BeiGene

2019 Annual Report on Form 10-K

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, 2019

OR

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

For the transition period from to

Commission file number: 001-37686

BEIGENE, LTD.

(Exact Name of Registrant as Specified in its Charter)

Cayman Islands (State or other jurisdiction of incorporation or organization)	**98-1209416** (I.R.S. Employer Identification No.)
c/o Mourant Governance Services (Cayman) Limited **94 Solaris Avenue, Camana Bay** **Grand Cayman Cayman Islands** (Address of principal executive offices)	**KY1-1108** (Zip Code)

+1 (345) 949 4123
(Registrant's Telephone Number, Including Area Code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
American Depositary Shares, each representing 13 Ordinary Shares, par value $0.0001 per share	**BGNE**	**The NASDAQ Global Select Market**
Ordinary Shares, par value $0.0001 per share*	**06160**	**The Stock Exchange of Hong Kong Limited**

* Included in connection with the registration of the American Depositary Shares with the Securities and Exchange Commission. The ordinary shares are not registered or listed for trading in the United States but are listed for trading on The Stock Exchange of Hong Kong Limited.

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of June 28, 2019, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the ordinary shares, including in the form of American Depositary Shares ("ADSs"), each representing 13 ordinary shares, held by non-affiliates of the registrant was approximately US$4.9 billion, based upon the closing price of the registrant's ADSs on the NASDAQ Global Select Market on June 28, 2019.

As of February 14, 2020, 1,007,975,711 ordinary shares, par value $0.0001 per share, were outstanding, of which 846,730,482 ordinary shares were held in the form of 65,133,114 ADSs.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2019. Portions of such definitive proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

BeiGene, Ltd.

Annual Report on Form 10-K

TABLE OF CONTENTS

Forward-Looking Statements and Market Data

This Annual Report on Form 10-K (the "Annual Report"), contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this Annual Report, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected growth, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Forward looking statements are often identified by the use of words such as, but not limited to, "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "seek," "should," "target," "will," "would" and similar expressions or variations intended to identify forward-looking statements, although not all forward-looking statements contain those identifying words. These forward-looking statements include, among other things, statements about:

- our ability to successfully commercialize BRUKINSA™ (zanubrutinib) in the United States, for which we have obtained approval from the U.S. Food and Drug Administration ("FDA") for the treatment of adult patients with mantle cell lymphoma ("MCL") who have received at least one prior therapy, and tislelizumab in the People's Republic of China ("PRC" or "China"), for which we have received approval from the National Medical Products Administration ("NMPA") for the treatment of patients with classical Hodgkin's Lymphoma ("cHL") who have received at least two prior therapies;
- our ability to successfully obtain approvals in additional indications and territories for BRUKINSA and tislelizumab and to commercialize these and other drugs and drug candidates, if approved;
- our ability to successfully commercialize our in-licensed drugs in China, including ABRAXANE® (paclitaxel albumin-bound particles for injectable suspension), REVLIMID® (lenalidomide) and VIDAZA® (azacitidine for injection) from Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"), XGEVA® (denosumab), KYPROLIS® (carfilzomib), and BLINCYTO® (blinatumomab) from Amgen Inc. ("Amgen"), SYLVANT® (siltuximab) and QARZIBA® ▼ (dinutuximab beta), from EUSA Pharma ("EUSA"), and any other drugs we may in-license;
- our ability to successfully develop and commercialize oncology assets licensed from Amgen in China pursuant to our global strategic oncology collaboration with Amgen;
- our ability to further develop sales and marketing capabilities and launch new drugs, if approved;
- our ability to maintain and expand regulatory approvals for our drugs and drug candidates, if approved;
- the pricing and reimbursement of our drugs and drug candidates, if approved;
- the initiation, timing, progress and results of our preclinical studies and clinical trials and our research and development programs;
- our ability to advance our drug candidates into, and successfully complete, clinical trials;
- our reliance on the success of our clinical-stage drug candidates;
- our plans, expected milestones and the timing or likelihood of regulatory filings and approvals;
- the implementation of our business model, strategic plans for our business, drugs, drug candidates and technology;
- the scope of protection we (or our licensors) are able to establish and maintain for intellectual property rights covering our drugs, drug candidates and technology;
- our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights and proprietary technology of third parties;
- costs associated with enforcing or defending against intellectual property infringement, misappropriation or violation, product liability and other claims;

- regulatory developments in the United States, China, the United Kingdom, the European Union ("EU") and other jurisdictions;
- the accuracy of our estimates regarding expenses, revenues, capital requirements and our need for additional financing;
- the potential benefits of strategic collaboration and licensing agreements and our ability to enter into strategic arrangements;
- our ability to maintain and establish collaborations or licensing agreements;
- our reliance on third parties to conduct drug development, manufacturing and other services;
- our ability to manufacture and supply, or have manufactured and supplied, drug candidates for clinical development and drugs for commercial sale;
- the rate and degree of market access and acceptance and reimbursement of our drugs and drug candidates, if approved;
- developments relating to our competitors and our industry, including competing therapies;
- the size of the potential markets for our drugs and drug candidates and our ability to serve those markets;
- our ability to effectively manage our growth;
- our ability to attract and retain qualified employees and key personnel;
- statements regarding future revenue, hiring plans, expenses, capital expenditures, capital requirements and share performance;
- the future trading price of our American Depositary Shares ("ADS"), and ordinary shares, and impact of securities analysts' reports on these prices; and
- other risks and uncertainties, including those listed under "Part I — Item 1A — Risk Factors."

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in such statements, so you should not place undue reliance on them. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this Annual Report, particularly in "Part I — Item 1A — Risk Factors," that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this Annual Report and the documents that we have filed as exhibits to the Annual Report with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

This Annual Report includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, you are cautioned not to give undue weight to this information.

PART I

Unless the context requires otherwise, references in this report to "BeiGene," the "Company," "we," "us," and "our" refer to BeiGene, Ltd. and its subsidiaries, on a consolidated basis.

Item 1. Business

Overview

We are a global commercial-stage biotechnology company focused on developing and commercializing innovative molecularly-targeted and immuno-oncology cancer therapeutics. We started as a research and development company in Beijing in 2010. Over the last ten years, we have developed into a fully-integrated global biotechnology company, with significant commercial, manufacturing, and research and development capabilities.

We have built substantial commercial capabilities in the People's Republic of China ("PRC" or "China") and the United States, and are currently marketing two internally-developed drugs and three in-licensed drugs. We also anticipate introducing five more in-licensed drugs into the China market in the next one to two years. In the United States, we market BRUKINSA™ (zanubrutinib) for adult patients with mantle cell lymphoma ("MCL") who have received at least one prior therapy and in China, we have received marketing approval and are in the process of launching tislelizumab for patients with classical Hodgkin's Lymphoma ("cHL") who have received at least two prior therapies. We have filed four additional supplementary new drug applications ("sNDA") for regulatory approvals in China and are planning for launches in these additional indications in 2020. Our in-licensed portfolio includes ABRAXANE®, REVLIMID® and VIDAZA®, which we have been marketing in China since 2017 under a license from Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"). We plan on launching additional in-licensed products in China from our collaborations, including XGEVA® (denosumab), KYPROLIS® (carfilzomib) and BLINCYTO® (blinatumomab) from Amgen Inc. ("Amgen"), and SYLVANT® (siltuximab) and QARZIBA® ▼ (dinutuximab beta), from EUSA Pharma ("EUSA").

We have built deep clinical development capabilities, including a more than 1,100-person global clinical development team that is running over 60 ongoing or planned clinical trials that have enrolled over 7,500 patients and healthy subjects. We are conducting late-stage clinical trials of BRUKINSA and tislelizumab, including 26 registration or registration-enabling trials in 15 discrete cancer indications. Our internal research capabilities have yielded another late-stage asset, pamiparib, and five other internally-developed drug candidates are currently in early-stage clinical development. In addition, we have been able to leverage our capabilities and China's rising importance as a clinical science center to expand our clinical and pre-clinical portfolio with in-licensed drug candidates. We are also working with high-quality contract manufacturing organizations ("CMOs") to manufacture our internally-developed commercial and clinical products in China and globally and have built state-of-the-art small molecule and biologic manufacturing facilities in China to support the launches and potential future demand of our internally-developed products.

Based on the strength of our China-inclusive global development and commercial capabilities, we have entered into collaborations with leading pharmaceutical and biotechnology companies to develop and commercialize innovative medicines in China and the Asia-Pacific region. In October 2019, we entered into a strategic collaboration with Amgen pursuant to which we have agreed to collaborate on the commercialization of Amgen's oncology products XGEVA, KYPROLIS, and BLINCYTO in China, and the global development and future commercialization in China of up to 20 of Amgen's clinical- and late pre-clinical-stage pipeline products, including AMG 510, Amgen's first-in-class investigational KRAS G12C inhibitor.

Our Strategy

Our mission is to become a global leader in the discovery, development, and commercialization of innovative medicines for the treatment of cancer. Key elements of our strategy are as follows:

- **Realize Two Large Commercial Opportunities with BRUKINSA (zanubrutinib) and tislelizumab.** Zanubrutinib is a wholly-owned, potentially best-in-class small molecule inhibitor of Bruton's tyrosine

kinase ("BTK") for B-cell malignancies. We believe zanubrutinib may have efficacy and safety advantages compared to the other approved BTK therapies based on its ability to achieve full BTK occupancy and minimize off-target binding. There is a large global commercial opportunity for BTK inhibitors, with global revenues totaling approximately $5.8 billion in 2019 according to published reports. We believe that our clinical experience to date in over 2,500 patients, along with our broad clinical development plan, position us to capitalize on this commercial opportunity. In November 2019, we received accelerated approval for BRUKINSA from the U.S. Food and Drug Administration ("FDA") for the treatment of adult patients with MCL who have received at least one prior therapy. We have built a commercial team in the United States and launched BRUKINSA in late 2019. In addition, we have submitted two new drug applications ("NDAs") in China for zanubrutinib for the treatment of patients with relapsed or refractory ("R/R") MCL and patients with R/R chronic lymphocytic leukemia ("CLL") or small lymphocytic lymphoma ("SLL"). Both applications are being reviewed under priority review status. We are conducting a broad clinical program for zanubrutinib, with near-term data readouts expected, both as a monotherapy and in combination with other therapies.

Our most recently approved drug is tislelizumab, a wholly-owned antibody against the immune checkpoint receptor programmed cell death protein 1 ("PD-1") that was designed to minimize Fc-gamma receptor binding, which is believed to play an essential role in activating phagocytosis in macrophages, to minimize its negative impact on T effector cells. We received approval from China's National Medical Products Administration ("NMPA") in December 2019 to market tislelizumab for the treatment of patients with cHL who have received at least two prior therapies. In addition, we have filed an sNDA in China for tislelizumab in patients with previously treated locally advanced or metastatic urothelial carcinoma ("UC") which has been granted priority review by the Center for Drug Evaluation ("CDE") at the NMPA and is currently under review. We believe that there is a large and growing opportunity for novel cancer therapeutics in China and the market opportunity for PD-1/PD-L1 antibody therapies may be especially attractive, as this class of agents has demonstrated anti-tumor activity in all four of the most common tumors in China: lung cancer, gastric cancer ("GC"), liver cancer and esophageal cancer ("EC"). According to published reports, China has a higher proportion of PD-1 responsive tumors in its total annual cancer incidence in comparison to other geographies like the U.S. and Europe. According to a published study (Chen et al., Cancer Statistics in China, 2015, CA: Cancer J. Clin. 2016; 66(2):115-32), which we refer to as Chen et al. 2016, the annual incidence of the top ten PD-1 responsive tumors in China is estimated to be 3.0 million out of 4.3 million in total annual cancer incidence. We believe that we are uniquely positioned to capture this opportunity with our strong presence and experience in China, our global clinical development capabilities, the breadth of our development plan, which has enrolled more than 5,000 patients to date, including 15 registration or potentially registration-enabling trials, and high-quality manufacturing.

- **Utilize Our Key Strategic Clinical and Commercial Capabilities.** We believe that recent changes in the regulatory environment in China have led to an unprecedented opportunity in our industry. Historically, the regulatory environment in China was considered highly challenging, with clinical development delays and regulatory approvals taking much longer than in the United States and the EU. To address these challenges, the NMPA issued a series of reform policies and opinions, which, among other things, has expanded access to clinical patients and created an opportunity to expedite drug development and approval by removing delays and creating an environment with international quality standards for drug development, manufacturing and commercialization in China. These regulatory reforms allow clinical trials in China to play a major role in global drug development programs, with the data generated in China used to support approvals outside of China. However, challenges to benefit from these reforms remain, including limited contract research organization ("CRO") capability, a limited talent pool and clinical data and trial management challenges. Our strategy has been to aggressively build our clinical development and commercial capabilities in China to take advantage of these changes and mitigate the challenges with accessing China as a clinical science center. Our global oncology development team is made up of more than 1,100 employees, approximately 60% of whom are in China. We are dedicated to performing studies that conform to the highest global International Council for Harmonisation ("ICH") standards. We have

initiated 12 global, China-inclusive pivotal studies and 26 pivotal or potentially registration-enabling studies. We have over 60 ongoing or planned trials and have enrolled over 7,500 patients and healthy subjects in our clinical trials. From a commercial perspective, our strategy in China is to seek broader access to patients in need of innovative medicines through national reimbursement. This strategy requires a large commercial organization. We have increased our commercial capability from just over 150 people when we acquired the commercial operations of Celgene (now part of BMS) in China in 2017 to over 900 people as of the end of 2019. We believe that we are well-positioned to launch our current and future pipeline of internally-developed and in-licensed drugs in China and take advantage of the opportunity of improved national reimbursement.

- **Expand Our Portfolio by Leveraging Our Clinical and Commercial Capabilities.** As many leading pharmaceutical and biotechnology companies evaluate opportunities in China, we believe that collaborating with us could allow these companies to efficiently and effectively access deep local clinical development, commercial and manufacturing capabilities at global quality standards. For example, we have leveraged our unique China-inclusive development and commercial capabilities to expand our portfolio through our collaboration with Amgen. In addition, we have entered into over 10 transactions since 2017 in which we have added innovative pre-clinical, clinical and/or commercial-stage drugs and drug candidates to our portfolio. Our strategy is to continue to aggressively evaluate licensing opportunities to add to our pipeline of drugs and drug candidates.
- **Pursue a New Model for Global Growth.** We believe that the large addressable patient population and the expansion of reimbursement of innovative medicines in China can support a new business model for growth in our industry by allowing R&D investment for these drugs to be leveraged over a significantly larger patient pool, which can enable broader access worldwide with more affordable pricing as compared to the traditional priority market model. This global access and pricing model will allow us to leverage our strong clinical and commercial capabilities in China and globally. It also provides an opportunity to obtain return on the investments made to develop our portfolio of drug candidates. We evaluate worldwide markets by researching the opportunities, start-up risks and costs, and our capabilities. Subsequently, we design targeted market entrance strategies and plan to pursue these global markets in a staged manner based on investment and return analyses. We plan to seek approvals of our portfolio compounds globally in order for us to capitalize on these opportunities.

Our Commercial Products

The following table summarizes the status of our commercial products as of February 29, 2020:

PRODUCT	LEAD INDICATIONS	MECHANISM OF ACTION	REGULATORY STATUS	BEIGENE COMMERCIAL RIGHTS	PARTNER
Brukinsa™ zanubrutinib 80 mg capsules	R/R mantle cell lymphoma	BTK inhibitor	Approved in the United States	Global	N/A
tislelizumab	R/R classical Hodgkin's lymphoma	Anti-PD-1 antibody	Approved in China	Global	N/A
Abraxane® nanoparticle albumin bound paclitaxel	Breast cancer	Microtubule inhibitor	Approved in China	Mainland China	Bristol-Myers Squibb
Revlimid® (lenalidomide) capsules 2.5 · 5 · 10 · 15 · 20 · 25 mg	R/R adult multiple myeloma, newly diagnosed multiple myeloma	Anti-angiogenesis, immuno-modulation	Approved in China	Mainland China	Bristol-Myers Squibb
Vidaza® azacitidine for injection	Myelodysplastic syndromes, acute myeloid leukemia, chronic myelomonocytic leukemia	DNA hypomethylation	Approved in China	Mainland China	Bristol-Myers Squibb
XGEVA® (denosumab) injection	Giant cell tumor of bone	Anti-RANK ligand antibody	Approved in China	Mainland China	AMGEN
Kyprolis® (carfilzomib) for injection	Multiple myeloma	Proteasome inhibitor	NDA filed in China	Mainland China	AMGEN
BLINCYTO® (blinatumomab) for injection 35 mcg single-dose vial	Acute lymphocytic leukemia	Anti-CD19 x anti-CD3 bispecific (BiTE) antibody	NDA filed in China	Mainland China	AMGEN
sylvant® siltuximab	Idiopathic multicentric Castleman disease	IL-6 antagonist	Fast track listed in China	Greater China	EUSAPharma
QARZIBA (dinutuximab beta)	High-risk neuroblastoma	Anti-GD2 antibody	Fast track listed in China	Mainland China	EUSAPharma

We commercialize the following wholly-owned cancer medicines, for which we have worldwide commercial rights:

BRUKINSA

BRUKINSA is a second-generation small molecule BTK inhibitor designed to maximize BTK occupancy and minimize off-target binding effects. On November 14, 2019, BRUKINSA received accelerated approval from the FDA as a treatment for MCL in adult patients who have received at least one prior therapy. BRUKINSA is the first BeiGene-discovered product to be approved. Currently, we have a 100-plus person commercial team marketing BRUKINSA in the United States. In China, we have filed NDAs for the treatment of patients with R/R MCL and patients with R/R CLL/SLL, and those applications are pending under priority review.

Market Opportunity and Competition

Lymphomas are blood-borne cancers involving lymphatic cells of the immune system. They can be broadly categorized into non-Hodgkin's lymphoma ("NHL") and Hodgkin's lymphoma ("HL"). Depending on the origin of the cancer cells, lymphomas can also be characterized as B-cell or T-cell lymphomas. B-cell lymphomas make up approximately 85% of NHLs and comprise a variety of specific diseases involving B-cells at differing stages of maturation or differentiation. According to statistics from the Surveillance, Epidemiology and End Results ("SEER") program of the U.S. National Cancer Institute, there were 74,200

new NHL cases and 19,970 deaths, and of these NHL cases the incidence of CLL was 20,720 and there were 3,930 deaths from CLL in 2019 in the United States. Similar SEER analyses calculated U.S. incidence rates of 3,000 for MCL and 1,350 for Waldenström's macroglobulinemia ("WM"). According to Chen et al. 2016, and GLOBOCAN's online Global Cancer Observatory analyses on cancer statistics in China, there are an estimated 88,200 to 93,097 new lymphoma cases and 52,100 to 50,865 deaths in China each year, and of the lymphoma cases, approximately 90% are NHL and approximately 4.5% of the NHL cases are CLL/SLL.

Conventional methods of treating lymphomas vary according to the specific disease or histology, but generally include chemotherapy, antibodies directed at CD20, a molecular marker found on the surface of B-cells, and, less frequently, radiation. Recently, significant progress has been made in the development of new therapies for lymphomas, including BTK inhibitors, the phosphoinositide 3-kinase ("PI3K") inhibitors, idelalisib, copanlisib and duvelisib, and the Bcl-2 inhibitor, venetoclax. Recently, cell-based therapies have been receiving approvals. These include YESCARTA® (axicabtagene ciloleucel) and KYMRIAH™ (tisagenlecleucel), both anti-CD19 therapies.

The BTK inhibitor IMBRUVICA® (ibrutinib) was first approved by the FDA in 2013 for the treatment of patients with MCL who have received at least one prior therapy. Since that time, ibrutinib has received supplemental FDA approvals for the treatment of patients with CLL/SLL, CLL/SLL patients with 17p deletion, patients with WM, patients with marginal zone lymphoma ("MZL") who have received at least one prior anti-CD20-based therapy, patients with chronic graft versus host disease after failure of one or more lines of systemic therapy, in combination with rituximab in WM, and in combination with obinutuzumab in CLL/SLL. Ibrutinib is also approved by the European Medicines Agency ("EMA") for the treatment of patients with MCL, CLL and WM. Ibrutinib has been approved in over 90 countries and regions, and it was approved and launched in China at the end of 2017 for the treatment of patients with R/R CLL/SLL and R/R MCL. Subsequently, in July 2018, ibrutinib was also approved for first-line CLL/SLL. Another BTK inhibitor, CALQUENCE® (acalabrutinib) was approved by the FDA in 2017 under accelerated approval for the treatment of patients with MCL who have received at least one prior therapy, and in November 2019 for use in adults with CLL/SLL. In 2019, global revenues for BTK inhibitors were approximately $5.8 billion according to published reports.

