Commission. The EU General Data Protection Regulation, which was officially adopted in April 2016 and will be applicable in May 2018, will introduce new data protection requirements in the EU, as well as substantial fines for breaches of the data protection rules. The EU General Data Protection Regulation will increase our responsibility and liability in relation to personal data that we process, including in clinical trials, and we may be required to put in place additional mechanisms to ensure compliance with the new EU data protection rules, which could divert management s attention and increase our cost of doing business.

Any failures or further setbacks in our ADC development program would negatively affect our business and financial position.

ADCETRIS and our enfortumab vedotin, tisotumab vedotin, ladiratuzumab vedotin, denintuzumab mafodotin, SGN-CD19B, SGN-CD123A, SGN-CD33A and SGN-CD352A product candidates are all based on our ADC technology, which utilizes proprietary stable linkers and potent cell-killing synthetic agents. Our ADC technology is also the basis of our collaborations with AbbVie, Astellas, Bayer, Celldex, Genentech, GSK, Pfizer, and Progenics, and our collaboration agreements with Takeda, Astellas, and Genmab. Although ADCETRIS has received marketing approval in the United States, Canada, the European Union, Japan and other countries, ADCETRIS is our first and only ADC product that has been approved for commercial sale in any jurisdiction. In addition, certain of our ADC product candidates include additional proprietary technologies that have not yet been proven in late stage clinical development. Any failures or further setbacks in our ADC

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development program or with respect to our additional proprietary technologies, including adverse effects resulting from the use of this technology in human clinical trials and/or the imposition of additional clinical holds on our trials of any of our other product candidates, could have a detrimental impact on the continued commercialization of ADCETRIS in its current or any potential future approved indications and on our internal product candidate pipeline, as well as our ability to maintain and/or enter into new corporate collaborations regarding our ADC technology, which would negatively affect our business and financial position.

We have been named a defendant in a purported securities class action lawsuit and a stockholder derivative lawsuit. These, and potential similar or related lawsuits, could result in substantial damages and may divert management s time and attention from our business.

On January 10, 2017, a purported securities class action lawsuit was commenced in the United States District Court for the Western District of Washington, naming as defendants us and certain of our officers. The lawsuit alleges material misrepresentations and omissions in public statements regarding our business, operational and compliance policies, violations by all named defendants of Section 10(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Rule 10b-5 thereunder, as well as violations of Section 20(a) of the Exchange Act. The complaint seeks compensatory damages of an undisclosed amount. The plaintiff alleges, among other things, that we made false and/or misleading statements and/or failed to disclose that SGN-CD33A presents a significant risk of fatal hepatotoxicity and that we had therefore overstated the viability of SGN-CD33A as a treatment for AML. We filed a motion to dismiss this complaint on July 28, 2017. On October 18, 2017, the Court granted our motion to dismiss with leave for plaintiff to file a second consolidated amended complaint. Plaintiff filed a second consolidated amended complaint on November 17, 2017 and we filed a motion to dismiss this new complaint on January 5, 2018. It is possible that additional suits will be filed, or allegations received from stockholders, with respect to these same matters and also naming us and/or our officers and directors as defendants.

On March 29, 2017, a stockholder derivative lawsuit was filed in Washington Superior Court for the County of Snohomish. The complaint names as defendants certain of our current and former executives and members of our board of directors. We are named as a nominal defendant. The complaint generally makes the same allegations as the securities class action, claiming that the individual defendants breached their duties to us. The complaint seeks unspecified damages, disgorgement of compensation, corporate governance changes, and attorneys fees and costs. Because the complaint is derivative in nature, it does not seek monetary damages from us. On June 8, 2017, the Snohomish County Superior Court entered an order staying this derivative action until resolution of the motion to dismiss the class action suit above. On October 18, 2017, in light of the granting of our motion to dismiss the first class action complaint, the parties in the derivative action filed a joint status report with the Snohomish County Superior Court stipulating to continue to stay the derivative action pending a ruling on a motion to dismiss the second consolidated amended class action complaint.

These lawsuits and any other related lawsuits are subject to inherent uncertainties, and the actual costs to be incurred relating to the lawsuits will depend upon many unknown factors. The outcome of these lawsuits is necessarily uncertain, and we could be forced to expend significant resources in the defense of these lawsuits, and we may not prevail. Monitoring and defending against legal actions is time-consuming for our management and detracts from our ability to fully focus our internal resources on our business activities, which could result in delays of our clinical trials or our development and commercialization efforts. In addition, we may incur substantial legal fees and costs in connection with these lawsuits. We are also generally obligated, to the extent permitted by law, to indemnify our current and former directors and officers who are named as defendants in these and similar lawsuits. We are not currently able to estimate the possible cost to us from these matters, as these lawsuits are currently at an early stage and we cannot be certain how long it may take to resolve these matters or the possible amount of any damages that we may be required to pay. We have not established any reserves for any potential liability relating to these lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. Decisions adverse to our interests in these lawsuits could result in the payment of substantial damages, or possibly fines, and could have a material adverse

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effect on our cash flow, results of operations and financial position. In addition, the uncertainty of the currently pending litigation could lead to increased volatility in our stock price.