Tislelizumab

Tislelizumab is a humanized IgG4 monoclonal antibody against the immune checkpoint receptor programmed cell death protein 1 (" PD-1"), that we specifically designed to minimize binding to Fc receptor gamma ("FcγR"), which is believed to play an essential role in activating phagocytosis in macrophages, to minimize its negative impact on T effector cells. Tislelizumab is currently being evaluated in a broad pivotal clinical program for both solid tumor and hematological indications, both globally and in China. We submitted an NDA for approval in China in 2018 for the treatment of R/R cHL, which received priority review and was approved on December 26, 2019. We are planning to launch tislelizumab in China in the first quarter of 2020. We have also filed a sNDA in China for the treatment of urothelial bladder cancer ("UBC") in May 2019 and expect NMPA approval in 2020, and we expect to submit a sNDA in first line squamous non-small cell lung cancer ("NSCLC") in 2020 based on the positive interim analysis of our Phase 3 study announced in January 2020. Additionally, we plan to discuss with regulators our Phase 2 study in second- or third-line hepatocellular carcinoma ("HCC") in 2020, and we expect readouts from several studies of tislelizumab in 2020. We have full commercial rights to tislelizumab, following the termination of our collaboration agreement with Celgene prior to its acquisition by BMS.

Market Opportunity and Competition

A number of PD-1 or PD-L1 antibody drugs have been approved by the FDA. These include Merck's KEYTRUDA® (pembrolizumab), BMS's OPDIVO® (nivolumab), Roche's TECENTRIQ® (atezolizumab), AstraZeneca's IMFINZI® (durvalumab), Pfizer and Merck Sereno's BAVENCIO® (avelumab), and Regeneron and Sanofi's LIBTAYO® (cemiplimab). In the global setting, several PD-1 or PD-L1 antibody agents are in clinical development in addition to tislelizumab, such as Novartis' PDR-001, GlaxoSmithKline/ Tesaro's TSR042, Pfizer's PF-06801591, and AstraZeneca's MEDI0680. In China, as of February 14, 2020, there are five other approved PD-1 antibodies, OPDIVO® (nivolumab) and KEYTRUDA®

(pembrolizumab), as well as Junshi's TUOYI (toripalimab), Innovent's TYVYT (sintilimab), and Hengrui's AIRUIKA® (camrelizumab), and there are two approved PD-L1 antibody agents AstraZeneca's IMFINZI® (durvalumab) and Roche's TECENTRIQ® (atezolizomab). There are approximately 40 more PD-1 and PD-L1 agents in late-stage development in China, of which one has filed for approval as of the end of January 2020.

Globally, the top four PD-1/PD-L1 antibody drugs had sales of approximately $21 billion in 2019 based on public reports. We believe that there is a large commercial opportunity in China for PD-1 and PD-L1 antibody drugs. Currently available clinical data suggest that some of the most prevalent cancers in China, such as lung, gastric, liver and esophageal cancer, are responsive to this class of agents. According to the World Health Organization's GLOBOCAN online database, in 2018 China suffered 39%, 50%, 47%, and 56% of all deaths from lung, gastric, liver, and esophageal cancers, respectively, in the world. Collectively, these four tumor types comprised over 2.3 million new cases in 2016 in China alone, according to Chen et al. 2016. In addition, China has a higher proportion of PD-1 responsive tumors in its total annual cancer incidence in comparison to other geographies like the U.S. or Europe. According to Chen et al. 2016, the annual incidence of the top 10 PD-1 responsive tumors in China is estimated to be 3.0 million out of 4.3 million in total annual cancer incidence. In comparison, the estimated annual incidence of the top 10 PD-1 responsive tumors is 0.9 million out of 1.7 million in total annual cancer incidence in the United States, and 0.9 million out of the 1.8 million total in the EU5 countries (United Kingdom, France, Germany, Spain and Italy) according to the SEER program of the U.S. National Cancer Institute and the World Health Organization.

We commercialize the following cancer drugs in China under an exclusive license from BMS:

ABRAXANE

ABRAXANE (paclitaxel albumin-bound particles for injectable suspension) is a solvent-free chemotherapy product which was developed using BMS's proprietary nanoparticle albumin-bound (nab®) technology platform. This protein-bound chemotherapy agent combines paclitaxel with albumin. Globally, ABRAXANE is approved for uses in breast cancer, NSCLC, pancreatic cancer, and GC, with geographic differences in labeling. In China, ABRAXANE is approved for metastatic breast cancer after failure of combination chemotherapy for metastatic disease or relapse within six months of adjuvant chemotherapy. Prior therapy should have included an anthracycline unless clinically contraindicated.

According to Chen et al. 2016, there were approximately 4.3 million new cancer cases and 2.8 million cancer deaths in China in 2015, with breast cancer as the most common tumor type in Chinese women. It is estimated that in 2015 breast cancer affected 268,600 women and resulted in 69,500 deaths. Targeted therapy, hormone therapy and chemotherapy are three main strategies to treat different types of breast cancer.

Taxanes are the backbone chemotherapy to treat triple negative breast cancer, Her2+ or aggressive estrogen-receptor-positive and/or progesterone-receptor-positive breast cancer patients. ABRAXANE is the only currently approved taxane that does not need pre-medication with dexamethasone to prevent hypersensitivity reactions, and several Phase 3 trials have demonstrated its efficacy and safety based on comparison to solvent-based taxanes in both metastatic and neo-adjuvant breast cancer settings. Unlike other taxanes, ABRAXANE has demonstrated unique and strong efficacy in pancreatic cancer and has become the backbone of first line standard of care for metastatic pancreatic cancer globally.

The taxanes marketed in China include two branded solvent-based paclitaxel (TAXOL® and ANZATAX) formulations, one branded docetaxel (TAXOTERE®) formulation, one paclitaxel liposome (LIPUSU®), one albumin-bound paclitaxel (ABRAXANE) and generic forms of solvent-based taxanes and ABRAXANE, including albumin-bound paclitaxel products from CSPC Pharmaceutical Group , Hengrui and Qilu. LIPUSU is currently the market leader with approximately one-third of the market share.

ABRAXANE is listed on provincial reimbursement drug lists of Hubei, Ningxia, Jiangsu, and Hunan, as well as in critical illness insurance program in Zhejiang and Shandong. In January 2020, we were notified by the National Healthcare Security Administration of China that our tender offer for ABRAXANE was

one of the winning tenders in China's centralized procurement process, with a reduction from the current pricing, which is expected to take effect in the second quarter of 2020.

On May 30, 2019 we announced that the NMPA accepted the supplemental import drug application for ABRAXANE in combination with gemcitabine, as a first-line treatment of patients with metastatic adenocarcinoma of the pancreas ("mPC").

REVLIMID

REVLIMID (lenalidomide) is an oral immunomodulatory drug that was approved in China in 2013 for the treatment of multiple myeloma ("MM") in combination with dexamethasone in adult patients who have received at least one prior therapy. In February 2018, REVLIMID received NMPA approval of a new indication for the treatment of MM in combination with dexamethasone in adult patients with previously untreated MM who are not eligible for transplant.

Globally, the incidence of MM is estimated at two to three per 100,000, with a male-to-female ratio of 1.6:1, and most patients are over 40 years old, according to Siegel et al., 2011 and IMS analysis. It is estimated that the incidence rate of MM is approximately one to two per 100,000 people in China, or approximately 21,000 new patients in 2019, out of which 10,000 are in urban populations, according to Lu et al., 2014, IMS analysis, and local market research. With a growing aging population and improving diagnosis, China has seen a steady increase in MM incidence.

Although MM cannot be cured, the progression of the disease can be controlled. The purpose of treatment is to extend patients' survival and improve quality of life. The main treatments for MM in China include VELCADE®, which is a proteasome inhibitor marketed by Johnson & Johnson in China since 2006, REVLIMID, NINLARO® (ixazomib), an oral proteasome inhibitor developed by Takeda, and generic forms of VELCADE and REVLIMID. VELCADE currently dominates the market in first-line MM treatment in China, while VELCADE and REVLIMID share the market in the second line. Chinese guidelines recommend lenalidomide as a standard of care for the treatment of R/R and newly diagnosed MM as well as in the maintenance setting.

REVLIMID was listed on the National Reimbursement Drug List ("NRDL") in June 2017. On November 12, 2019, we announced that REVLIMID received formal inclusion on the NRDL in China for R/R multiple myeloma. On December 22, 2019 we announced that our sNDA for the use of REVLIMID in R/R indolent lymphoma was accepted by the NMPA.

VIDAZA

VIDAZA (azacitidine for injection) is a pyrimidine nucleoside analog that has been shown to reverse the effects of DNA hypermethylation and promote subsequent gene re-expression. VIDAZA was approved in China in April 2017 for the treatment of intermediate-2 and high-risk myelodysplastic syndromes ("MDS"), chronic myelomonocyte leukemia ("CMML") and acute myeloid leukemia ("AML") with 20% to 30% blasts and multi-lineage dysplasia. In January 2018, VIDAZA became commercially available in China.

MDS are a group of cancers in which immature blood cells in the bone marrow do not mature and therefore do not become healthy blood cells. Approximately seven per 100,000 people are affected with approximately four per 100,000 people newly acquiring the condition each year globally according to Germing et al., 2013. The typical age of onset is 70 years. The higher-risk MDS (intermediate-2 and high-risk MDS) is considered fatal because the median overall survival rate is only 0.4-1.1 years and nearly 30% of these patients progress to AML, according to the U.S. National Comprehensive Cancer Network ("NCCN"), MDS guideline 2013 and MDS Foundation.

In China, the main treatments for intermediate-2 and high-risk MDS are conventional care regimen ("CCR") (best supportive care, low-dose cytarabine and intensive chemotherapy), and hypomethylating agents ("HMAs"). DACOGEN® (decitabine) marketed by Johnson & Johnson was the first HMA agent approved in China in 2009. In the past several years, at least six decitabine generics have become available. In 2017, decitabine was listed in the NRDL. Nevertheless, there are still over 50% of higher-risk MDS patients treated with CCR and the unmet need remains large.

VIDAZA is the only approved HMA shown to prolong survival for patients with MDS. Besides reversing the effects of DNA hypermethylation, VIDAZA inhibits protein synthesis via RNA incorporation. VIDAZA is a Category 1 recommended treatment for patients with intermediate-2 and high-risk MDS, according to the U.S. NCCN guideline. It is also a first-line recommended treatment for patients with intermediate-2 and high-risk MDS, according to the Chinese MDS treatment guidelines, and was listed on the NRDL in October 2018.

We are planning to commercialize the following cancer drugs in China under an exclusive license from Amgen:

XGEVA

XGEVA (denosumab) is an antibody-based RANK ligand ("RANKL") inhibitor that was approved globally for the prevention of skeletal-related events ("SREs") in patients with multiple myeloma, for the prevention of SREs in patients with bone metastases from solid tumors and for treatment of adults and skeletally mature adolescents with giant cell tumor of bone ("GCTB"). XGEVA is approved in over 70 countries worldwide. In China, it was approved in 2019 for patients with GCTB and is in development in China for prevention of skeletal-related events in cancer patients with bone metastases.

KYPROLIS

KYPROLIS (carfilzomib), a proteasome inhibitor, has been approved in over 60 countries for use in patients with relapsed and/or refractory multiple myeloma ("RRMM"). It has been filed in China as a treatment for patients with MM, and the NDA has been accepted by the NMPA.

BLINCYTO

BLINCYTO (blinatumomab), a bispecific CD-19 directed CD3 T-cell engager, is the first and only approved bi-specific T-cell engager ("BiTE") immunotherapy. It has been approved in 60 countries for use in patients with acute lymphoblastic leukemia ("ALL"). It has been filed in China as a treatment for adult patients with R/R ALL, and the NDA has been accepted and granted priority review by the NMPA.

We are planning to commercialize the following cancer drugs in China under an exclusive license from EUSA Pharma:

SYLVANT

SYLVANT (siltuximab), an interleikin-6 (IL-6) antagonist, that was approved as a treatment for patients with idiopathic multicentric Castleman disease who are human immunodeficiency virus ("HIV") negative and human herpesvirus-8 ("HHV-8") negative. It has been been listed for fast-track approval in China by the NMPA under its Review and Approval Procedures for Urgently-Needed Pharmaceutical Drugs Developed Overseas.

QARZIBA

QARZIBA (dinutuximab beta), a mouse-human chimeric monoclonal lgG1 antibody, that was approved as a treatment of high-risk neuroblastoma in patients aged 12 months and above, who have previously received induction chemotherapy and achieved at least a partial response ("PR"). It has been been listed for fast-track approval in China by the NMPA under its Review and Approval Procedures for Urgently-Needed Pharmaceutical Drugs Developed Overseas.

Our Pipeline Products

The following table summarizes the status of our internally-discovered drug candidates as of February 29, 2020:

DRUG CANDIDATES	PROGRAMS	DOSE ESC.	DOSE EXPANSION		PIVOTAL		FILED	MARKET
		Phase 1a	Phase 1b	Phase 2*	Phase 2**	Phase 3		
zanubrutinib *(BTK)*	monotherapy	*R/R MCL (Accelerated approval in the U.S. Nov. 14, 2019)*						
		R/R MCL, R/R CLL/SLL (NDAs accepted by NMPA)						
		R/R WM						
		WM, 1L CLL/SLL, R/R CLL/SLL						
		R/R MZL						
		Previously treated CLL/SLL (ibrutinib intolerant)						
	+ rituximab	*1L MCL*						
	+ obinutuzumab	*R/R FL*						
tislelizumab *(PD-1)*	monotherapy	*R/R cHL (approved December 26, 2019)*						
		2L+ UC (NDA accepted by NMPA)						
		2L NSCLC, 1L HCC, 2L ESCC						
		2L/3L HCC						
		R/R NK/T-cell lymphoma						
	+ chemo	*1L Sq. NSCLC, 1L Non-Sq. NSCLC, 1L NPC, 1L SCLC*						
		1L GC, 1L ESCC						
	+ pamiparib (PARP)	*Solid tumors*						
	+ zanubrutinib (BTK)	*B-cell malignancies*						
pamiparib *(PARP)*	monotherapy	*1L platinum-sensitive GC maintenance*						
		2L platinum-sensitive OC maintenance						
		3L gBRCA+ OC						
		Solid tumors						
	+ TMZ (chemo)	*Solid tumors*						
	+ RT/TMZ (RT/chemo)	*Glioblastoma*						
lifirafenib (RAF Dimer)	monotherapy	*B-Raf- or K-RAS/N-RAS-mutated solid tumors*						
		B-Raf- or K-RAS/N-RAS-mutated solid tumors						
BGB-A333 (PD-L1)	monotherapy + tislelizumab	*Solid tumors*						
BGB-A425 (TIM-3)	monotherapy + tislelizumab	*Solid tumors*						
BGB-A1217 (TIGIT)	+ tislelizumab	*Solid tumors*						
BGB-11417 (Bcl-2)	monotherapy + zanubrutinib	*Phase 1 in hematologic malignancies planned in 1H 2020*						

Global
China

*Some indications will not require a non-pivotal Phase 2 clinical trial prior to beginning pivotal Phase 2 or Phase 3 clinical trials. **Confirmatory clinical trials post approval are required for accelerated approvals.

Abbreviations: 1L = first line; 2L = second line; 3L = third line; AML = acute myeloid leukemia; Bcl-2 = B-cell lymphoma 2; BTK = Bruton's tyrosine kinase; cHL = classical Hodgkin's lymphoma; CLL = chronic lymphocytic leukemia; Dose Esc = dose escalation; ESCC = esophageal squamous cell carcinoma; FL = follicular lymphoma; gBRCA = germline BRCA (Breast Cancer); GC = gastric cancer; HCC = hepatocellular carcinoma; MCL = mantle cell lymphoma; MZL = marginal zone lymphoma; NSCLC = non-small cell lung cancer; NDA = new drug application; NK = natural killer; NMPA = National

Medical Products Administration; NPC = nasopharyngeal carcinoma; OC = ovarian cancer; PARP = poly ADP-ribose polymerase; PD-1 = programmed cell death protein 1; PD-L1 = programmed death-ligand 1; PH = Phase; R/R = relapsed / refractory; RT = radiotherapy; SLL = small lymphocytic lymphoma; SCLC = small cell lung cancer; Sq = squamous; TIGIT = T-cell immunoreceptor with Ig and ITIM domains; TIM-3 = T-cell immunoglobulin and mucin-domain containing-3; TMZ = temozolomide; UC = urothelial carcinoma; WM = Waldenström's macroglobulinemia.

The following table summarizes the status of our in-licensed drug candidates as of February 29, 2020:

DRUG CANDIDATES	DESCRIPTION	DOSE ESCALATION / EXPANSION		PIVOTAL		COMMERCIAL RIGHTS
		Phase 1	Phase 2*	Phase 2^	Phase 3	
Sitravatinib	*(multi-kinase inhibitor)*[1]	*NSCLC, RCC, OC, MEL, HCC/GEJ*				*Asia ex-Japan, NZ, AU*
Mirdametinib	***+ lifirafenib (Raf dimer)***	*Solid tumors*				
ME401	***+ zanubrutinib (BTK)***	*B-cell malignancies*				
ZW25	*(bispecific HER2 antibody)*[2]	*Planned (in Ph2 ex-China by Zymeworks)*				*Asia ex-Japan, NZ, AU*
ZW49	*(bispecific anti-HER2 ADC)*[2]	*Planned (in Ph1 ex-China by Zymeworks)*				*Asia ex-Japan, NZ, AU*
AMG 510	*(KRAS G12C, SM)*[3]	*Solid tumors*				*China*
AMG 596	*(EGFRvIII, BiTE)*[3]	*Glioblastoma*				*China*
AMG 757	*(DLL3, HLE BiTE)*[3]	*SCLC*				*China*
AMG 160	*(PSMA, HLE BiTE)*[3]	*Prostate*				*China*
AMG 212	*(PSMA, BiTE)*[3]	*Prostate*				*China*
AMG 506	*(FAP x 4-1BB, DARPin®)*[3]	*Solid tumors*				*China*
AMG 701	*(BCMA, HLE BiTE)*[3]	*MM*				*China*
AMG 420	*(BCMA, BiTE)*[3]	*MM*				*China*
AMG 176	*(Mcl-1, SM (i.v.))*[3]	*Hematologic*				*China*
AMG 397	*(Mcl-1, SM (oral))*[3]	*Hematologic*				*China*
AMG 330	*(CD33, BiTE)*[3]	*AML*				*China*
AMG 673	*(CD33, HLE BiTE)*[3]	*AML*				*China*
AMG 427	*(FLT3, HLE BiTE)*[3]	*AML*				*China*
AMG 562	*(CD19, HLE BiTE)*[3]	*NHL*				*China*

Global
China

*Some indications will not require a non-pivotal Phase 2 clinical trial prior to beginning pivotal Phase 2 or Phase 3 clinical trials. ^Confirmatory clinical trials post approval are required for accelerated approvals. 1. Collaboration with Mirati Therapeutics, Inc.; APAC study. 2. Collaboration with Zymeworks. 3. Collaboration with Amgen.

Abbreviations: ADC = antibody drug conjugate; AML = acute myeloid leukemia; AU = Australia; BCMA = B-cell maturation antigen; BiTE = Bi-specific T-cell engager; BTK = Bruton's tyrosine kinase; CD## = cluster of differentiation; DLL3 = delta-like ligand 3; EGFRvIII = epidermal growth factor receptor variant III; FAP = familial adenomatous polyposis; FLT3 = fms-like tyrosine kinase 3; GEJ = gastro-esophageal junction; HER2 = human epidermal growth factor receptor 2; HCC = hepatocellular carcinoma; HLE = half-life extended; i.v. = intravenous; KRAS = gene for K version of Ras (rat sarcoma) protein; Mcl-1 = Myeloid cell leukemia-1; MEL = melanoma; MM = multiple myeloma; NSCLC = non-small cell lung cancer; NZ = New Zealand; OC = ovarian cancer; PH = Phase; PSMA = prostate-specific membrane antigen; RCC = renal cell carcinoma; SCLC = small cell lung cancer; SM = small molecule.

Our Clinical-Stage Drug Candidates

A description of our clinical-stage drug candidates and clinical data from selected clinical trials is set forth below. Historically, we have made available, and we intend to continue to make available, clinical data and/or topline results from clinical trials of our drug candidates in our press releases and/or filings with the U.S. Securities and Exchange Commission ("SEC") and the Stock Exchange of Hong Kong Limited ("HKEx"), copies of which are available on the Investors section of our website.

Zanubrutinib, a BTK Inhibitor

Zanubrutinib, is a small molecule inhibitor of BTK that is approved in the United States for the treatment of MCL in adult patients who have received at least one prior therapy. It is currently being evaluated in a broad pivotal clinical program globally and in China as a monotherapy and in combination with other therapies to treat various lymphomas. Zanubrutinib has demonstrated higher selectivity against BTK than IMBRUVICA (ibrutinib), an approved BTK inhibitor, based on our biochemical assays; higher exposure than ibrutinib based on their respective Phase 1 experience in separate studies; and sustained 24-hour BTK occupancy in both the peripheral blood and lymph node compartments. We recently reported data from our Phase 3 ASPEN study which compared zanubrutinib with ibrutinib in WM. While the trial did not achieve statistical significance on its primary endpoint of superiority in complete response and very good partial response ("VGPR") rates for zanubrutinib compared to ibrutinib, zanubrutinib demonstrated a higher VGPR rate as well as improvements in safety and tolerability.

Mechanism of Action

BTK is a key component of the B-cell receptor ("BCR"), signaling pathway and is an important regulator of cell proliferation and cell survival in various lymphomas. BTK inhibitors block BCR-induced BTK activation and its downstream signaling, leading to growth inhibition and cell death in certain malignant white blood cells called B-cells. Zanubrutinib is an orally active inhibitor that covalently binds to BTK, resulting in irreversible inactivation of the enzyme.

Summary of Clinical Results

As of January 15, 2020, we had enrolled more than 2,500 patients in clinical trials of zanubrutinib, including trials of zanubrutinib in combination with other therapies, which we refer to as combination trials. A multi-center, open-label Phase 1 trial is being conducted in Australia, New Zealand, the United States, South Korea and Europe to assess the safety, tolerability, pharmacokinetic properties and preliminary activity of zanubrutinib as a monotherapy in patients with different subtypes of B-cell malignancies, such as WM, CLL/SLL, follicular lymphoma ("FL"), and MCL. The initial results of the dose-escalation phase and dose-expansion phase of this trial demonstrated that, consistent with zanubrutinib's pharmacokinetic profile, complete and sustained 24-hour BTK occupancy in the blood was observed in all tested patients, starting at the lowest dose of 40 mg once daily ("QD"). In addition, sustained full BTK occupancy was observed in the lymph nodes with the 160 mg twice-daily ("BID") dosing regimen. We substantially expanded the clinical development program for zanubrutinib based on these early results to include late stage clinical studies in WM, CLL/SLL, MCL, FL and MZL. In addition, we have several studies ongoing in DLBCL, both monotherapy and combinations, and we have several combination studies in CLL including combinations with the Bcl-2 inhibitor venetoclax and a planned study with our internally-discovered Bcl-2 inhibitor, BGB-14417. All of the studies discussed below were presented at major medical conferences and were the subject of a press release and a filing with the SEC. These sources have further details on each study. The first readout of our late-stage program was recently reported, the ASPEN study in WM (NCT03053440), discussed below.

Mantle Cell Lymphoma

We presented two data sets in MCL at the 15th International Conference on Malignant Lymphoma that took place on June 18 – 22, 2019 in Lugano, Switzerland (the "2019 ICML"), and it was these two data sets that formed the basis for our accelerated approval in MCL in adult patients who have received at least one prior therapy that we received from the U.S. FDA in November 2019.

The first trial (NCT03206970, also known as BGB-3111-206) is a single-arm, open-label, multi-center, pivotal Phase 2 trial of zanubrutinib as a monotherapy in patients with R/R MCL. The trial is being conducted in China and enrolled 86 patients who had received a median of two (1 – 4) prior lines of therapy. Patients were treated with zanubrutinib, dosed at 160 mg orally BID. The primary endpoint of the trial is overall response rate ("ORR") assessed by an independent review committee ("IRC") using PET-based imaging according to the Lugano Classification 2014. As of the February 15, 2019 data cutoff, 52 patients (60.5%) remained on study treatment. The median follow-up time for patients enrolled in the trial was 18.4 months (0.3-23.5).

The investigator-assessed ORR was 83.7% (72/86). The complete response ("CR") rate was 77.9% (67/86) and the PR rate was 5.8% (5/86). At an earlier data cutoff in March 2018 (8.2 months median follow-up), the ORR, CR and PR were 84.7%, 72.9%, and 11.8% per investigator assessment, and 83.5%, 58.8%, and 24.7% per IRC assessment, respectively. The 15-month PFS by investigator was estimated at 72.1%, and median PFS follow-up was 19.1 months (0.0-22.3). With 16.4 months median follow-up (2.3-19.5), the duration of response (DOR) by investigator at 15 months was 67.4%.

The second set of data was the MCL cohort of our BGB-3111-AU-003 study (NCT02343120). This open-label, multi-center Phase 1/2 trial of zanubrutinib as a monotherapy in patients with different subtypes of B-cell malignancies, including MCL, is being conducted in the United States, Australia, Italy, South Korea, New Zealand, and the United Kingdom. As of the December 13, 2018 data cut-off, 53 patients with treatment naïve (TN, n=16) or R/R (n=37) MCL had been enrolled in the trial and the median follow-up time was 15.4 months (0.1-38.2). Forty-eight patients (all 37 R/R and 11 TN) were evaluable for efficacy with median follow-up time of 16.7 months (1.6-38.2) in this analysis, per the Lugano 2014 Classification. At the time of the data cutoff, 27 patients (13 TN and 14 R/R) remained on study treatment.

The investigator-assessed ORR was 85.4% (41/48); the CR rate was 29.2% (14/48) and the PR rate was 56.3% (27/48). The majority of patients were assessed via CT-scan; PET scan was optional per trial protocol. The median DOR was 16.2 months (0.03-28.2) for all patients. The median PFS for patients with R/R MCL was 17.3 months. Response rates shown in the table below from this study are for the 32 patients who had R/R disease and received the full 160mg BID dose of zanubrutinib.

The following table shows the efficacy data included in our label in the United States for BRUKINSA (zanubrutinib) for the treatment of adult patients with mantle cell lymphoma (MCL) who have received at least one prior therapy:

	Study BGB-3111-206 (N=86)	**Study BGB-3111-AU-003 (N=32)**
ORR (95% CI)	84% (74, 91)	84% (67, 95)
CR	59%	22% *
PR	24%	62%
Median DoR in months (95% CI)	19.5 (16.6, NE)	18.5 (12.6, NE)

ORR: overall response rate, CR: complete response, PR: partial response, DoR: duration of response, CI: confidence interval, NE: not estimable

* FDG-PET scans were not required for response assessment

In the BGB-3111-206 study, the tolerability of zanubrutinib was generally consistent with previous reports of zanubrutinib treatment in patients with various B-cell malignancies. The majority of treatment-emergent adverse events ("TEAEs") were grade 1 or 2 in severity, with the most frequently reported being neutrophil count decreased (44.2%), upper respiratory tract infection (34.9%), rash (33.7%), white blood cell count decrease (31.4%), and platelet count decrease (25.6%). Grade ≥3 TEAEs were reported in 36 patients (41.9%), with the most frequently reported being neutrophil count decrease (18.6%), lung infection (7.0%), white blood cell count decrease (5.8%), and anemia (5.8%). Five patients (5.8%) had TEAEs leading to death (one case each of pneumonia, cerebral hemorrhage, traffic accident, and two cases of death with unknown cause). Among TEAEs of special interest for BTK inhibitors, hypertension was reported in 13 patients (15.1%), petechiae/purpura/contusion in four patients (4.7%), and major hemorrhage in three patients (3.5%); no cases of atrial fibrillation/flutter, secondary primary malignancy, or tumor lysis syndrome were reported in this trial.

In the BGB-3111-AU-003 study, the majority of adverse events ("AEs") were grade 1 or 2 in severity. The most frequently reported AEs included contusion (39.6%), diarrhea (34.0%), upper respiratory tract infection (26.4%), constipation (22.6%), fatigue (22.6%), and rash (18.9%). Grade ≥3 AEs were reported in 54.7% patients, with the most frequent being anemia (9.4%), myalgia (5.7%), cellulitis (5.7%), pleural effusion (5.7%), and pneumonia (5.7%). Discontinuation due to AEs occurred in 18.9% patients with two determined to be related to study drug (one case each of peripheral edema and subdural hematoma). There were five deaths due to AEs, which were all determined by the investigators to be unrelated to zanubrutinib treatment.

Waldenström's Macroglobulinemia — ASPEN Study

On December 16, 2019, we announced topline results from our Phase 3 ASPEN trial (NCT03053440) of zanubrutinib compared to ibrutinib for the treatment of patients with WM. The trial did not achieve statistical significance on its primary endpoint of superiority in CR and very good partial response ("VGPR") rates for zanubrutinib compared to ibrutinib, but zanubrutinib demonstrated more frequent VGPRs (28.4% versus 19.2% in overall population) and advantages in safety and tolerability.

The ASPEN trial is a randomized Phase 3 trial in 229 patients with WM conducted in 61 centers in Europe, Australia, and the United States. ASPEN is the largest Phase 3 trial yet conducted in Waldenström's Macroglobulinemia and the first comparative trial readout for two BTK inhibitors. The study included two cohorts, a randomized cohort (cohort 1) consisting of 201 patients with a MYD88 mutation and a non-randomized cohort (cohort 2) in which 28 patients with MYD88 wild-type ("MYD88WT") received zanubrutinib because MYD88WT patients have historically responded poorly to ibrutinib therapy. The randomized cohort 1 enrolled 102 patients (including 83 R/R patients and 19 treatment-naïve ("TN") patients) in the zanubrutinib arm and 99 patients (including 81 R/R patients and 18 TN patients) in the ibrutinib arm. Patients in the zanubrutinib arm were assigned to receive zanubrutinib 160 mg BID and patients in the ibrutinib arm received 420 mg of ibrutinib QD. Responses were determined according to the modified Sixth International Workshop on WM Criteria.

Results included:	**R/R**		**Overall**	
Efficacy	**Zanubrutinib (N = 83)**	**Ibrutinib (N = 81)**	**Zanubrutinib (N = 102)**	**Ibrutinib (N = 99)**
VGPR + CR Rate	28.9%	19.8%	28.4%	19.2%
PFS (12 month)	92.4%	85.9%	89.7%	87.2%
(CI)	(88.9 – 98.8)	(75.9 – 91.9)	(81.7 – 94.3)	(78.6 – 92.5)
OS (12 month)	98.8%	92.5%	97.0%	93.9%
(CI)	(91.6 – 99.8)	(84.1 – 96.6)	(90.9 – 99.0)	(86.8 – 97.2)

As of data cutoff of August 31, 2019, with a median follow-up of 19.4 months, results from cohort 1 are shown above. In R/R patients, the VGPR rate as assessed by IRC was 28.9% in the zanubrutinib arm and 19.8% in the ibrutinib arm (2-sided p=0.1160, no patients achieved a CR in either arm). In the overall patient population, the VGPR rate as assessed by IRC was 28.4% in the zanubrutinib arm and 19.2% in the ibrutinib arm (2-sided descriptive p=0.0921, no patients achieved a CR in either arm). In the R/R patient population, the major response rate ("MRR"), which is the rate of PR or better, as assessed by IRC was 78.3% in the zanubrutinib arm and 80.2% in the ibrutinib arm; in the overall patient population, the MRR was 77.5% in the zanubrutinib arm and 77.8% in the ibrutinib arm. The 12-month progression-free survival (PFS) rate was 92.4% (83.8-96.5) in R/R patients and 89.7% (81.7-94.3) in all patients in the zanubrutinib arm, compared to 85.9% (75.9-91.9) in R/R patients and 87.2% (78.6-92.5) in all patients in the ibrutinib arm; and the 12-month overall survival (OS) rate was 98.8% (91.6-99.8) for R/R patients and 97.0% (90.9-99.0) for

all patients in the zanubrutinib arm, compared to 92.5% (84.1-96.6) in R/R patients and 93.9% (86.8-97.2) in all patients in the ibrutinib arm.

	Zanubrutinib	Ibrutinib
Safety	Overall (n = 101)	Overall (n = 98)
Grade >3 AEs	58.4%	63.3%
Treatment discontinuation due to AEs	4 (4.0)%	9 (9.2)%
Fatal AEs	1 (1.0)%	4 (4.1)%
Atrial fibrillation / flutter of any grade	2.0%	15.3%
Minor bleeding	48.5%	59.2%
Major hemorrhage	5.9%	9.2%
Diarrhea	20.8%	31.6%
Neutropenia	29.7%	13.3%

Zanubrutinib showed a favorable safety profile compared to ibrutinib, with grade >3 AEs of 58.4% in the zanubrutinib arm and 63.3% in the ibrutinib arm. In the zanubrutinib arm, four (4.0%) patients discontinued treatment due to AEs and there was one (1.0%) fatal AE; in the ibrutinib arm, nine patients (9.2%) discontinued due to AEs and there were four (4.1%) fatal AEs. For AEs of special interest for BTK inhibitors, atrial fibrillation/flutter of any grade was 2.0% in the zanubrutinib arm and 15.3% in the ibrutinib arm; minor bleeding was 48.5% for zanubrutinib and 59.2% for ibrutinib; major hemorrhage was 5.9% for zanubrutinib and 9.2% for ibrutinib; and diarrhea was 20.8% for zanubrutinib and 31.6% for ibrutinib; and the rate of neutropenia was higher in the zanubrutinib arm (29.7%) as compared to the ibrutinib arm (13.3%).

Waldenström's Macroglobulinemia and Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma

In general, the most recent data that we have presented on the use of zanubrutinib in patients with WM and CLL/SLL are consistent with our earlier data, which we believe supports our pursuit of a broad development program including these two indications. Data from several trials investigating the use of zanubrutinib in WM and CLL/SLL were presented during 2019. At the 24th Congress of the European Hematology Association that took place on June 13-16 in Amsterdam (the "2019 EHA"), we presented data from the MYD88^{WT} cohort of the ASPEN study (NCT03053440) as well as the WM cohort of our first-in-human global Phase 1/2 study (NCT02343120). At the 2019 ICML, we reported on two data sets, our pivotal Phase 2 results (NCT03206918) and a combination study with obinutuzumab (NCT02569476). We also reported data in CLL/SLL from two studies at the 61st American Society of Hematology ("ASH") Annual Meeting in Orlando, FL from Arm C of the SEQUOIA trial (NCT03336333) in patients with the deletion of chromosome 17p13.1 (del17p) and from the CLL/SLL cohort of our first in man global Phase 1/2 study (NCT02343120). Data from these studies and the other studies summarized in this Annual Report were included in press releases issued at the time of the medical conferences and included in our current reports or announcements filed with the SEC and HKEx, respectively.

Other Lymphomas

We are also investigating zanubrutinib for the treatment of patients with several other lymphomas. We have studies ongoing in FL, MZL, and DLBCL, and we reported data from two FL studies in 2019, one monotherapy study and one in combination with obinutuzumab. Results from the combination study with obinutuzumab (NCT02569476) in FL were presented at the 2019 ICML, while data in FL from our Phase 1 study (NCT03189524) in Chinese patients were reported at the 22nd Annual Meeting of the Chinese Society of Clinical Oncology that took place September 18-22, 2019 in Xiamen, China (the "2019 CSCO").

Analysis of Safety Data from Monotherapy Trials

Pooled safety data from 682 patients enrolled in six ongoing, Phase 1 and Phase 2 clinical trials of zanubrutinib monotherapy, for WM, MCL, CLL/SLL, DLBCL and other B-cell malignancies were presented at the 2019 EHA. The majority of patients had R/R disease; almost all patients received zanubrutinib at a dose of 320mg QD or 160mg BID. The median duration of zanubrutinib exposure was 13.4 months (0.1-49.7). This analysis included an evaluation of the frequency and severity of AEs, AEs of special interest (AESIs), and AEs leading to death, dose reduction, or treatment discontinuation. Ninety-seven percent of patients reported at least one AE, which were primarily grade 1 or 2. The most common AEs of all grades included upper respiratory tract infection (32.4%), neutrophil count decreased (25.2%), diarrhea (19.4%), cough (19.1%), contusion (18.6%), and rash (18%). The most common grade ≥3 AEs included neutrophil count decreased (14.4%), anemia (7.6%), neutropenia (6.6%), pneumonia (4.5%), platelet count decreased (4.3%), and lung infection (4.1%). Serious AEs (SAEs), consisting primarily of infectious complications such as pneumonia/lung infection, were reported in 36% of patients. AESIs such as atrial fibrillation/flutter (1.9%), major hemorrhage (2.5%), and grade ≥3 hypertension (3.4%) were infrequent, and treatment discontinuation due to AEs was uncommon (9.1% overall, including 3.5% for whom the event(s) were treatment-related).

Clinical Development Plan

We received accelerated approval from the U.S. FDA in November 2019 for zanubrutinib for use in adult MCL patients who have received at least one prior therapy. In addition, zanubrutinib was granted Fast Track designation by the U.S. FDA for the treatment of patients with WM in July 2018 and Breakthrough Therapy designation in January 2019 for the treatment of adult patients with MCL who have received at least one prior therapy. We plan to discuss our ASPEN study results in WM with the FDA and EMA in 2020. In China, we have announced the acceptance of our filings for approval in R/R MCL and R/R CLL/SLL in August 2018 and October 2018, respectively, and we expect approval for both indications in the first half of 2020. We also expect to submit a sNDA in China for zanubrutinib for the treatment of R/R WM in 2020.

Based on the clinical data to date, we believe that zanubrutinib has a potentially best-in-class profile, and we are running a broad global pivotal program in multiple indications, including nine registration or registration-enabling clinical trials. Four of the nine studies are Phase 3 and five are designed to be registration-enabling Phase 2.

We have an ongoing monotherapy head-to-head Phase 3 trial versus ibrutinib in WM (ASPEN), which has reported topline results and study follow-up is underway. We plan to report full ASPEN study details at a medical conference in 2020. We are also conducting an ongoing Phase 3 trial compared to bendamustine and rituximab in patients with treatment-naive ("TN") CLL/SLL (SEQUOIA) and a head-to-head Phase 3 trial in R/R CLL/SLL versus ibrutinib (ALPINE). We have completed patient enrollment in SEQUOIA and expect interim results as early as 2020. We also expect to finish expanded patient enrollment in ALPINE in 2020. Our fourth Phase 3 trial is an ongoing Phase 3 confirmatory trial in patients with TN MCL. Additionally, we have five ongoing Phase 2 trials that are designed to be registration-enabling, including four monotherapy studies in R/R MCL, R/R WM, R/R CLL/SLL, and R/R MZL (MAGNOLIA) and an ongoing pivotal Phase 2 trial in combination with GAZYVA® (obinutuzumab) in patients with R/R FL (ROSEWOOD), which is designed as a pivotal trial for accelerated or conditional approval and will require a confirmatory study. Finally, we are also investigating zanubrutinib in several combination studies in DLBCL and CLL/SLL, including two studies in CLL/SLL investigating venetoclax combinations.

If we receive conditional approval instead of full approval, we will be required to conduct one or more confirmatory studies after such conditional approvals.

Tislelizumab, an anti-PD-1 Antibody

Tislelizumab is a humanized monoclonal antibody against the immune checkpoint receptor PD-1 that is currently being evaluated in pivotal clinical trials globally and in China and for which we plan to commence additional pivotal trials as a monotherapy and in combination with standard of care to treat various solid and hematological cancers.

Mechanism of Action

Cells called cytotoxic T-lymphocytes ("CTLs") provide an important self-defense mechanism against cancer, patrolling the body, recognizing cancer cells due to immunogenic features that differ from normal cells, and killing cancer cells by injecting deleterious proteins into them. T-lymphocytes have various mechanisms that prevent them from damaging normal cells, among which is a protein called PD-1 receptor, that is expressed on the surface of T-lymphocytes. PD-L1 is an important signaling protein that can engage PD-1. PD-L1 binding to PD-1 sends an inhibitory signal inside the T-lymphocyte and suppresses its cytotoxic effects. Many types of cancer cells have hijacked the PD-L1 expression system that normally exists in healthy cells. By expressing PD-L1, cancer cells protect themselves from being killed by CTLs. Anti-PD-1 therapies are designed to bind to and block downstream activity of PD-1, allowing the immune system to combat cancer cells.