We may need to raise significant amounts of additional capital that may not be available to us.

We expect to make additional capital outlays and to increase operating expenditures over the next several years as we hire additional employees, support our preclinical development, manufacturing and clinical trial activities for ADCETRIS and our other pipeline programs, and expand internationally, as well as commercialize ADCETRIS and position ADCETRIS for potential additional regulatory approvals. In addition, we anticipate committing substantial capital resources to the transactions contemplated by the Merger Agreement and the anticipated integration and development activities related to the acquired Cascadian business and Cascadian s product candidates, including tucatinib. Our commitment of resources to the continuing development, regulatory and commercialization activities for ADCETRIS, and the research, continued development and manufacturing of our product candidates will likely require us to raise substantial amounts of additional capital. Further, we actively evaluate various strategic transactions on an ongoing basis, including licensing or otherwise acquiring complementary products, technologies or businesses, and we may require significant additional capital in order to complete or otherwise provide funding for any additional acquisitions. We may seek additional funding through some or all of the following methods: corporate collaborations, licensing arrangements and public or private debt or equity financings. We do not know whether additional capital will be available when needed, or that, if available, we will obtain financing on terms favorable to us or our stockholders. If we are unable to raise additional funds when we need them, we may be required to delay, reduce the scope of, or eliminate one or more of our development programs, which may adversely affect our business and operations. Our future capital requirements will depend upon a number of factors, including:

- the level of sales and market acceptance of ADCETRIS;
- the rate of progress and cost of the confirmatory post-approval study that we are required to conduct as a condition to the FDA s accelerated approval of ADCETRIS in the relapsed sALCL indication;
- the time and costs involved in obtaining regulatory approvals of ADCETRIS in additional indications, if any;
- the size, complexity, timing, progress and number of our clinical programs and our collaborations;
- the timing, receipt and amount of milestone-based payments or other revenue from our collaborations or license arrangements, including royalty revenue generated from commercial sales of ADCETRIS by Takeda;
- the cost of establishing and maintaining clinical and commercial supplies of ADCETRIS;
- the costs associated with acquisitions or licenses of additional technologies, products, or companies, including the Cascadian Acquisition, as well as licenses we may need to commercialize our products;
- the terms and timing of any future collaborative, licensing and other arrangements that we may establish;
- expenses associated with the pending and potential additional related purported securities class action or derivative lawsuits, as well as any other potential litigation;

the potential costs associated with international, state and federal taxes; and

competing technological and market developments.

In addition, changes in our spending rate may occur that would consume available capital resources sooner, such as increased development, manufacturing and clinical trial expenses in connection with our expanding pipeline programs, and the Cascadian Acquisition, or our undertaking of additional programs, business activities or entry into additional strategic transactions, including potential future acquisitions of products, technologies or businesses. To the extent that we raise additional capital by issuing equity securities, our stockholders may

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experience substantial dilution. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

During the past several years, domestic and international financial markets have experienced extreme disruption from time to time, including, among other things, high volatility and significant declines in stock prices and severely diminished liquidity and credit availability for both borrowers and investors. Such adverse capital and credit market conditions could make it more difficult to obtain additional capital on favorable terms, or at all, which could have a material adverse effect on our business and growth prospects.

We rely on license agreements for certain aspects of ADCETRIS, our product candidates and technologies such as our ADC technology. Failure to maintain these license agreements or to secure any required new licenses could prevent us from continuing to develop and commercialize ADCETRIS and our product candidates.

We have entered into agreements with third-party commercial and academic institutions to license technology for use in ADCETRIS and our ADC technology. Currently, we have license agreements with BMS and the University of Miami, among others. In addition to royalty provisions, some of these license agreements contain diligence and milestone-based termination provisions, in which case our failure to meet any agreed upon royalty or diligence requirements or milestones may allow the licensor to terminate the agreement. Many of our license agreements grant us exclusive licenses to the underlying technologies. If our licensors terminate our license agreements or if we are unable to maintain the exclusivity of our exclusive license agreements, we may be unable to continue to develop and commercialize ADCETRIS or our product candidates. Further, we have had in the past, and may in the future have, disputes with our licensors, which may impact our ability to develop and commercialize ADCETRIS or our product candidates or require us to enter into additional licenses. An adverse result in potential future disputes with our licensors may impact our ability to develop and commercialize ADCETRIS and our product candidates, or may require us to enter into additional licenses or to incur additional costs in litigation or settlement. In addition, continued development and commercialization of ADCETRIS and our product candidates will likely require us to secure licenses to additional technologies. We may not be able to secure these licenses on commercially reasonable terms, if at all.