Tislelizumab is a monoclonal antibody designed to specifically bind to PD-1, without activating the receptor, thereby blocking engagement of PD-1 by its ligands PD-L1 and PD-L2. Tislelizumab has demonstrated high affinity and specificity for PD-1 in preclinical studies. It is differentiated mechanistically from the currently approved PD-1 antibodies by an engineered Fc region designed to minimize binding to FcγR on macrophages, thereby abrogating antibody-dependent phagocytosis, a potential mechanism of T-cell clearance, which we believe may minimize potentially negative interactions with other immune cells based on preclinical data.

Summary of Clinical Results

As of January 15, 2020, we had enrolled over 5,100 patients in clinical trials of tislelizumab, including combination trials. Data from our trials thus far suggested that tislelizumab was generally well-tolerated and exhibited anti-tumor activity in a variety of tumor types. All of the studies discussed below were presented at major medical conferences and were included in press releases issued at the time of the medical conferences and included in our current reports or announcements filed with the SEC and HKEx, respectively.

Hodgkin's Lymphoma

On December 26, 2019 tislelizumab received approval from the NMPA for the treatment of patients with cHL, who have received at least two prior therapies based on the results of a pivotal Phase 2 study (NCT03209973). Data from that study were presented on June 14, 2019 at the 2019 EHA meeting. The single-arm, multi-center, pivotal Phase 2 study of tislelizumab as a monotherapy in patients with R/R cHL enrolled 70 patients in China who were either R/R to autologous stem cell transplantation ("ASCT"), or received at least two prior lines of systemic therapy for cHL and were not candidates for ASCT. Patients were treated with tislelizumab, dosed at 200 mg intravenously every three weeks. The primary endpoint of the trial was ORR assessed by IRC according to the Lugano Classification 2014.

As of November 26, 2018, 70 patients with R/R cHL were evaluable for efficacy. Thirteen patients received prior ASCT, and the remaining 57 patients were ineligible for ASCT. Patients had a median of three prior lines of systemic therapy (2-11). With a minimum of 23.8 weeks of follow-up and a median follow-up time of 13.9 months at the data cutoff, the IRC assessed efficacy data included:

Efficacy data	Full Analysis Set (n=65)
ORR, %	77
DCR, %	91
CR, %	62
PR, %	15
SD, %	14
DoR†	
Events, %	18
Median DOR (month)	NE
6-month event-free rate %	87
12-month event-free rate %*	76
PFS†	
Events, %	29
Median PFS, month	NE
6-month event-free rate, %	81
12-month event-free rate, %*	72

Source: NMPA label

(Based on IRC assessment, Lugano 2014)

Abbreviations: CI=confidence interval; NE = Not Estimable.

1 Two-side Clopper-Pearson 95%CI

† Based on Kaplan-Meier estimation

* The estimation for 12m DoR rate and 12m PFS rate is not mature.

The majority AEs were grade 1 or 2 in severity. The summary of AEs occurring in ≥5% of patients is shown below:

Preferred term^^	Tislelizumab 200 mg every 3 weeks n=70^	
	All grades* %	≥ Grade 3** %
General disorders and administration site conditions		
Pyrexia	54	0.0
Fatigue[(a)]	10	0.0
Chills	5.7	0.0
Endocrine disorders		
Hypothyroidism	33	0.0
Investigations		
Weight increased	27	2.9
Weight decreased	8.6	0.0
Skin and subcutaneous tissue disorders		
Pruritus[(b)]	17	0.0
Rash[(c)]	14	0.0
Infections and infestations		
Upper respiratory tract infection	17	0.0
Respiratory, thoracic and mediastinal disorders		
Cough	11	0.0
Pneumonitis[(d)]	5.7	4.3
Metabolism and nutrition disorders		
Hyperlipidaemia	7.1	0.0
Hyperuricaemia	5.7	0.0
Musculoskeletal and connective tissue disorders		
Musculoskeletal pain[(e)]	7.1	1.4
Pain in extremity	7.1	0.0
Gastrointestinal disorders		
Diarrhea	5.7	0.0
Blood and lymphatic system disorders		
Anemia	5.7	0.0
Nervous system disorders		
Headache	5.7	0.0

Source: NMPA label

^ Adverse reactions in this package insert are defined as: adverse events that assessed by investigator as related, definitely related, probably related, possibly related, unlikely related or missing causal relationship. Only adverse events that are assessed by investigator as definitely unrelated are excluded. The cutoff date of the data is 26 November 2018.

^^ Preferred term is based on ICH MedDRA Chinese version 20.0.

* Severity of adverse reactions per NCI CTCAE v4.03.

** No Grade 5 adverse event was reported in this study.

(a) Fatigue is a composite term which includes fatigue, asthenia, and malaise.

(b) Pruritus is a composite term which includes pruritus and urticaria.

(c) Rash is a composite term which includes G1-2 rash, dermatitis and eczema.

(d) Pneumonitis is a composite term which includes pneumonitis, interstitial lung disease and organising pneumonia.

(e) Musculoskeletal pain is a composite term which includes back pain, neck pain and musculoskeletal chest pain and spinal pain.

Metastatic Urothelial Carcinoma

Data in metastatic UC were presented at the European Society for Medical Oncology Congress 2019 in Barcelona, Spain on September 30, 2019 (the "2019 ESMO"). The study is a multi-center, open-label Phase 2 trial (NCT04004221) of tislelizumab being conducted in China and South Korea with PD-L1+ locally advanced or metastatic UC previously treated with > 1 platinum-containing therapy. The trial was designed to assess safety, tolerability and efficacy of tislelizumab at the recommended Phase 2 dose (200 mg IV every three weeks), with a primary endpoint of ORR as assessed by IRC per RECIST criteria v1.1.

As of February 28, 2019, 113 patients were enrolled in the trial, including 38.9% of patients who had received two (32.7%) or at least three (6.2%) prior therapies, and 23.9% of patients with liver metastasis. The median duration of treatment for all patients was 15.3 weeks (2-72). At the time of the data cutoff, 30 patients (26.5%) remained on treatment. There were 104 patients evaluable for efficacy, with results shown in the table below.

Best Overall Response	**N=104**
Source	Ye et. al., 2019 ESMO
Median Follow-up Time	7.6
Median Duration of Response	NR
ORR % (confirmed)	23
CR % (confirmed)	7.7
PR %	15
SD %	14
Median Progression-Free Survival, months	2.1
Overall Survival, months	9.8
Clinical Trial #	NCT04004221

Tislelizumab was generally well-tolerated. There were 105 patients with >1 treatment-related adverse event ("TRAE"); the most common TRAEs of any grade were anemia (26.5%), decreased appetite (18.6%), pyrexia (16.8%), aspartate aminotransferase increased (15%), and pruritus (15%). Thirty-nine patients experienced grade >3 TRAEs related to the study drug. The most common grade >3 TRAEs were anemia (7.1%), urinary tract infection (4.4%), decreased appetite (3.5%), and hyponatremia (3.5%). Twelve (11%) patients experienced AEs related to the study drug that resulted in treatment discontinuation. SAEs related to study treatment were reported in 11 (9.7%) patients.

Immune-related TEAEs ("irTEAEs") occurred in 64% of patients. Common irTEAEs included immune-mediated skin adverse reaction (34%), immune-mediated hepatitis (24%), thyroid disorders (13%), and immune-mediated nephritis and renal dysfunction (12%).

Four (3.5%) patients experienced AEs with fatal outcome, including hepatic failure (n=2), respiratory arrest (n=1), and renal impairment (n=1). The events of hepatic failure and respiratory arrest were reported as possibly related to the study drug by the investigator. The event of renal impairment was reported as possibly unrelated to the study drug.

Non-Small Cell Lung Cancer

On January 21, 2020 we announced that the pivotal Phase 3 trial (NCT03594747) evaluating our anti-PD-1 antibody tislelizumab in combination with two chemotherapy regimens for the first-line treatment of patients with squamous NSCLC met the primary endpoint of improved PFS at the planned interim analysis, as assessed by IRC. In this Phase 3, randomized, open-label, multi-center trial, patients with

previously untreated advanced squamous NSCLC were randomized to receive either tislelizumab in combination with paclitaxel and carboplatin, tislelizumab in combination with ABRAXANE (nanoparticle albumin-bound (nab) paclitaxel) and carboplatin, or paclitaxel and carboplatin alone. Patients enrolled into the study were from China and had untreated stage IIIB or IV squamous NSCLC, regardless of PD-L1 expression. The primary endpoint is PFS per IRC. 360 patients were randomized 1:1:1 to receive tislelizumab (200mg every three weeks) in combination with each of the chemotherapy regimens or chemotherapy only, until disease progression, unacceptable toxicity, physician decision or consent withdrawal. Patients on the chemotherapy-only control arm who experienced disease progression, verified by central independent review, were eligible to cross over to receive tislelizumab monotherapy. The safety profile of tislelizumab in both combinations in this trial was consistent with the known risks of each study treatment, and no new safety signals were identified. Squamous NSCLC remains a significant unmet need, representing approximately 30 percent of patients with NSCLC in China. Chinese NSCLC patients have a low rate of driver mutations, and as such are not candidates for therapeutic approaches that target such driver mutations.

In addition to the above study result, data from a Phase 2 trial in advanced lung cancer were presented at the 2019 CSCO. This lung cancer study is an open-label, multi-cohort pivotal Phase 2 clinical trial (NCT03432598) of tislelizumab in combination with chemotherapy as first-line treatment for patients with advanced lung cancer, being conducted in China. Patients with non-squamous NSCLC were treated with tislelizumab at a dose of 200mg and doublet chemotherapy on day one of each three-week cycle; chemotherapy was given for up to four cycles, with pemetrexed and tislelizumab continued as scheduled if clinically appropriate. Patients with squamous NSCLC (two cohorts) and small cell lung cancer ("SCLC"), were treated with tislelizumab at a dose of 200mg and doublet chemotherapy every three weeks, for four to six cycles, with tislelizumab continued as scheduled if clinically appropriate. Efficacy data presented included a confirmed ORR of 67%, with no patients having a CR. More specifically, the confirmed ORR was 43.8% (7/16) in patients with non-squamous NSCLC; 80.0% (12/15) in patients with squamous NSCLC (cohort A); 66.7% (4/6) in patients with squamous NSCLC (cohort B); and 76.5% (13/17) in patients with SCLC.

Esophageal Squamous Cell Carcinoma ("ESCC") and Nasopharyngeal Cancer

During 2019 data from several other studies evaluating tislelizumab in patients with esophageal and nasopharyngeal cancers were presented. The data from esophageal cancer patients was from a Phase 2 trial in esophageal and gastric or gastroesophageal junction carcinoma being conducted in China. Patients were treated with tislelizumab at a dose of 200mg and cisplatin on day one, and fluorouracil (5-FU) on days one through five during each 21-day cycle. Data presented at a median follow-up time of 13 months showed an ORR of 47%, with no patients having a CR.

The nasopharyngeal cancer ("NPC") data was from a cohort of our Phase 1/2 study of tislelizumab in China. The multi-center, open-label trial of tislelizumab in China as monotherapy in advanced solid tumors consists of a Phase 1 dose verification and pharmacokinetics component and a Phase 2 component of indication expansion in disease-specific cohorts, including patients with NPC solid tumors. Data presented at the American Society of Clinical Oncology ("ASCO") were from 21 patients with NPC, of whom 20 were enrolled in the Phase 2 indication-expansion portion of the trial. Patients were treated with tislelizumab at a dose of 200 mg every three weeks. Data presented at a median follow-up time of 7.6 months showed an ORR of 23% and a CR rate of 8%.

Other Tumor Types

In addition to the studies discussed above, we are evaluating tislelizumab for the treatment of patients with a broad array of tumor types including gastric, head and neck, ovarian, natural killer/T-cell and liver cancers as well as cancers that are microsatellite instability-high ("MSI-high") or deficient mismatch repair ("dMMR").

Safety Results

The safety results of tislelizumab in clinical trials to date are consistent with its therapeutic class, having a relatively low rate of drug-related grade 3 or above toxicity. Across the monotherapy studies, the safety results were consistent with our two Phase 1 studies, and our first-in-human Phase 1 study. TEAEs are

indicated in the table immediately below. Over half of the patients in our two Phase 1 studies experienced a tislelizumab-related TEAE, though ≥ grade 3 events were less frequent (8% to 10%).

System Organ Class Preferred Term	Phase 1a N=116 n (%)	Phase 1b N=335 n (%)	Total N=451 n (%)
Patients with at least one TEAE	114(25.3)	322(71.4)	436(96.7)
Fatigue	47(10.4)	78(17.3)	125(27.7)
Nausea	41 (9.1)	68(15.1)	109(24.2)
Decreased appetite	19 (4.2)	71(15.7)	90(20.0)
Diarrhea	32 (7.1)	49(10.9)	81(18.0)
Constipation	26 (5.8)	50(11.1)	76(16.9)
Abdominal pain	26 (5.8)	38 (8.4)	64(14.2)
Vomiting	20 (4.4)	43 (9.5)	63(14.0)
Back pain	22 (4.9)	40 (8.9)	62(13.7)
Cough	15 (3.3)	45(10.0)	60(13.3)
Rash	23 (5.1)	37 (8.2)	60(13.3)
Dyspnea	12 (2.7)	33 (7.3)	45(10.0)

All grades, regardless of causality; Data cut-off April 27, 2018; 6 months after Last Patient Enrolled; Source: BGB-A317 IB v6.0. Of the 451 total patients in the Safety Population for Study BGB A317_001, 203 (45.0%) experienced at least 1 grade 3 or higher TEAE. The most commonly occurring grade 3 or higher TEAEs (≥ 2%; 9 or more patients overall incidence) were pneumonia (22 patients, 4.9%), anemia (18 patients, 3.2%), and hypokalemia (9 patients, 2.0%).

irTEAEs and Deaths

Immune-related TEAEs ("irTEAEs") of any grade were reported in approximately 47% of patients across the monotherapy studies but were primarily low grade (9.5% ≥ grade 3). These irTEAEs have well-established algorithms for treatment and are considered manageable.

Across the monotherapy studies, the rate of treatment emergent serious AEs, or TESAEs, was 33% in patients with a variety of different disease characteristics. TESAEs considered to be related to treatment with tislelizumab were notably lower, at 9.6%.

There have been some deaths reported across the monotherapy studies with clinical data available, of which <1% of the total patient population were considered related to study drug. No new safety signals were observed since the last report as of February 29, 2020. In our clinical studies to date, the safety profile of tislelizumab has been consistent with that of molecules in the same class.

Clinical Development Plan

Tislelizumab was approved on December 26, 2019 by the NMPA for use in cHL patients who have received at least two prior therapies. We plan to launch the product in China in the first quarter of 2020. We expect to receive approval for a second indication in R/R UBC in 2020. If we receive conditional approval instead of full approval, we will be required to conduct one or more confirmatory studies after such conditional approvals. We also expect to submit for approval in China for tislelizumab for the treatment of patients with NSCLC, HCC, GC, and ESCC based on our China trials and, where appropriate, our global studies.

We are running a broad development program for tislelizumab, including 15 registration or registration-enabling clinical trials. These include global pivotal trials in Asia-prevalent cancers, NSCLC, HCC, GC, and ESCC, which are intended to support regulatory submissions globally and in China. We have initiated pivotal or Phase 3 trials to evaluate tislelizumab as a potential second- or third-line treatment compared to docetaxel in patients with NSCLC; two Phase 3 trials evaluating tislelizumab plus chemotherapy versus chemotherapy in squamous and non-squamous histology NSCLC; and a Phase 3 trial in 1L SCLC

evaluating tislelizumab plus chemotherapy versus chemotherapy. In 2020, we expect to complete enrollment in the third line versus docetaxel study, and we expect to report top-line data from the squamous and non-squamous histology Phase 3 trials. In liver cancer we have ongoing studies investigating use of tislelizumab as a potential first-line treatment compared to sorafenib in patients with HCC and in second- or third-line HCC used as a monotherapy in a single arm pivotal Phase 2 study. We expect to have regulatory discussions with the relevant authorities regarding the second- or third-line monotherapy HCC study in 2020. In GC we have a study ongoing that is investigating the use of tislelizumab as a potential first-line treatment in combination with platinum and fluoropyrimidine-based chemotherapy. Finally, in ESCC we have several studies ongoing, including as a potential second-line treatment compared to investigator-chosen chemotherapy in patients with ESCC, as a potential first-line treatment in advanced ESCC patients in combination with platinum and fluoropyrimidine-based chemotherapy, and most recently as a potential treatment in localized ESCC evaluating tislelizumab plus chemoradiotherapy versus chemoradiotherapy alone. We expect to complete enrollment in the second-line study comparing tislelizumab to investigator-chosen chemotherapy in the first half of 2020.

We are also testing tislelizumab in registration-enabling studies in UC, MSI-high or dMMR solid tumors and NPC. We have initiated two studies in UC, including a pivotal Phase 2 in second-line UC using tislelizumab as monotherapy, and a Phase 3 in first line UC comparing tislelizumab plus chemotherapy versus chemotherapy alone; a pivotal Phase 2 study in MSI-high or dMMR solid tumors using tislelizumab as monotherapy; and a Phase 3 in first line NPC evaluating tislelizumab plus chemotherapy versus chemotherapy alone.

We have also recently initiated a global Phase 2 trial in patients with R/R mature T- and NK-cell lymphomas.

Pamiparib (BGB-290), an inhibitor of PARP1 and PARP2

Pamiparib is an investigational, selective small molecule inhibitor of poly ADP-ribose polymerase 1 ("PARP1") and PARP2 enzymes that is being evaluated as a potential monotherapy and in combinations for the treatment of various solid tumors. We believe that pamiparib has the potential to be differentiated from other PARP inhibitors because of its brain penetration, greater selectivity, strong DNA-trapping activity, and good oral bioavailability demonstrated in preclinical models.

Mechanism of Action

PARP family members PARP1 and PARP2 play essential roles in cell survival in response to DNA damage. PARP1 and PARP2 are key base-excision-repair proteins that function as DNA damage sensors by binding rapidly to the site of damaged DNA and modulating a variety of proteins in DNA repair processes. Inhibition of PARPs prevents the repair of common single-strand DNA breaks, which leads to formation of double-strand breaks during DNA replication. Double-strand DNA breaks in normal cells are repaired by homologous recombination, and normal cells are relatively tolerant of PARP inhibition. On the other hand, cancer cells with mutations in breast cancer susceptibility gene, or BRCA1/2 genes, which are key players in homologous recombination, are highly sensitive to PARP inhibition. This phenomenon is called "synthetic lethality" and is the foundation of the therapeutic utility of PARP inhibitors as a monotherapy for BRCA mutant cancers. In addition to hereditary BRCA1/2 mutations, the synthetic lethality concept has been broadened to include sporadic tumors that display homologous recombination deficiency ("HRD"), a gene expression profile that resembles that of a BRCA deficient tumor. HRD can stem from somatic mutation of BRCA1/2, epigenetic silencing of BRCA genes or genetic or epigenetic loss of function of other genes in homologous recombination DNA damage repair pathways. Third-party clinical studies have published results demonstrating that sensitivity to platinum-based chemotherapies confers sensitivity to PARP inhibitors in OC as well. Thus, the application of PARP inhibitors is likely broader than BRCA or HRD mutations, and there is additional possibility to identify and enrich patient populations for PARP inhibition.

Another potential therapeutic utility of PARP inhibitors is in combination therapy, which has strong scientific rational. PARP proteins are key factors in base-excision-repair, which is critical for the repair of DNA lesions caused by some chemotherapeutic agents and by radiation. PARP inhibitors are hypothesized to potentiate cytotoxicity of DNA-alkylating agents such as platinum compounds, temozolomide and ionizing radiation, and may be used in combination with these agents in treating various cancers.

PARP inhibitors are also considered good potential combination partners with checkpoint inhibitors in part due to increased mutations in tumor cells as a result of the blockade of DNA repair by PARP inhibitors as a higher mutational load in cancers has been shown in clinical studies to correlate with improved response to checkpoint inhibitors. In addition, preclinical data suggest that BRCA mutant tumors which are sensitive to PARP inhibition are likely to be immunogenic and responsive to PD-1 or PD-L1 antibodies.

Market Opportunity and Competition

We believe that the market opportunity for PARP inhibitors is large and expanding in various patient segments. Many tumor types have been shown to be responsive to PARP inhibitors, including OC, breast cancer, prostate cancer, and GC. PARP inhibitors have demonstrated encouraging activity both in R/R patients as well as in the maintenance setting. In the United States, in 2019 there were approximately 22,530 new cases of OC, 271,270 new cases of breast cancer, 174,650 new cases of prostate cancer, and 27,510 new cases of GC, according to the U.S. National Cancer Institute's SEER online database. In China, each year there are approximately 52,000 new cases of OC, 272,000 new cases of breast cancer, 60,000 new cases of prostate cancer, and 680,000 new cases of GC according to Chen et al. 2016.

A number of PARP inhibitors have been approved by the FDA. These include AstraZeneca's LYNPARZA® (olaparib), Clovis Oncology's RUBRACA® (rucaparib), GlaxoSmithKline / Tesaro's ZEJULA® (niraparib), and Pfizer's TALZENNA® (talazoparib). AbbVie's veliparib is in late-stage development. In 2019, global sales of the PARP class exceeded $1.5 billion according to company reports. In China, AstraZeneca received approval for olaparib in August 2018 under priority review that utilized international multi-center data. Zai Labs obtained the development and commercial rights for niraparib in China, and its NDA to the NMPA was approved on December 30, 2019. There are other PARP inhibitors being developed by domestic Chinese companies, including fluzoparib from Hengrui and Hansoh. Fluzoparib was submitted to the NMPA in October 2019.

Summary of Clinical Results

We have multiple ongoing studies in indications known to be responsive to PARP inhibition, including two registration studies in ovarian cancer ("OC") in China.

Advanced Solid Tumors

Data from our open-label, multi-center Phase 1b dose-escalation/expansion trial (NCT03150810) of pamiparib plus low-dose temozolomide (TMZ) were presented at the 2019 ESMO. The trial was designed to evaluate the safety, tolerability, maximum tolerated dose (MTD), and preliminary anti-tumor activity of the combination in patients with locally advanced and metastatic tumors. Patients received full dose pamiparib in combination with escalating doses of TMZ, administered in both pulse and continuous dosing schedules. The recommended Phase 2 dose and schedule of the combination was determined to be 60 mg of pamiparib taken orally BID for 28 days, with TMZ at 60 mg orally QD during days one through seven. Data were presented from three disease cohorts: prostate, extensive-stage SCLC, and GC. The ORR and CR rates from these cohorts were 19% and 0%, 32% and 5%, and 0% and 0%, respectively. Median follow-up time in the SCLC and gastric cohorts was four months in each cohort.

Ovarian Cancer

At the 2019 ESMO, we reported results from a multi-center, open-label Phase 1a/1b trial (NCT02361723) of pamiparib being conducted in Australia in patients with advanced solid tumors. The Phase 1a dose-escalation and dose-finding component identified the recommended Phase 2 dose to be 60 mg orally BID. The ongoing Phase 1b trial consists of a component to investigate the safety, tolerability, and antitumor activity of pamiparib in disease-specific dose-expansion cohorts, and a component investigating the effects of food on the pharmacokinetic profile of a single dose. Data from 58 patients in the OC cohort showed an ORR of 40% and a CR rate of 7%.

Clinical Development Plan

Gastric Cancer

We are in the process of converting from Phase 3 to Phase 2 the clinical trial of our PARP inhibitor pamiparib versus placebo as maintenance therapy in patients with inoperable locally advanced or metastatic GC who have responded to platinum-based first line chemotherapy (NCT03427814, also known as the BGB-290-303 trial). The trial has enrolled approximately 120 patients globally since it commenced in July 2018, and the enrollment has been slower than expected. The reason for this change was not due to safety or efficacy issues. We plan to evaluate data from the Phase 2 trial to assess the potential of pamiparib in this indication and the potential next steps of development as a monotherapy or in combination with other therapies.

Our clinical development program includes a Phase 3 trial as a maintenance therapy in patients with platinum-sensitive recurrent OC (NCT03519230), a pivotal Phase 2 study in third line BRCA mutated OC (NCT03333915), a Phase 2 trial in BRCA mutated HER2-negative breast cancer (NCT03575065), and a Phase 2 trial in HRD- metastatic prostate cancer (NCT03712930).

We plan to discuss our data in OC with regulatory authorities and potentially submit an NDA in China for use of pamiparib in OC in 2020. We expect to announce top-line results from our pivotal Phase 2 germline BRCA ("gBRCA")-mutated OC as well as data from our Phase 3 maintenance study in patients with platinum-sensitive recurrent OC. In addition, we expect to present data from the OC cohort of the global Phase 1 study and data from the Phase 1 study investigating pamiparib in combination with tislelizumab in 2020.

Lifirafenib (BGB-283) and BGB-3245, Inhibitors of RAF

Lifirafenib is an investigational novel small molecule inhibitor with RAF monomer and dimer inhibition activities. Lifirafenib has shown antitumor activities in preclinical models and in cancer patients with tumors harboring BRAF V600E mutations, non-V600E BRAF mutations or KRAS/NRAS mutations. We have been developing lifirafenib for the treatment of cancers with aberrations in the mitogen-activated protein kinase ("MAPK"), pathway, including BRAF gene mutations and KRAS/NRAS gene mutations where first generation BRAF inhibitors are not effective. The MAPK pathway consists of proteins in the cell that transmit a signal from a receptor on the surface of the cell to the DNA in the nucleus of the cell. This pathway plays an essential role in regulating cell proliferation and survival. We believe that lifirafenib as monotherapy or in combination with other agents may have potential for treating various malignancies, such as melanoma, NSCLC, and endometrial cancer.

Currently approved BRAF inhibitors include Roche's ZELBORAF® (vemurafenib), Novartis' TAFINLAR® (dabrafenib) and Array BioPharma's BRAFTOVI® (encorafenib). The combination of BRAF and MEK inhibitors is approved in patients with BRAF V600E/K mutation-positive metastatic melanoma, such as Novartis' dabrafenib and MEKINIST® (trametinib), Genentech's vemurafenib and COTELLIC® (cobimetinib), and Array Biopharma's encorafenib and MEKTOVI® (binimetinib). We are aware of several other BRAF inhibitors in clinical development, such as Roche's belvarafenib and Novartis' LXH254.

In September 2018, BeiGene and SpringWorks Therapeutics, Inc. ("SpringWorks") announced a global clinical collaboration agreement to evaluate the safety, tolerability, and preliminary efficacy of combining lifirafenib and SpringWorks' investigational MEK inhibitor, PD-0325901, in patients with advanced solid tumors. Under the collaboration, the parties began a Phase 1b clinical trial in the third quarter of 2019 to evaluate this combination in patients with advanced or refractory solid tumors that harbor RAS mutations, RAF mutations, and other MAPK pathway aberrations.

In June 2019, we and SpringWorks announced the formation of MapKure, LLC to develop BGB-3245, an investigational, selective next-generation RAF kinase inhibitor discovered by BeiGene scientists. MapKure recently initiated a Phase 1 clinical trial (NCT04249843) in patients with advanced or refractory tumors harboring specific v-RAF murine sarcoma viral oncogene homolog B (B-RAF) genetic mutations.

Sitravatinib (MGCD-0516), a Multi-Kinase Inhibitor

In January 2018, we entered into an exclusive license agreement with Mirati Therapeutics, Inc. ("Mirati") for the development, manufacturing and commercialization of Mirati's sitravatinib in Asia (excluding Japan and certain other countries), Australia and New Zealand. Sitravatinib is an investigational spectrum-selective kinase inhibitor, which potently inhibits receptor tyrosine kinases, including RET, TAM family receptors (TYRO3, Axl, MER), and split family receptors (VEGFR2, KIT). Sitravatinib is being evaluated by Mirati in multiple clinical trials to treat patients who are refractory to prior immune checkpoint inhibitor therapy, including a potentially registration-enabling Phase 3 trial of sitravatinib in NSCLC initiated in the second quarter of 2019. Sitravatinib is also being evaluated as a single agent in patients with NSCLC, melanoma and other solid tumor types whose tumors harbor specific genetic alterations in the CBL protein. In recent data readouts by Mirati, sitravatinib has demonstrated durable responses in lung cancer patients who progressed after treatment with checkpoint inhibitors. We began a Phase 1 study (NCT03666143) of sitravatinib in combination with tislelizumab in various solid tumors in Australia and China in the third quarter of 2018, and in the second quarter of 2019 we initiated a second study, a Phase 1/2 (NCT03941873) trial, combining sitravatinib with tislelizumab, this one focused on HCC or gastroesophageal junction cancer.

BGB-A333, a PD-L1 Inhibitor

BGB-A333 is an investigational humanized IgG1-variant monoclonal antibody against PD-L1, the ligand of PD-1. We intend to develop BGB-A333 either as a monotherapy or in combination with other cancer therapies, such as tislelizumab, to treat various cancers and potentially other areas of unmet need. BGB-A333 is currently being evaluated in a Phase 1 clinical trial (NCT03379259) in Australia to assess the safety and antitumor effect of BGB-A333 alone and in combination with tislelizumab in patients with advanced solid tumors.

BGB-A425, a TIM-3 Inhibitor

BGB-A425 is an investigational humanized IgG1-variant monoclonal antibody against T-cell immunoglobulin and mucin-domain containing-3 ("TIM-3"). We began a Phase 1/2 trial (NCT03744468) of BGB-A433 in combination with tislelizumab in various solid tumors in the fourth quarter of 2018.

BGB-A1217, a TIGIT Inhibitor

BGB-A1217 is an investigational humanized IgG1-variant monoclonal antibody directed against TIGIT. We have initiated patient enrollment in a Phase 1a/1b trial (NCT04047862) in Australia investigating the safety, tolerability, pharmacokinetics, and preliminary antitumor activity of BGB-A1217 in combination with tislelizumab in patients with advanced solid tumors.

BGB-11417, a Small Molecule Bcl-2 Inhibitor

BGB-11417 is a small molecule Bcl-2 inhibitor. We have completed preclinical and investigational new drug (IND) -enabling studies of BGB-11417, which demonstrated potent activity and high selectivity against the pro-apoptotic protein Bcl-2. We have initiated study start-up for a Phase 1 trial (NCT04277637) in Australia and the United States to investigate the safety, tolerability, pharmacokinetics, and preliminary antitumor activity of BGB-11417 in patients with mature B-cell malignancies.

BGB-A445, an OX40 Agonist Antibody

BGB-A445 is an agonistic antibody directed to the OX40 antigen. We have initiated a Phase 1 trial (NCT04215978) of our OX40 antibody in combination with tislelizumab in patients with advanced solid tumors.

Our Preclinical Programs

We have a proprietary cancer biology platform that has also allowed us to develop our clinical-stage drug candidates and several additional preclinical-stage drug candidates in potentially important areas. These currently consist of targeted therapies and immuno-oncology agents. We have initiated first-in-human studies for two drug candidates and have initiated study start-up activities for a third, BGB-11417, a small molecule Bcl-2 inhibitor. We anticipate advancing one or more of our preclinical drug candidates into the clinic in the next 12 months. We believe we have the opportunity to combine tislelizumab with our preclinical candidates to target multiple points in the cancer immunity cycle. We also may seek to develop companion diagnostics that will help identify patients who are most likely to benefit from the use of our drug candidates.

Manufacturing and Supply

We manufacture our drugs and drugs candidates internally and with the help of third-party contract manufacturing organizations ("CMOs"). The manufacturing of our drugs and drug candidates is subject to extensive regulations that impose various procedural and documentation requirements governing recordkeeping, manufacturing processes and controls, personnel, quality control and quality assurance, among others. Our manufacturing facilities and the facilities of the CMOs we use to manufacture our drugs and drug candidates operate under current good manufacturing practice regulations ("GMP") conditions. GMP are regulatory requirements for the production of pharmaceuticals that will be used in humans.

Our Manufacturing Facilities

We have an approximately 11,000 square meter multi-functional manufacturing facility in Suzhou, China, where we produce small molecule and biologics drug candidates for clinical supply and which we plan to use for commercial supply of our small molecule drug candidates in China and potentially outside of China, if approved. This facility consists of one oral-solid-dosage production line for small molecule drug products and one pilot plant for monoclonal antibody drug substances and is aligned with the design criteria of the United States, EU, and China regulatory requirements. The facility has a manufacturing license, which is required for the commercial manufacture of zanubrutinib in China following NDA approval.

In addition, we formed a joint venture with Guangzhou High-Tech Zone Technology Holding Group Co., Ltd. (formerly GET), an affiliate of Guangzhou Development District, to build a commercial-scale biologics manufacturing facility in Guangzhou, China. We completed the initial phase of construction in September 2019. This facility is designed to be 100,000 square meters and have a 50,000-liter commercial scale capacity. The initial phase of the facility utilizes General Electric's state-of-the-art KUBio™ prefabricated bio-manufacturing equipment. We have received the drug manufacturing license for drug substances and drug products for this facility and are now in the process of validating this facility for global commercial supplies. Following regulatory inspection and approval, the first commercial product to be manufactured at this facility is expected to be tislelizumab.

We also have an approximately 140 square meter manufacturing facility at our research and development location in Beijing, China, which produces preclinical and clinical trial materials for some of our small molecule drug candidates.

Contract Manufacturing Organizations

We currently rely on, and expect to continue to rely on, a limited number of third-party CMOs and CROs for the production of some drug products and drug substances and the supply of raw materials to meet the commercial, clinical, and preclinical needs of our drugs and drug candidates. We have adopted procedures to ensure that the production qualifications, facilities and processes of our third-party outsourced suppliers comply with the relevant regulatory requirements and our internal quality and operation guidelines. We select our third-party suppliers carefully by considering a number of factors, including their qualifications, relevant expertise, production capacity, geographic proximity, reputation, track record, product quality, reliability in meeting delivery schedules, and terms offered by such third-party outsourced suppliers.

We have framework agreements with most of our manufacturing service providers. For example, we entered into a commercial supply agreement with Catalent Pharma Solutions, LLC ("Catalent") to produce BRUKINSA at Catalent's Kansas City, MO site for commercial and clinical supply outside of China. In addition, we entered into a commercial supply agreement with Boehringer Ingelheim Biopharmaceuticals (China) Ltd. ("Boehringer Ingelheim") for our anti-PD-1 antibody tislelizumab, which is being manufactured at Boehringer Ingelheim's facility in Shanghai, China as part of a marketing authorization holder ("MAH") project pioneered by us and Boehringer Ingelheim. For our commercial products licensed from BMS, we rely on BMS and its contract manufacturers outside of China for the supply of those drugs. For our clinical and commercial products that are being commercialized in collaboration with Amgen, we expect to rely on Amgen and its contract manufacturers outside of China for the supply of those drugs and drug candidates.

Our agreements with our outsourced suppliers generally set out terms, including product quality or service details, technical standards or methods, delivery terms, agreed price and payment, and product inspection and acceptance criteria. We are generally allowed to return any products that fail to meet our quality standards. Our outsourced suppliers procure raw materials themselves. Typically, outsourced suppliers request settlement of payment within 30 days from the date of invoice. Either party may terminate the agreements by serving notice to the other party under certain circumstances.

We generally obtain raw materials for our manufacturing activities from multiple suppliers who we believe have sufficient capacity to meet our demands. Raw materials and starting materials used at our facilities in Beijing and Suzhou include active pharmaceutical ingredients custom-made by our third-party CROs and excipients, which are commercially available from well-known vendors that meet the requirements of the relevant regulatory agencies. The core raw materials to be used in manufacturing at our Guangzhou facility are expected to be genetically modified cell lines that we co-developed and licensed from Boehringer Ingelheim and other third parties.

We typically order raw materials on a purchase order basis and do not enter into long-term dedicated capacity or minimum supply arrangements. We pay for our purchases of raw materials on credit. Credit periods granted to us by our suppliers generally range from 30 to 60 days. Our suppliers are generally not responsible for the defects of our finished products.

Amgen Collaboration

Collaboration Agreement

On October 31, 2019 our wholly-owned subsidiary, BeiGene Switzerland GmbH ("BeiGene Switzerland"), entered into a Collaboration Agreement with Amgen, which became effective on January 2, 2020 (the "Amgen Collaboration Agreement"). Pursuant to the terms of the Amgen Collaboration Agreement, BeiGene Switzerland will be responsible for commercializing Amgen's oncology products XGEVA, KYPROLIS and BLINCYTO in China (excluding Hong Kong, Macao and Taiwan) for a period of five or seven years following each product's regulatory approval in China, as specified in the Amgen Collaboration Agreement, with the commercialization period for XGEVA commencing following the transition of operational responsibilities for the product. In addition, as specified in the agreement, BeiGene Switzerland will have the option to retain one of the three products to commercialize for as long as the product is sold in China. The parties have agreed to equally share profits and losses for the products in China during each product's commercialization period through BeiGene Switzerland. After expiration of the commercialization period for each product, the products not retained will be transitioned back to Amgen and BeiGene Switzerland will be eligible to receive tiered mid-single to low-double digit royalties on net sales in China of each product for an additional five years.

Additionally, pursuant to the terms of the Amgen Collaboration Agreement, BeiGene Switzerland and Amgen have agreed to collaborate on the global development and commercialization in China of 20 Amgen clinical- and late-preclinical-stage oncology pipeline products. Starting from the commencement of the Amgen Collaboration Agreement, BeiGene Switzerland and Amgen will co-fund global development costs, with BeiGene Switzerland contributing up to $1.25 billion worth of development services and cash over the term of the collaboration. BeiGene Switzerland will be eligible to receive tiered mid-single digit royalties on net sales of each product globally outside of China, other than AMG 510, on a product-by-product and country-by-country basis, until the latest of the expiration of the last valid patent claim, the expiration of regulatory exclusivity, or the earlier of eight years after the first commercial sale of such product in the country of sale and 20 years from the date of first commercial sale of such product anywhere in the world.

For each pipeline product that is approved in China, BeiGene Switzerland will have the right to commercialize the product for seven years, with the parties sharing profits and losses for the product in China equally. In addition, depending on how many of the 20 pipeline products receive approval in China, BeiGene Switzerland will have the right to retain approximately one of every three approved products, up to a total of six, other than AMG 510, to commercialize for as long as each such product is sold in China. After the expiration of the seven-year commercialization period, each product will be transitioned back to Amgen and BeiGene Switzerland will be eligible to received tiered mid-single to low-double digit royalties on net sales in China for an additional five years. The parties are subject to specified exclusivity requirements in China and the rest of the world.

We have guaranteed certain obligations of BeiGene Switzerland under the Amgen Collaboration Agreement pursuant to the terms of a separate Guarantee Agreement.

The Amgen Collaboration Agreement contains customary representations, warranties and covenants by the parties. The agreement will continue in effect on a product-by-product basis unless terminated by either party pursuant to its terms. The agreement may be terminated by mutual written consent of the parties, or by either party upon the other party's uncured material breach, insolvency, failure to comply with specified compliance provisions, or subject to a specified negotiation mechanism, certain adverse economic impacts or the failure to meet commercial objectives. In addition, Amgen may terminate the agreement with respect to a pipeline product in the event it suspends development of such pipeline product on specified terms, subject to the parties determining whether to continue development of the pipeline product in China.

Share Purchase Agreement

In connection with the Amgen Collaboration Agreement, pursuant to a share purchase agreement dated October 31, 2019, as amended, by and between BeiGene, Ltd. and Amgen (the "Share Purchase Agreement"), we issued 206,635,013 ordinary shares in the form of 15,895,001 American Depositary Shares

("ADSs") of BeiGene, Ltd. on January 2, 2020, representing approximately 20.5% of our outstanding shares to Amgen, for an aggregate cash price of $2.78 billion, or $13.45 per ordinary share, or $174.85 per ADS.