If we are unable to enforce our intellectual property rights or if we fail to sustain and further build our intellectual property rights, we may not be able to successfully commercialize ADCETRIS or future products and competitors may be able to develop competing therapies.

Our success depends, in part, on obtaining and maintaining patent protection and successfully enforcing these patents and defending them against third-party challenges in the United States and other countries. We own multiple U.S. and foreign patents and pending patent applications for our technologies. We also have rights to issued U.S. patents, patent applications, and their foreign counterparts, relating to our monoclonal antibody, linker and drug-based technologies. Our rights to these patents and patent applications are derived in part from worldwide licenses from third parties. In addition, we have licensed certain of our U.S. and foreign patents and patent applications to third parties.

The standards that the U.S. Patent and Trademark Office, or USPTO, and foreign patent offices use to grant patents are not always applied predictably or uniformly and can change. Consequently, our pending patent applications may not be allowed and, if allowed, may not contain the type and extent of patent claims that will be adequate to conduct our business as planned. Additionally, any issued patents we currently own or obtain in the future may have a shorter patent term than expected or may not contain claims that will permit us to stop competitors from using our technology or similar technology or from copying our products. Similarly, the standards that courts use to interpret patents are not always applied predictably or uniformly and may evolve, particularly as new technologies develop. In addition, changes to patent laws in the United States or other countries may be applied retroactively to affect the validity, enforceability, or term of our patent. For example, the U.S. Supreme Court has modified some legal standards applied by the USPTO in examination of U.S. patent

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applications, which may decrease the likelihood that we will be able to obtain patents and may increase the likelihood of challenges to patents we obtain or license. In addition, changes to the U.S. patent system have come into force under the Leahy-Smith America Invents Act, or the America Invents Act, including changes from a first-to-invent system to a first to file system, changes to examination of U.S. patent applications and changes to the processes for challenging issued patents. These changes include provisions that affect the way patent applications are being filed, prosecuted and litigated. For example, the America Invents Act enacted proceedings involving post-issuance patent review procedures, such as inter partes review, or IPR, and post-grant review and covered business methods. These proceedings are conducted before the Patent Trial and Appeal Board, or PTAB, of the USPTO. Each proceeding has different eligibility criteria and different patentability challenges that can be raised. In this regard, the IPR process permits any person (except a party who has been litigating the patent for more than a year) to challenge the validity of some patents on the grounds that it was anticipated or made obvious by prior art. As a result, non-practicing entities associated with hedge funds, pharmaceutical companies who may be our competitors and others have challenged certain valuable pharmaceutical U.S. patents based on prior art through the IPR process. A decision in such a proceeding adverse to our interests could result in the loss of valuable patent rights which would have a material adverse effect on our business, financial condition, results of operations and growth prospects. In any event, the America Invents Act and any other potential future changes to the U.S. patent system could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

We rely on trade secrets and other proprietary information where we believe patent protection is not appropriate or obtainable. However, trade secrets and other proprietary information are difficult to protect. We have taken measures to protect our unpatented trade secrets and know-how, including the use of confidentiality and assignment of inventions agreements with our employees, consultants and certain contractors. It is possible, however, that these persons may breach the agreements or that our competitors may independently develop or otherwise discover our trade secrets or other proprietary information. Our research collaborators may publish confidential data or other restricted information to which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information may be impaired.

We may incur substantial costs and lose important rights or may not be able to continue to commercialize ADCETRIS or to commercialize any of our product candidates that may be approved for commercial sale as a result of litigation or other proceedings relating to patent and other intellectual property rights, and we may be required to obtain patent and other intellectual property rights from others.

We may face potential lawsuits by companies, academic institutions or others alleging infringement of their intellectual property. Because patent applications can take a few years to publish, there may be currently pending applications of which we are unaware that may later result in issued patents that adversely affect the continued commercialization of ADCETRIS or future commercialization of our product candidates in development. In addition, we are monitoring the progress of multiple pending patent applications of other organizations that, if granted, may require us to license or challenge their enforceability in order to continue commercializing ADCETRIS or to commercialize our product candidates that may be approved for commercial sale. Our challenges to patents of other organizations may