Pursuant to the Share Purchase Agreement, Amgen has agreed to (i) a lock-up on sales of its shares until the earliest of (a) the fourth anniversary of the closing, (b) the expiration or termination of the Collaboration Agreement and (c) a change of control of BeiGene, Ltd., (ii) a standstill until the later of (a) the first anniversary of the date as of which it ceases to have the right to appoint a director and (b) the date on which it holds less than 5% of our then outstanding shares, and (iii) a voting agreement to vote its shares on certain matters presented for shareholder approval until the later of (a) the fifth anniversary of the closing and (b) the expiration of the standstill period, all under specified circumstances and as set forth in the agreement. Following the later of (i) the expiration of the lock-up period and (ii) the expiration of the standstill period, Amgen has agreed not to sell shares representing more than 5% of our then outstanding shares in any rolling 12-month period, subject to specified exceptions. In addition, Amgen will have the right to designate an independent director to serve on our board of directors until the earlier of (a) the date on which Amgen holds less than 10% of our then outstanding shares as a result of Amgen's sale of ordinary shares or Amgen's failure to participate in future offerings and (b) the third anniversary of the date of the expiration or termination of the Amgen Collaboration Agreement. Under the terms of the Share Purchase Agreement, Amgen will also have specified registration rights upon expiration of the lock-up. Additionally, we have agreed to use reasonable best efforts to provide Amgen with an opportunity to participate in subsequent new securities offerings upon the same terms and conditions as other purchasers in the offering in an amount needed to allow Amgen to hold 20.5% of our shares, subject to applicable law and HKEx rules and other specified conditions.

Celgene License and Supply Agreement

On July 5, 2017, we and Celgene Logistics Sàrl, a wholly-owned subsidiary of BMS, entered into a License and Supply Agreement, which we refer to as the China License Agreement and which became effective on August 31, 2017, pursuant to which we were granted the right to exclusively distribute and promote BMS's approved cancer therapies, ABRAXANE, REVLIMID and VIDAZA in China, excluding Hong Kong, Macau and Taiwan. In addition, if BMS decides to commercialize a new oncology product through a third party in the licensed territory during the first five years of the term, we have a right of first negotiation to obtain the right to commercialize the product, subject to certain conditions. We subsequently assigned the agreement to our wholly-owned subsidiary, BeiGene Switzerland.

The term of the China License Agreement is 10 years and may be terminated by either party upon written notice in the event of uncured material breach or bankruptcy of the other party, or if the underlying regulatory approvals for the covered products are revoked. BMS also has the right to terminate the agreement with respect to REVLIMID at any time upon written notice to us under certain circumstances.

The China License Agreement contains customary representations and warranties and confidentiality and mutual indemnification provisions.

Intellectual Property

The proprietary nature of, and protection for, our drugs, drug candidates, and their methods of use are an important part of our strategy to develop and commercialize novel medicines, as described in more detail below. We have obtained patents and filed patent applications in the United States and other countries and regions, such as China and Europe, relating to our drugs and certain of our drugs and drug candidates, and are pursuing additional patent protection for them and for our other drug candidates and technologies. We rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection including our manufacturing processes. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and support our development programs.

As of January 29, 2020, we owned 25 issued U.S. patents, 11 issued China patents, a number of pending U.S. and China patent applications, and corresponding patents and patent applications internationally. In addition, we owned pending international patent applications under the Patent

Cooperation Treaty ("PCT"), which we plan to file nationally in the United States and other jurisdictions, as well as additional priority PCT applications. With respect to any issued patents in the United States and Europe, we may be entitled to obtain a patent term extension to extend the patent expiration date, provided that we meet the applicable requirements for obtaining such patent term extensions. For example, in the United States, we can apply for a patent term extension of up to five years for one of the patents covering a drug product once the product is approved by the FDA. The exact duration of the extension depends on the time that we spend in clinical studies as well as getting approval from the FDA.

The key patents for our drugs and late-stage clinical drug candidates as of January 29, 2020, are summarized below:

Molecule	Territory	General Subject Matter	Expiration[(1)]
BRUKINSA™ (Zanubrutinib)	U.S.	Compound and composition	2034
	U.S.	Use for the treatment of autoimmune diseases	2034
	China	Compound and composition	2034
Tislelizumab	U.S.	Antibodies	2033
	U.S.	Use for the treatment of cancer	2033
	U.S.	Antibodies and use for the treatment of cancer	2033
	U.S.	Antibodies	2033
	China	Antibodies	2033
Pamiparib	U.S.	Compound and composition	2031
	U.S.	Compound and composition	2031
	U.S.	Use for the treatment of cancer	2031
	U.S.	Compositions	2031
	U.S.	Crystalline forms	2036
	China	Compound and composition	2031
	China	Use for the treatment of cancer	2031

(1) The expected expiration does not include any additional term for patent term extensions

We have three in-licensed drugs in China from BMS. The key patents for them as of January 29, 2020 are summarized below:

Product	Territory	General Subject Matter	Expiration
ABRAXANE® (a nanoparticle albumin-bound paclitaxel)	China	Use for the treatment of cancer	2026
	China	Use for the treatment of cancer	2031
REVLIMID® (lenalidomide)	China	Use for the treatment of multiple myeloma	2023
	China	Use for the treatment of multiple myeloma	2023
	China	Use for the treatment of multiple myeloma	2023
	China	Use for the treatment of multiple myeloma	2023
VIDAZA® (azacitidine)	China	No patent	N/A

Under our collaboration with Amgen, we have the right to commercialize in China one drug and, upon approval in China, two late-stage product candidates. The key patents necessary for these products in China are summarized below:

Product	Territory	General Subject Matter	Expiration
XGEVA® (denosumab)	China	Antibodies	2022
KYPROLIS® (carfilzomibe)	China	Compound and Composition	2025
BLINCYTO® (blinatumomab)	China	No patent	N/A

Although various extensions may be available, the life of a patent and the protection it affords, is limited. ABRAXANE, REVLIMID and VIDAZA face or are expected to face competition from generic medications, and we may face similar competition for our drugs and any approved drugs even if we successfully obtain patent protection. The scope, validity or enforceability of our patents may be challenged in court, and we may not be successful in enforcing or defending those intellectual property rights and, as a result, may not be able to develop or market the relevant product exclusively, which would have a material adverse effect on any potential sales of that product. Additionally, in China, the NMPA may approve a generic version of a brand-name drug that still has patent protection, such as has occurred with ABRAXANE and REVLIMID. Under our license agreements with BMS and Amgen, they retain the responsibility for, but are not obligated, to prosecute, defend and enforce the patents for these in-licensed products. As such, any issued patents may not protect us from generic or biosimilar competition for these drugs.

The term of individual patents may vary based on the countries in which they are obtained. In most countries in which we file, including the United States and China, the term of an issued patent is generally 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country. In the United States, a patent's term may be lengthened in some cases by a patent term adjustment, which extends the term of a patent to account for administrative delays by the United States Patent and Trademark Office (the "USPTO"), in excess of a patent applicant's own delays during the prosecution process, or may be shortened if a patent is terminally disclaimed over a commonly owned patent having an earlier expiration date. In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost in obtaining FDA regulatory approval. However, the restoration period cannot be longer than five years and the total patent term including the restoration period must not exceed 14 years following FDA approval.

In certain foreign jurisdictions similar extensions as compensation for regulatory delays are also available. The actual protection afforded by a patent varies on a claim by claim and country by country basis and depends upon many factors, including the type of patent, the scope of its coverage, the availability of any patent term extensions or adjustments, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

We may rely, in some circumstances, on trade secrets and unpatented know-how to protect aspects of our technology. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with employees, consultants, scientific advisors and contractors and invention assignment agreements with our employees. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

Additionally, we currently own a number of registered trademarks and pending trademark applications. We currently have registered trademarks for BeiGene, our corporate logo and product names and logos in China, the EU and other jurisdictions, and we are seeking trademark protection for BeiGene, our corporate logo, product names and logos, and other marks in the United States and other countries where available and appropriate.

Government Regulation

Government authorities in the United States at the federal, state and local level and in other countries extensively regulate, among other things, the research and clinical development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution,

post-approval monitoring and reporting, marketing, pricing and export and import of drugs such as those we are developing and commercializing. Some jurisdictions also regulate the pricing of drugs. Generally, before a new drug can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific to each regulatory authority, submitted for review and approved by the regulatory authority.

U.S. Regulation

U.S. Government Regulation and Product Approval

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act ("FDCA"), and its implementing regulations, and biologics under the FDCA, its implementing regulations, and the Public Health Service Act ("PHSA"), and its implementing regulations.

Cancer therapies are sometimes characterized as first line, second line or third line, and the FDA often approves new therapies initially only for second or third-line use. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first line therapy, usually chemotherapy, hormone therapy, surgery or a combination of these, proves unsuccessful, second line therapy may be administered. Second line therapies often consist of more chemotherapy, radiation, antibody drugs, tumor targeted small molecule drugs or a combination of these. Third line therapies can include bone marrow transplantation, antibody and small molecule targeted therapies, more invasive forms of surgery and new technologies.

U.S. Drug Development Process

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

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices ("GLP"), regulations;
- submission to the FDA of an investigational new drug ("IND") application, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to GCP, to establish the safety and efficacy of the proposed drug or safety, purity and potency of the proposed biologic, for the intended use;
- preparation and submission to the FDA of an NDA for a drug or a Biologics License Application ("BLA") for a biologic;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with cGMP;
- FDA audits of some clinical trial sites to ensure compliance with GCPs; and
- FDA review and approval of the NDA or licensing of the BLA.

Once a product candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity, formulation and stability, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, to the FDA as part of the IND. The sponsor must also include a protocol detailing, among other things, the objectives of the initial clinical trial, dosing procedures, subject selection and exclusion criteria, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the initial clinical trial lends itself to an efficacy evaluation. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions related to the proposed clinical trial and places the trial on a clinical hold within that 30-day time period. In such a case,

the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or noncompliance and may be imposed on all products within a certain class of products. The FDA also can impose partial clinical holds, for example, prohibiting the initiation of clinical trials of a certain duration or for a certain dose.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent in writing before their participation in any clinical trial. Further, an institutional review board ("IRB") must review and approve the plan for any clinical trial before it commences at any institution, and the IRB must conduct continuing review and reapprove the study at least annually. An IRB considers, among other things, whether the risks to individuals participating in the clinical trial are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the clinical trial and the consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed.

Each new clinical protocol and any amendments to the protocol must be filed with the FDA as an IND amendment and submitted to the IRBs for approval.

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

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

- **Phase 1.** The product is initially introduced into a small number of healthy human subjects or patients and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion and, if possible, to gain early evidence on effectiveness. In the case of some products for severe or life-threatening diseases, especially when the product is suspected or known to be unavoidably toxic, the initial human testing may be conducted in patients.
- **Phase 2.** Involves clinical trials in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage and schedule.
- **Phase 3.** Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population. These clinical trials are intended to evaluate the overall risk/benefit relationship of the product and provide an adequate basis for product labeling.

We refer to our Phase 1 programs as dose-escalation and dose-expansion trials. In addition, we refer to some of our Phase 2 programs as pivotal or registrational programs, where the results can be used to support regulatory approval in specific jurisdictions without the need to conduct a Phase 3 trial.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected AEs, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator's brochure, or any findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the product drug. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase 1, Phase 2, and Phase 3 studies may not be completed successfully within any specified period, or at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly,

an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product has been associated with unexpected serious harm to subjects.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product does not undergo unacceptable deterioration over its shelf life.

A manufacturer of an investigational drug for a serious disease or condition is required to make available, such as by posting on its website, its policy on evaluating and responding to requests for individual patient access to such investigational drug. This requirement applies on the earlier of the first initiation of a Phase 2 or Phase 3 trial of the investigational drug or, as applicable, 15 days after the drug receives a designation as a breakthrough therapy, fast track product, or regenerative advanced therapy.

U.S. Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the product, proposed labeling and other relevant information, are submitted to the FDA as part of an NDA for a new drug or a BLA for a biologic, requesting approval to market the product. The submission of an NDA or BLA is subject to the payment of a substantial user fee, although a waiver of such fee may be obtained under certain limited circumstances. The sponsor of an approved NDA or BLA is also subject to an annual prescription drug product program fee.

The FDA reviews all NDAs and BLAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an NDA or BLA for filing. In this event, the NDA or BLA must be re-submitted with the additional information. The re-submitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use, and a BLA to determine whether the biologic is safe, pure, and potent for its intended use. The FDA also evaluates whether the product's manufacturing is cGMP-compliant to assure the product's identity, strength, quality and purity. Before approving an NDA or BLA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications.

The approval process is lengthy and difficult, and the FDA may refuse to approve an NDA or BLA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive, and the FDA may interpret data differently than we interpret the same data. The FDA will issue a complete response letter if the agency decides not to approve the NDA or BLA in its present form. The complete response letter usually describes all of the specific deficiencies that the FDA identified in the NDA or BLA that must be satisfactorily addressed before it can be approved. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be

included in the product labeling. In addition, the FDA may require post-approval studies, including Phase 4 clinical trials, to further assess a product's safety and effectiveness after NDA or BLA approval and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. The FDA may also approve an NDA or BLA with a Risk Evaluation and Mitigation Strategy ("REMS") program to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Regulation of Combination Products in the United States

Certain products may be comprised of components that would normally be regulated under different types of regulatory authorities in certain jurisdictions, and in the United States by different centers at the FDA. These products are known as combination products. Under the FDCA, the FDA is charged with assigning a center with primary jurisdiction, or a lead center, for review of a combination product. That determination is based on the "primary mode of action" of the combination product. We are developing combination products using our own drug candidates and third-party drugs.

Expedited Programs

Fast Track Designation

The FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs, including biologics that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition for which there is no effective treatment and demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new drug may request the FDA to designate the drug as a fast track product concurrently with, or at any time after, submission of an IND, and the FDA must determine if the drug candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request.

In addition to other benefits, such as the ability to engage in more frequent interactions with the FDA, the FDA may initiate review of sections of a fast track drug's NDA or BLA before the application is complete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the submission of each portion of the NDA or BLA and the applicant pays the applicable user fee. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA or BLA is submitted. Additionally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Zanubrutinib was granted fast track designation status by the FDA for the treatment of WM. Tislelizumab was granted fast track designation by the FDA for the treatment of HCC.

Accelerated Approval

Under FDA's accelerated approval regulations, the FDA may approve a drug, including a biologic, for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. In clinical trials, a surrogate endpoint is a marker, such as a laboratory measurement or clinical signs of a disease or condition that is thought to predict clinical benefit but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. A drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of post-approval clinical trials sometimes referred to as Phase 4 trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

Zanubrutinib was granted accelerated approval by FDA for the treatment of adult patients with MCL who have received at least one prior therapy.

Breakthrough Designation

Breakthrough therapy designation is intended to expedite the development and review of a breakthrough therapy. A drug or biologic product can be designated as a breakthrough therapy if it is intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that it may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. A sponsor may request that a product be designated as a breakthrough therapy concurrently with, or at any time after, the submission of an IND, and the FDA must determine if the candidate qualifies for breakthrough therapy designation within 60 days of receipt of the sponsor's request. If so designated, the FDA shall act to expedite the development and review of the product's marketing application, including by meeting with the sponsor throughout the product's development, providing timely advice to the sponsor to ensure that the development program to gather preclinical and clinical data is as efficient as practicable, involving senior managers and experienced review staff in a cross-disciplinary review, and assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor. The designation may be rescinded if the drug candidate does not continue to meet the criteria for breakthrough therapy designation.

Zanubrutinib was granted breakthrough therapy designation by the FDA for the treatment of adult patients with MCL who have received at least one prior therapy.

Priority Review

The FDA may grant an NDA for a new molecular entity or BLA a priority review designation, which sets the target date for FDA action on the application at six months after the FDA accepts the application for filing. Priority review is granted where there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. If criteria are not met for priority review, the application is subject to the standard FDA review period of ten months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

The NDA for zanubrutinib was granted priority review by the FDA for the treatment of adult patients with MCL who have received at least one prior therapy.

Post-Approval Requirements

Any products for which we receive FDA approval are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Further, manufacturers must continue to comply with cGMP requirements, which are extensive and require considerable time, resources and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

The Drug Supply Chain Security Act ("DSCSA") was enacted in 2013 with the aim of building an electronic system to identify and trace certain prescription drugs distributed in the United States. The DSCSA mandates phased-in and resource-intensive obligations for pharmaceutical manufacturers, wholesale distributors, and dispensers over a 10-year period that is expected to culminate in November 2023. The law's requirements include the quarantine and prompt investigation of a suspect product to determine if it is illegitimate, and notifying trading partners and FDA of any illegitimate product. Drug manufacturers and their collaborators are also required to place a unique product identifier on prescription drug packages.

This identifier consists of the National Drug Code, serial number, lot number and expiration date, in the form of a 2 dimensional data matrix barcode that can be read by humans and machines.

Manufacturers and other entities involved in the manufacturing and distribution of approved products are required to register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. The cGMP requirements apply to all stages of the manufacturing process, including the production, processing, sterilization, packaging, labeling, storage and shipment of the product. Manufacturers must establish validated systems to ensure that products meet specifications and regulatory requirements and test each product batch or lot prior to its release.

The FDA may withdraw a product approval or revoke a biologics license if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, untitled or warning letters, holds on clinical trials, product seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions or civil or criminal penalties. We may undertake or be required to undertake a product recall.

Patent Term Restoration and Regulatory Exclusivity

Depending upon the timing, duration and specifics of FDA approval of the use of our drug candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application, except that this review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, if available, we intend to apply for restorations of patent term for some of our currently owned patents beyond their current expiration dates, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA or BLA; however, there can be no assurance that any such extension will be granted to us.

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

Pediatric exclusivity is another type of regulatory exclusivity in the United States. Pediatric exclusivity, if granted, provides an additional six months of exclusivity, which runs from the end of other regulatory exclusivity or patent periods. This six-month exclusivity may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Biosimilars and Exclusivity

The PHSA includes an abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies, and a clinical trial or trials. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

A reference biologic is granted 12 years of exclusivity from the time of first licensure of the reference product. The first biologic product submitted under the abbreviated approval pathway that is determined to be interchangeable with the reference product has exclusivity against other biologics submitting under the abbreviated approval pathway for the lesser of (i) one year after the first commercial marketing, (ii) 18 months after approval if there is no legal challenge, (iii) 18 months after the resolution in the applicant's favor of a lawsuit challenging the biologic's patents if an application has been submitted, or (iv) 42 months after the application has been approved if a lawsuit is ongoing within the 42-month period.

Orphan Drugs

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs, including biologics, intended to treat a rare disease or condition-generally a disease or condition that affects fewer than 200,000 individuals in the United States or that affects more than 200,000 individuals in the United States and for which there is no reasonable expectation that costs of research and development of the product for the indication can be recovered by sales of the product in the United States. Orphan drug designation must be requested before submitting an NDA or BLA.

After the FDA grants orphan drug designation, the generic identity of the drug or biologic and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The first NDA or BLA applicant to receive FDA approval for a particular active ingredient to treat a particular disease or condition with FDA orphan drug designation is entitled to a seven-year exclusive marketing period in the United States for that product, for that indication. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA or BLA application user fee.

During the exclusivity period, the FDA may not approve any other applications to market the same drug for the same disease or condition, except in limited circumstances, such as if the second applicant demonstrates the clinical superiority of its product to the product with orphan drug exclusivity through a demonstration of superior safety, superior efficacy, or a major contribution to patient care. "Same drug" means a drug that contains the same active moiety if it is a drug composed of small molecules, or the same principal molecular structural features if it is composed of macromolecules and is intended for the same use as a previously approved drug, except that if the subsequent drug can be shown to be clinically superior to the first drug, it will not be considered to be the same drug. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition.

Zanubrutinib was granted orphan drug designation status by the FDA for the treatment of WM, CLL, and MCL. Tislelizumab was granted orphan drug designation status by the FDA for the treatment of ESCC and HCC.

Disclosure of Clinical Trial Information

Sponsors of clinical trials of FDA-regulated products, including drugs and biologics, are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Pharmaceutical Coverage, Pricing, and Reimbursement

In the United States and in other countries, sales of any products for which we may receive regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payors, including government authorities, managed care providers, private health insurers and other organizations. Patients generally rely on third-party payors to reimburse all or part of the associated healthcare costs and no uniform policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor.

Additionally, the process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list which might not include all of the FDA-approved products for a particular indication. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of any products, in addition to the costs required to obtain regulatory approvals. If third-party payors do not consider a product to be cost-effective or medically-necessary compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The U.S. government and state legislatures have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. For example, the Affordable Care Act (the "ACA") contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs reimbursed by Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Adoption of government controls and measures and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

The current U.S. president's administration's budget proposals for fiscal years 2019 and 2020 contain further drug price control measures that could be enacted during the 2020 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the current administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of Health and Human Services (the "HHS") has already started the process of soliciting feedback on some of these measures and, at the same time, is

immediately implementing others under its existing authority. Although a number of these measures and other proposed measures will require authorization through additional legislation to become effective, U.S. Congress and the current administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Other U.S. Healthcare Laws and Compliance Requirements

If we obtain regulatory approval of our product candidates, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business prior to and after receiving regulatory approval of our product candidates. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, providing, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation or arrangement of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims and civil monetary penalty laws, such as the federal False Claims Act, which impose criminal and civil penalties and authorize civil whistleblower or qui tam actions, against individuals or entities for, among other things: knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious or fraudulent; knowingly making or causing a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which prohibits knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH"), and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans and healthcare clearinghouses as well as their respective business associates who perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information;
- the federal transparency requirements under the ACA, including the provision commonly referred to as the Physician Payments Sunshine Act, which require manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the HHS information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, these reporting

obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners; and

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

The ACA broadened the reach of the fraud and abuse laws by, among other things, amending the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes contained within 42 U.S.C. § 1320a-7b. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the ACA provides that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act or the civil monetary penalties statute. Many states have adopted laws similar to the federal Anti-Kickback Statute and False Claims Act, some of which apply to claims for, and referral of patients for, healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs. Similarly, state privacy laws may be broader and require greater protections than HIPAA. These data privacy and security laws may differ from each other in significant ways and often are not pre-empted by HIPAA, which may complicate compliance efforts. For example, in June 2018, the State of California enacted the California Consumer Privacy Act of 2018 ("CCPA"), which came into effect on January 1, 2020 and provides new data privacy rights for consumers and new operational requirements for companies. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. While there is currently an exception for protected health information that is subject to HIPAA and clinical trial regulations, as currently written, CCPA may impact certain of our business activities. CCPA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business.

Additionally, we are subject to state equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply to healthcare services reimbursed by any third-party payor, not just governmental payors, but also private insurers. These laws are enforced by various state agencies and through private actions. Some states have passed laws that require pharmaceutical companies to comply with the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers and/or other voluntary industry codes of conduct that restrict the payments made to healthcare providers and other potential referral sources. Several states and local laws also impose other marketing restrictions or require pharmaceutical companies to make marketing or price disclosures to the state, require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, and require the registration of pharmaceutical sales representatives.

Violations of fraud and abuse laws may be punishable by administrative, criminal and/or civil sanctions, including penalties, damages, disgorgement, fines, individual imprisonment, reputational harm, the curtailment or restructuring of our operations, and/or exclusion or suspension from federal and state healthcare programs such as Medicare and Medicaid and debarment from contracting with the U.S. government. In addition, private individuals have the ability to bring actions on behalf of the U.S. government under the federal False Claims Act as well as under the false claims laws of several states.

European Data Collection and Privacy Laws

The collection, use, storage, disclosure, transfer, or other processing of personal data, including personal health data, regarding individuals in the EU are governed by, as of May 2018, the General Data Protection Regulation ("GDPR"). The GDPR is wide-ranging in scope and imposes several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals regarding data processing activities, the notification of data breaches, certain measures to take when engaging third-party processors, and the implementation of safeguards to protect the security and confidentiality of personal data. GDPR also impose strict rules on the transfer of personal data out of the European Economic Area to the United States. GDPR introduces new data protection requirements in the

EU and substantial fines for breaches of the data protection rules, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of GDPR. In addition, GDPR includes restrictions on cross-border data transfers. GDPR regulations may impose additional responsibility and liability in relation to personal data that we process where such processing is subject to GDPR, and we may be required to put in place additional mechanisms ensuring compliance with GDPR, including as implemented by individual countries. This may be onerous and adversely affect our business, financial condition, results of operations, and prospects. Further, the United Kingdom's decision to leave the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated now that the United Kingdom has left the EU.

PRC Regulation

In the PRC, we operate in an increasingly complex legal and regulatory environment. We are subject to a variety of PRC laws, rules and regulations affecting many aspects of our business. This section summarizes the principal PRC laws, rules and regulations that we believe are relevant to our business and operations.

PRC Drug Regulation

Introduction

China heavily regulates the development, approval, manufacturing and distribution of drugs, including biologics. The legal framework for the administration of pharmaceutical products in China is established by the Drug Administration Law of the PRC (DAL) enacted by the Standing Committee of the National People's Congress on September 20, 1984 and effective from July 1, 1985 (last amended on August 26, 2019, effective from December 1, 2019). The Drug Administration Law applies to entities and individuals engaged in the development, production, trade, clinical use, as well as supervision and administration of pharmaceutical products by regulatory agencies. It provides for a framework for regulating pharmaceutical manufacturers, pharmaceutical trading companies, medical institutions, and the research, development, manufacturing, distribution, packaging, pricing, and advertisement activities related to pharmaceutical products. The Implementing Measures of the Drug Administration Law promulgated by the State Council on August 4, 2002 and effective from September 15, 2002 and amended on February 6, 2016 and March 2, 2019 provides detailed implementation regulations for the Drug Administration Law.

The Revised DAL

The DAL revised on August 26, 2019 (the "rDAL") embodies an expected regulatory trend to strengthen the life-cycle management of drugs, to balance the development of innovative drugs and generic drugs, and to enhance drug review and enforcement. It also reflects legislative efforts to address prominent problems of the pharmaceutical industry, such as counterfeit and substandard drugs and high drug prices.

The rDAL contains a dedicated chapter on the Marketing Authorization Holder ("MAH") system. The MAH system has been trialed in a pilot program across 10 provinces since 2016. Upon the enactment of the rDAL, the MAH system will no longer be a pilot program but will be implemented nationwide. Subject to approval by the NMPA, MAHs will be allowed to transfer their marketing authorizations. It is not sure whether the transferability of MAH will offer more flexibility in structuring cross-border transactions. In addition, the implementation of the MAH system will be accompanied by a range of new requirements for the MAHs. For example, a MAH must establish a quality assurance system and be responsible for the whole process and all aspects of preclinical research, clinical trials, manufacturing and distribution, post-marketing research, adverse drug reaction monitoring and reporting. A foreign MAH will be required to engage a local agent to fulfill the MAH's obligations and the foreign MAH shall be subject to joint and several liability in the event of any wrongdoing. It is unclear how the scope of such joint liability will be defined.

The rDAL no longer requires the certification for GLP, good clinical practice ("GCP"), good supply practice ("GSP"), and GMP. However, drug manufacturers and drug distributors must still comply with current GMP and GSP requirements. Pursuant to the rDAL, NMPA and its local counterparts are directed

to strengthen their surveillance of drug manufacturers and distributors, including through regular and continuous site inspections, to ensure their compliance. It remains to be seen how clinical trial institutions will ensure self-compliance with GCP requirements and whether there will be more inspections of clinical trial institutions.

The rDAL also requires MAHs, manufacturers, distributors, and medical institutions to establish and implement drug track and trace systems. The NMPA will issue related standards and regulations regarding drug track and trace system. A drug pharmacovigilance system will also be established to monitor, identify, evaluate and control adverse drug reactions and other possible drug-related problems.

The rDAL creates an expanded access pathway for investigational drugs under which a company sponsor of a clinical trial in China can apply to establish an expanded access treatment program for patients with life-threatening disease who otherwise do not satisfy the inclusion criteria of a clinical trial. To quality for expanded access: (1) the drug must be used for life-threatening diseases that lack effective treatment; (2) the drug must have demonstrated its potential efficacy based on medical observations; (3) such use is in line with ethical principles; (4) such expanded use has been reviewed and approved (although the approval pathway not clear), and has obtained patients' informed consent; and (5) the drug must be used within the clinical trial institution and used on patients with similar conditions.

The rDAL also significantly increases and expands penalties for violations. Depending on various types of violations, the DAL imposes different penalties, including warnings, confiscation of illegal gains, fines of up to RMB5 million (about $725,000) or up to 30 times of illegal gains, revocation of required business and operating licenses, certificates or approval documents for drugs, suspension of business, temporary (10 years) or permanent debarment of companies, institutions and responsible persons, and criminal liabilities in the case of serious violations.

On October 15, 2019, NMPA published draft measures for soliciting comments on drug registration, and on December 10, 2019, the State Administration for Market Regulation ("SAMR") published draft measures for soliciting comments on drug manufacturing and drug supply. These draft measures reflect the changes in the rDAL, including the MAH system, the abolishment of GLP, GCP, GSP and GMP certification, and the enhancement of administrative penalties on violations.

There are still uncertainties with respect to the interpretation and implementation of the rDAL. We plan to closely monitor the implementation of the rDAL and its impact on our operations in China.

Regulatory Authorities and Recent Government Reorganization

In China, the NMPA is the primary regulator for pharmaceutical products and businesses. The agency was newly formed from the prior China Food and Drug Administration ("CFDA") in 2018 as part of a complete government reorganization. NMPA is no longer an independent agency. Its parent agency is now the newly organized SAMR, into which agencies responsible for, among other areas, consumer protection, advertising, anticorruption, antitrust, fair competition and intellectual property have been merged.

Like the CFDA, the NMPA is still the chief drug regulatory agency and implements the same laws, regulations, rules, and guidelines as the CFDA, and it regulates almost all of the key stages of the life-cycle of pharmaceutical products, including nonclinical studies, clinical trials, marketing approvals, manufacturing, advertising and promotion, distribution, and pharmacovigilance (i.e., post-marketing safety reporting obligations). The Center for Drug Evaluation ("CDE"), which remains under the NMPA, conducts the technical evaluation of each drug and biologic application for safety and efficacy.

The National Health Commission ("NHC") (formerly known by the names Ministry of Health ("MOH") and National Health and Family Planning Commission ("NHFPC")), is China's chief healthcare regulator. It is primarily responsible for overseeing the operation of medical institutions, which also serve as clinical trial sites, and regulating the licensure of hospitals and other medical personnel. The NHC plays a significant role in drug reimbursement. Furthermore, the NHC and its local counterparts at or below the provincial-level of local government also oversee and organize public medical institutions' centralized bidding and procurement programs for pharmaceutical products. This is the primary way that public hospitals and their internal pharmacies procure drugs.

Also, as part of the 2018 reorganization, the PRC government formed a new State Medical Insurance Bureau which focuses on regulating reimbursement under state-sponsored insurance plans.

Preclinical and Clinical Development

The NMPA requires preclinical data to support registration applications for new drugs. Preclinical work, including pharmacology and toxicology studies, must meet the GLP standards, issued on August 4, 2003 and amended on July 27, 2017. Although the rDAL no longer requires the NMPA to accredit GLP labs, it still requires that nonclinical studies of chemical drug substances and preparations and biologics that are not yet marketed in China be conducted in GLP-qualified labs. There are no approvals required from the NMPA to conduct preclinical studies.

Under the Regulations for the Administration of Affairs Concerning Experimental Animals issued by the State Science and Technology Commission ("SSTC") on November 14, 1988 (last amended on March 1, 2017), the Administrative Measures on Good Practice of Experimental Animals jointly issued by the SSTC and the State Bureau of Quality and Technical Supervision on December 11, 1997, and the Administrative Measures on the Certificate for Experimental Animals (Trial) promulgated by SSTC and other regulatory authorities on December 5, 2001, a Certificate for Use of Laboratory Animals is required for performing experimentation on animals. Applicants for this certificate must satisfy a number of conditions, including (1) the environment and facilities for lab animals' living and propagating must satisfy national requirements; (2) lab animals must be qualified and sourced from institutions with Certificates for Production of Lab Animals; and (3) the animals' feeding and experimentation must be conducted by professionals, specialized and skilled workers, or other trained personnel.

Registration Categories

Prior to engaging with the NMPA on research and development and approval, an applicant will need to determine the registration category for its drug candidate (which will ultimately need to be confirmed with the NMPA), which will determine the requirements for its clinical trial and marketing application. There are five categories for small molecule drugs: Category 1 ("innovative drugs") refers to drugs that have a new chemical entity that has not been marketed anywhere in the world, Category 2 ("improved new drugs") refers to drugs with a new indication, dosage form, route of administration, combination, or certain formulation changes not approved in the world, Categories 3 and 4 are for generics that reference an innovator drug (or certain well-known generic drugs) marketed either abroad or in China, respectively, and Category 5 refers to innovative or generic drugs that have already been marketed abroad but are not yet approved in China (i.e., imported drugs).

Therapeutic biologics follow a similar categorization, with Category 1 being new to the world, but with fifteen product-specific categories. Like with small molecule drugs, Category 1 is for innovative biologics that have not been approved inside or outside of China. A clear regulatory pathway for biosimilars does not yet exist, but something was proposed in a draft revision to an NMPA regulation in 2017. Each of zanubrutinib, tislelizumab, pamiparib and lifirafenib is classified as Category 1 based on the respective clinical trial approval from the NMPA, which is a favored category for clinical trial approval, or CTA, and marketing approval.

Expedited Programs

Priority Evaluation and Approval Programs to Encourage Innovation

The NMPA has adopted several expedited review and approval mechanisms since 2009 and created additional expedited programs in recent years that are intended to encourage innovation. Applications for these expedited programs can be submitted after the CTA is admitted for review by the CDE. Some of the current categories of drugs eligible for priority status that may be particularly relevant for us include: (1) Category 1 innovative drugs that have not been approved inside or outside of China; (2) oncology drugs; (3) drugs using advanced technology, innovative treatment methods, and having clear therapeutic benefit; and (4) new drugs for which clinical trials are already approved in the United States or EU, or for which marketing authorization applications have been filed simultaneously in China and in the United States or EU and are manufactured in China using the same production line that passed FDA or EMA inspection.

If admitted to one of these expedited programs, an applicant will be entitled to more frequent and timely communication with reviewers at the CDE, expedited review and approval, and more agency resources throughout the approval process. Each of our drug candidates, zanubrutinib, tislelizumab, pamiparib and lifirafenib, is classified as Category 1 based on the respective clinical trial approval from the NMPA.

NMPA also permits conditional approval of certain medicines based on early phase data. Post-approval the applicant may need to conduct a post-market study. The agency has done this for drugs that meet unmet clinical needs for life-threatening illnesses and also for drugs that treat orphan indications. In 2018, NMPA established a conditional approval program for drugs designated by the CDE that have been approved in the US, EU and Japan within the last 10 years and that meet one of three criteria (1) orphan indications, (2) drugs that treat life threatening illnesses for which there are not effective treatment or preventive methods, and (3) drugs that treat life threatening illnesses and that have a clear clinical advantage over other clinical therapies.

CDE Guideline on PD-1/L1 NDA

In addition to the programs and proposals above, the CDE has recently stated that it will permit applicants for PD-1/L1 agents to submit data on a rolling basis based on the current high unmet medical need for PD-1/L1 agents. In February 2018, the CDE released the Guideline on the Basic Requirements of Information and Data for NDA Submissions of anti-PD-1/L1 Monoclonal Antibody Products on recurrent and refractory advanced cancers without standard-of-care therapies. Under the guideline, the sponsor must have a pre-NDA meeting with the CDE regarding the data and the NDA submission. The CDE will permit the following submission for these applicants: (1) an initial NDA submission with full preliminary safety data and effectiveness data, including the results of at least two independent therapeutic efficacy assessments of all patients who are currently enrolled pursuant to all of the protocol's requirements; (2) during the CDE's substantive technical review of the NDA, submission on a rolling basis of follow-up safety and effectiveness data from at least six months from the time of the last enrolled patient showing the duration of the response; and (3) submission of all efficacy and safety data as provided for under the protocol before final approval is granted by the NMPA. Sponsors may also apply for priority review and approval for their NDA to accelerate the progress. If granted, priority status will be applied to various stages of the approval process, including testing, manufacturing site inspection, technical review, and clinical site inspection.

New Policies on Expediting Approval of Imported Oncology Drugs

The PRC government continues to establish measures and incentives to promote the development and swifter approval of marketing for oncology and other innovative drugs. Beginning in May 2018, the PRC eliminated tariffs on a significant number of imported innovative drugs, including oncology drugs, making the importation process more efficient. The PRC government has also stated that it will explore ways to expand access to reimbursement under the state health plans for innovative drugs (particularly for urgently needed oncology drugs).

Clinical Trials and Marketing Approval

Upon completion of preclinical studies, a sponsor typically needs to conduct clinical trials in China for registering a new drug. The materials required for this application and the data requirements are determined by the registration category. The NMPA has taken a number of steps to increase efficiency for approving CTAs, and it has also significantly increased monitoring and enforcement of GCP to ensure data integrity.

Trial Approval

All clinical trials conducted in China for the purpose of seeking marketing approvals must be approved by the NMPA and conducted at hospitals satisfying GCP requirements. In addition to a standalone China trial to support development, imported drug applicants may establish a site in China that is part of an international multicenter trial ("IMCT") at the outset of the global trial. Domestically manufactured drugs are not subject to foreign approval requirements, and in contrast to prior practice, the NMPA has decided to permit those drugs to conduct development via an IMCT as well.

The rDAL has now also adopted an implied approval system for clinical trials of new drugs. Trials can proceed if after 60 business days, the applicant has not received any objections from the CDE, as opposed to the lengthier previous clinical trial pre-approval process in which the applicant had to wait for affirmative approval. The rDAL also expands the number of trial sites by abolishing the GCP accreditation system and requiring trial sites to follow a more simplified notification procedure.

Trial Register

Pursuant to the Announcement on Drug Clinical Trial Information Platform issued by the NMPA on September 6, 2013, clinical trials approved by the NMPA and conducted in China must be registered and published through the Drug Clinical Trial Information Platform (http://www.chinadrugtrials.org.cn). The applicant shall pre-register the trial information within one month after obtaining the clinical trial approval to obtain the trial's unique registration number and shall complete registration of certain follow-up information before the first subject's enrollment in the trial. If the foregoing pre-registration and registration is not obtained within one year after obtaining the clinical trial approval, the applicant shall submit an explanation, and if the procedure is not completed within three years, the clinical trial approval automatically expires.

Human Genetic Resources Regulation

On June 10, 2019, China's State Council promulgated the Regulation on the Administration of Human Genetic Resources (HGR Regulation), which became effective on July 1, 2019. The HGR Regulation applies to all human genetic resources (HGR)-related activities for R&D purposes, including sampling, biobanking, use of HGR materials and associated data in China, and provision of such to foreign parties.

According to the HGR Regulation, foreign parties (including foreign entities and entities established or actually controlled by foreign entities and individuals) seeking access to China's HGRs for scientific research, including clinical trials intended to support marketing approval of drugs and medical devices in China, must do so only through collaborations with Chinese parties. The HGR Regulation now prohibits foreign parties from independently sampling or biobanking any China HGR in China and it adds an approval requirement for the sampling of certain HGR and biobanking of all HGR by Chinese parties. Any cross-border transfer of the HGR materials, either under an international collaboration or as a direct export, must be on an as-needed basis and requires approval. In addition, providing the HGR data to foreign parties requires a record filing.

Another significant change is the HGR Regulation replaced the advance approval requirement with a record-filing procedure for international collaborations on clinical trials intended to support marketing approval of drugs in China that do not transfer HGR materials abroad, while the advance approval requirement still applies if such trials involve export of HGR materials or the collection, testing, analysis or disposals of HGR samples during the trials are not solely conducted at the clinical trial sites. It is unclear how this record-filing procedure will be implemented in practice and to what extent companies will benefit from it.

The HGR Regulation retains the provision in the Interim Measures for the Administration of Human Genetic Resources issued in 1998 (the "Interim Measures") that parties should jointly apply for and own the patent rights arising from the results generated from international collaborations that utilize China HGR. Subject to approval, the parties may contractually agree on how to dispose of their patent rights and non-patent proprietary rights arising from the collaboration. As the joint ownership requirement is rather broad, it is unclear how this requirement will be implemented in practice.

The HGR Regulation also significantly increases and expands penalties for various violations, including warnings, disgorgement of illegal gains, confiscation of illegal HGR, fines up to RMB10 million ($1,450,000) or 5 – 10 times of illegal gains in the event such illegal gains exceed RMB1 million ($145,000), and temporary (1 – 5 years) or permanent debarment of companies, institutions and responsible persons from future HGR projects regulated by the HGR Regulation.

As uncertainties exist as to how the HGR Regulation may be interpreted and implemented, we are still evaluating its potential impact on our HGR-related activities and practices. We expect that HGR-related activities will receive greater attention and focus from regulators going forward.

Trial Exemptions and Acceptance of Foreign Data

The NMPA may reduce requirements for trials and data, depending on the drug and the existing data. The NMPA has granted waivers for all or part of trials, and has stated that it will accept data generated abroad (even if not part of a global study), including early phase data, that meets its requirements. On July 6, 2018, the NMPA issued the Technical Guidance Principles on Accepting Foreign Drug Clinical Trial Data (the "Guidance Principles"), as one of the implementing rules for the Opinions on Deepening the Reform of the Evaluation and Approval Systems and Encouraging Innovation on Drugs and Medical Devices (the "Innovation Opinion"). According to the Guidance Principles, the data of foreign clinical trials must meet the authenticity, completeness and accuracy requirements and such data must be obtained in compliance with the relevant requirements under the GCP of the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use ("ICH"). Sponsors must be attentive to potentially meaningful ethnic differences in the subject population.

The NMPA now officially permits, and its predecessor agencies have permitted on a case-by-case basis in the past, drugs approved outside of China to be approved in China on a conditional basis without the need for pre-approval clinical trials in China. Specifically, in 2018, the NMPA established a program permitting drugs that have been approved within the last ten years in the United States, EU or Japan to be approved in China on a conditional basis without local clinical trials if they (1) prevent or treat orphan diseases, (2) prevent or treat serious life-threatening illnesses for which there is either no effective therapy in China, or for which the foreign-approved drug would have clear clinical advantages. Applicants for such conditional approvals will be required to establish a risk mitigation plan and may be required to complete trials in China after the drug is approved. The CDE has developed a list of drugs that meet these criteria.

Clinical Trial Process and Good Clinical Practices

Typically drug clinical trials in China have three phases. Phase 1 refers to the initial clinical pharmacology and human safety evaluation studies. Phase 2 refers to the preliminary evaluation of a drug candidate's therapeutic efficacy and safety for target indication(s) in patients. Phase 3 (often the pivotal study) refers to clinical trials to further verify the drug candidate's therapeutic efficacy and safety on patients with target indication(s) and ultimately provide sufficient evidence for the review of a drug registration application. The NMPA requires that the different phases of clinical trials in China receive ethics committee approval prior to approval of the CTA and comply with GCP. The NMPA conducts inspections on clinical trials conducted in China to assess GCP compliance and may refuse to approve the drug if it finds substantial issues in the trials. In addition, upon granting the drug registration certificate, NMPA may, at its sole discretion, require a Phase 4 trial to be conducted by MAH within a specified period of time so as to further monitor and obtain safety and efficacy data of the drug.

Generic small molecule drugs are required to conduct a bioequivalence trial, in vitro studies or in some cases a clinical trial to demonstrate therapeutic equivalence to an innovator drug marketed either in China or abroad or an internationally accepted generic drug. The NMPA has released catalogues of reference products, and it released first installment of a Marketed Drug List (China's "Orange Book") with information about drugs that may serve as reference products.

Pursuant to GCP, the sponsor of a clinical trial shall be responsible for proper packaging and labeling of drugs used for clinical trials, and in double-blinded clinical trials, the investigational drugs shall be consistent with the control drug or placebo in appearance, odor, packaging, labeling, and certain other features. According to the Measures for the Administration of Pharmaceutical Packaging promulgated on February 12, 1988 and effective from September 1, 1988, pharmaceutical packaging must comply with national and professional standards. If there is no national or professional standard available, companies may formulate and implement its own standards after obtaining the approval of the provincial administration for medical products or bureau of standards. Changes in such approved packaging standards need to be re-approved. Drugs of which the packaging standards are not approved shall not be released or marketed in China (except for those specifically supplied to the military).

New Drug Application ("NDA") and Approval

Upon completion of clinical trials, a sponsor may submit clinical trial data to support marketing approval for the drug.

NDA sponsors must submit data derived from domestically manufactured drugs in support of a drug approval. Under the rDAL, upon approval of the registration application, the NMPA will issue a drug registration certificate to the applicant which is in fact the marketing approval of the drug, and the applicant is no longer required to be equipped with relevant manufacturing capability.

Manufacturing and Distribution

According to the rDAL, all facilities that make drugs in China must receive a drug manufacturing license with an appropriate "scope of manufacturing" from the local drug regulatory authority. This license must be renewed every five years, and the manufacturing facility is also required to be in compliance with GMP.

Similarly, to conduct sales, importation, shipping and storage ("distribution activities"), a company must obtain a Drug Distribution License from the local drug regulatory authority, subject to renewal every five years. Like with GMPs, companies are required to be in compliance with GSP.

China has formed a "Two-Invoice System" to control distribution of prescription drugs. The "Two-Invoice System" generally requires that no more than two invoices may be issued throughout the distribution chain, with one from the manufacturer to a distributor and another from the distributor to the end-user hospital. This excludes the sale of products invoiced from the manufacturer to its wholly owned or controlled distributors, or for imported drugs, to their exclusive distributor, or from a distributor to its wholly owned or controlled subsidiary (or between the wholly owned or controlled subsidiaries). However, the system still significantly limits the options for companies to use multiple distributors to reach a larger geographic area in China. Compliance with the Two-Invoice System will become a prerequisite for pharmaceutical companies to participate in procurement processes with public hospitals, which currently provide most of China's healthcare. Manufacturers and distributors that fail to implement the Two-Invoice System may lose their qualifications to participate in the bidding process. Non-compliant manufacturers may also be blacklisted from engaging in drug sales to public hospitals in a locality.

The Two-Invoice System was first implemented in 11 provinces that are involved in pilot comprehensive medical reforms, but the program has expanded to nearly all provinces, which have their own individual rules for the program.

Post-Marketing Surveillance

Under the rDAL, the MAH of a drug is ultimately responsible for pharmacovigilance, including quality assurance, adverse reaction reporting and monitoring, and product recalls. Distributors and user entities (e.g., hospitals) are also required to report, in their respective roles, adverse reactions of the products they sell or use, and assist with the manufacturer of the product recall. A drug that is currently under the new drug monitoring period has to report all adverse drug reactions (as opposed to just serious adverse reactions) for that period.

Advertising and Promotion of Pharmaceutical Products

China has a strict regime for the advertising of approved medicines. No unapproved medicines may be advertised. The definition of an advertisement is very broad, and does not expressly exclude scientific exchange. It can be any media that directly or indirectly introduces the product to end users. There is no clear line between advertising and any other type of promotion.

An enterprise seeking to advertise a prescription drug may do so only in medical journals jointly approved by NMPA and the NHC, and each advertisement requires approval from a local drug regulatory authority. The content of an approved advertisement may not be altered without filing a new application for approval.

Prescription drug advertisements are subject to strict content restrictions, which prohibit recommendations by doctors and hospitals and guarantees of effectiveness. Advertising that includes content that is outside of the drug's approval documentation ("off-label content") is prohibited. False advertising can result in civil suits from end users and administrative liability, including fines. In addition to

advertisements, non-promotional websites that convey information about a drug must go through a separate approval process by a local drug regulatory authority.

Regulatory Intellectual Property Protections

On January 15, 2020, the United States and China signed the Economic and Trade Agreement Between the United States of America and the PRC (the "Trade Agreement"). Among other things, China has agreed to provide for effective protection and enforcement of pharmaceutical-related intellectual property rights, including patents and undisclosed test or other data submitted as a condition of marketing approval, as further described below. These provisions of the Trade Agreement will need to be implemented in China.

Non-Patent Exclusivities

New Drug Monitoring Period

Currently, new varieties of domestically produced drugs approved under Categories 1 or 2 in China may be placed under a monitoring period for three to five years. Category 1 innovative drugs will be monitored for five years. During the monitoring period, the NMPA will not approve another CTA from another applicant for the same type of drug, except if another sponsor has an approved CTA at the time that the monitoring period is initiated it may proceed with its trial and once approved become another drug that is part of the monitoring period.

Regulatory Data Protection

The Innovation Opinion also lays the foundation to improve and implement the system for regulatory data protection to protect innovators. This protection will be available to the undisclosed clinical trial data of drugs falling into the following categories: innovative drugs, innovative therapeutic biologics, drugs that treat orphan diseases, pediatric drugs, and drugs for which there has been a successful patent challenge. In the Trade Agreement, China has committed to providing for effective protection of undisclosed test or other data submitted as a condition of marketing approval.

NMPA published a draft on Implementing Regulations for Pharmaceutical Study Data Protection for public comment that would set regulatory data protection for innovative small molecule drugs at six years and for innovative therapeutic biologics at 12 years; pediatric and orphan drugs would receive six years to run concurrently from their approval dates. Full terms of protection would require reliance on local trials or sites of multi-center trials in China and simultaneous submissions of marketing applications in China and other countries. Submissions in China that are up to six years later than those abroad would result in the term being reduced to 1-5 years. Submissions over six years later in China may not receive protection.

There is also a reduction if the marketing application is filed in China based solely on overseas clinical data with no Chinese subjects (75% reduction) or based on supplemental "China clinical trial data" (50% reduction). Information about the exclusivity term will be included in a Marketed Drug List (similar to the Orange Book in the US) at the time of approval. Some mechanics of these proposed rules are not yet clear, and it is not certain when the proposed rules will be finalized.

Patent-Related Protections

Patent Linkage

The Innovation Opinion also sets forth the basic elements of a patent linkage system to protect innovators, in which a follow-on applicant will be required to specify patents that are relevant to its application and notify relevant patent right holders (including, innovators) within a specified period after filing its application, permitting them to sue to protect their rights. The system will require that the NMPA continue to review the potentially infringing follow-on application during any lawsuit by the innovator. However, the NMPA may not approve the follow-on application pending resolution of the patent litigation in favor of the follow-on application or for a specified period of time, whichever is shorter. Similarly, the Trade Agreement also adopts certain elements of a patent linkage system: notice to the patent right holder of the follow-on application; and time and opportunity for that right holder to sue and seek expeditious remedies to

obtain a timely resolution of the patent dispute. However, the Trade Agreement does not explicitly mention a stay of marketing approval of the follow-on application. It will require legislation and implementing regulations to introduce a patent linkage system into China, and it is not clear when these will be adopted and implemented.

Patent Term Extension

In early 2019, pursuant to the Innovation Opinion, the National People's Congress issued a proposal for patent term extension as part of a proposed amendment to the Patent Law. Under this proposal, the State Council may grant a patent term extension of up to five years to compensate for delays in the review process for innovative drugs that are applying simultaneously for marketing approval in both China and abroad. The patent term may not be extended to more than 14 years post-marketing. The Trade Agreement also provides for patent term extension to compensate for unreasonable delay that occurs during pharmaceutical product marketing approvals. It is not clear when this will be implemented.

Reimbursement and Pricing

China's national medical insurance program was adopted pursuant to the Decision of the State Council on the Establishment of the Urban Employee Basic Medical Insurance Program issued by the State Council in 1998, under which all employers in urban cities are required to enroll their employees in the basic medical insurance program. The insurance premium is jointly contributed by the employers and employees. In 2007, the State Council promulgated Guiding Opinions of the State Council about the Pilot Urban Resident Basic Medical Insurance, under which urban residents of the pilot district, rather than urban employees, may voluntarily join Urban Resident Basic Medical Insurance. Participants of the national medical insurance program and their employers, if any, are required to contribute to the payment of insurance premiums on a monthly basis. Program participants are eligible for full or partial reimbursement of the cost of medicines included in the National Reimbursement Drug List (the "NRDL"). A pharmaceutical product listed in the NRDL must be clinically needed, safe, effective, reasonably priced, easy to use, and available in sufficient quantity.

Factors that affect the inclusion of a pharmaceutical product in the NRDL include whether the product is consumed in large volumes and commonly prescribed for clinical use in the PRC and whether it is considered to be important in meeting the basic healthcare needs of the general public. Since 2016, special consideration has been given to, among others, innovative drugs with high clinical value and drugs for serious diseases. In addition, the PRC Ministry of Human Resources and Social Security has also been negotiating with manufacturers of expensive drugs with high clinical demands and proven effectiveness for price cuts in exchange for inclusion into the NRDL. The version of the NRDL released in 2019 covers 2,643 drugs in total, including 148 new additions and 150 new deletions as compared with the previous version, with an emphasis on innovative drugs and drugs that treat cancer and other serious diseases. China has been pursuing a policy of expediting the addition of innovative oncology drugs to this list. In 2019, 17 more oncology drugs, including VIDAZA (azacytidine), were added into the NRDL by the State Medical Insurance Bureau.

Government Price Controls

The Chinese government has abolished the 15-year-old government-led pricing system for drugs, and lifted the maximum retail price for most drugs, including drugs reimbursed by government medical insurance funds, patented drugs, and some other drugs. The government regulates prices mainly by establishing a consolidated procurement mechanism, restructuring medical insurance reimbursement standards and strengthening regulation of medical and pricing practices as discussed below.

Centralized Procurement and Tenders

Under current regulations, public medical institutions owned by the government or owned by state-owned or controlled enterprises are required to purchase pharmaceutical products through centralized online procurement processes. There are exceptions for drugs on the National List of Essential Drugs, which must comply with their own procurement rules, and for certain drugs subject to the central government's special control such as toxic, radioactive and narcotic drugs, and traditional Chinese medicines.

The centralized procurement process takes the form of public tenders operated by provincial or municipal-level government agencies. The centralized tender process is typically conducted once every year. The bids are assessed by a committee randomly selected from a database of experts. The committee members assess the bids based on a number of factors, including but not limited to bid price, product quality, clinical effectiveness, product safety, level of technology, qualifications and reputation of the manufacturer, after-sale services and innovation.

Over the last decade, the government has been using various methods to ensure that drugs are offered at affordable prices. In 2009, the central government announced a campaign to implement a "zero markup" policy on essential drugs among basic healthcare institutions, which has been fully implemented nationwide. In addition, some local government have begun to allow medical institutions to collectively negotiate with manufacturers for a second price to further lower the already agreed bid price. The newly adopted Two-Invoice System is also aimed to reduce price mark-ups brought about by multi-tier distribution chains.

On January 1, 2019, the State Council approved a volume-based, centralized drug procurement program as part of a trial in 11 major cities in an effort to deepen the reform of the medical and health sector and optimize the pricing of drugs. According to the State Council, in these 11 cities, drugs will be selected from generic brands for volume-based, centralized drug procurement. The selected drugs must pass the equivalence evaluation on quality and efficacy. The program is aimed at further lowering drug costs for patients, reducing transaction costs for enterprises, regulating drug use by institutions, and improving the centralized drug procurement and pricing system. All approved enterprises that produce drugs on the procurement list in China may participate. Clinical effects, adverse reactions, and batch stability of the drugs will be considered, and their consistency will be the main criteria for evaluation, while production capacity and stability of the supplier will also be considered. On September 30, 2019, nine ministry-level agencies (including the State Medical Insurance Bureau, NMPA, and NHC) jointly issued a plan intending to expand this program nationwide.

Other PRC National and Provincial Laws and Regulations

We are subject to changing regulations under many other laws and regulations administered by governmental authorities at the national, provincial and municipal levels, some of which are or may become applicable to our business. For example, regulations control the confidentiality of patients' medical information and the circumstances under which patient medical information may be released for inclusion in our databases or released by us to third parties. The privacy of human subjects in clinical trials is also protected under regulations. For example, the case report forms must avoid disclosing names of the human subjects.

These laws and regulations governing both the disclosure and the use of confidential patient medical information may become more restrictive in the future, including restrictions on transfer of healthcare data. The Cybersecurity Law that took effect in 2017 designates healthcare as a priority area that is part of critical information infrastructure, and China's cyberspace administration is working to finalize a draft rule on cross-border transfer of personal information.

PRC Regulation of Foreign Investment

On March 15, 2019, the National People's Congress published the Foreign Investment Law of the PRC (the "Foreign Investment Law"), and on December 26, 2019, the State Council promulgated the Implementing Rules to the Foreign Investment Law of the PRC (the "Implementing Rules") to further clarify and elaborate the relevant provisions of the Foreign Investment Law. The Foreign Investment Law and the Implementing Rules, both took effect on January 1, 2020. The Foreign Investment Law and the Implementing Rules replaced major previous laws and regulations governing foreign investment in China. They establish the basic framework for the access to, and the promotion, protection and administration of foreign investments in view of investment protection and fair competition and embody an expected regulatory trend to rationalize China's foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. The Implementing Rules further clarified that the state encourages and promotes foreign investment, protects the lawful rights and interests of foreign investors, regulates foreign investment administration, continues to optimize foreign investment environment, and advances a higher-level opening.

The Foreign Investment Law and the Implementing Rules provide that a system of pre-entry national treatment and negative list shall be applied for the administration of foreign investments, where "pre-entry national treatment" means that the treatment given to foreign investors and their investments at market access stage is no less favorable than that given to domestic investors and their investments, and "negative list" means the special administrative measures for foreign investment's access to specific fields or industries, which will be proposed by the competent investment department of the State Council in conjunction with the competent commerce department of the State Council and other relevant departments, and be reported to the State Council for promulgation, or be promulgated by the competent investment department or competent commerce department of the State Council after being reported to the State Council for approval. Foreign investments beyond the negative list will be granted national treatment. Foreign investors shall not invest in the prohibited fields as specified in the negative list, and foreign investors who invest in the restricted fields shall comply with the special requirements on the shareholding, senior management personnel, etc. In the meantime, relevant competent government departments will formulate a catalogue of industries for which foreign investments are encouraged according to the needs for national economic and social development, to list the specific industries, fields and regions in which foreign investors are encouraged and guided to invest. The current industry entry clearance requirements governing investment activities in the PRC by foreign investors are set out in two categories, namely the Special Entry Management Measures (Negative List) for the Access of Foreign Investment (2019 version), and the Encouraged Industry Catalogue for Foreign Investment (2019 version) (the "2019 Encouraged Industry Catalogue"), both were promulgated by the National Development and Reform Commission and the Ministry of Commerce (the "MOFCOM") and took effect on July 30, 2019. Industries not listed in these two categories are generally deemed "permitted" for foreign investments unless specifically restricted by other PRC laws. Pursuant to the 2019 Encouraged Industry Catalogue, the research, development and manufacture of innovative oncology drugs and certain other kinds of pharmaceutical products falls in the encouraged industries for foreign investment.

On December 30, 2019, the MOFCOM and the SAMR jointly promulgated Measures for Information Reporting on Foreign Investment, which became effective on January 1, 2020. Pursuant to the Measures for Information Reporting on Foreign Investment, where a foreign investor carries out investment activities in China directly or indirectly, the foreign investor or the foreign-invested enterprise shall submit the investment information to the competent commerce department.

Regulations Relating to Product Liability

In addition to the strict new drug approval process, certain PRC laws have been promulgated to protect the rights of consumers and to strengthen the control of medical products in the PRC, pursuant to which manufacturers and vendors of defective products in the PRC may incur liability for loss and injury caused by such products. Pursuant to the General Principles of the Civil Law of the PRC (the "PRC Civil Law") promulgated on April 12, 1986 and amended on August 27, 2009, a defective product which causes property damage or physical injury to any person may subject the manufacturer or vendor of such product to civil liability for such damage or injury.

The Product Quality Law of the PRC promulgated by the Standing Committee of the National People's Congress on February 22, 1993 and amended on July 8, 2000, August 27, 2009 and December 29, 2018, respectively, is the principal governing law relating to the supervision and administration of product quality, aiming to protect the legitimate rights and interests of the end-users and consumers. According to the Product Quality Law, manufacturers shall be liable for the quality of products produced by them, and sellers shall take measures to ensure the quality of the products sold by them. A manufacturer shall be liable for compensating for any bodily injuries or property damages resulting from the defects in the product, unless the manufacturer is able to prove that: (1) the product has never been distributed; (2) the defects causing injuries or damages did not exist at the time when the product was distributed; or (3) the science and technology at the time when the product was distributed was at a level incapable of detecting the defects. A seller shall be liable for compensating for any bodily injuries or property damages of others caused by the defects in the product if such defects are attributable to the seller. A seller shall pay compensation if it fails to indicate either the manufacturer or the supplier of the defective product. A person who is injured or whose property is damaged by the defects in the product may claim for compensation from the manufacturer or the seller.

Pursuant to the Tort Liability Law of the PRC promulgated by the Standing Committee of the National People's Congress on December 26, 2009 and effective from July 1, 2010, manufacturers shall assume tort liabilities where the defects in products cause damages to others. Sellers shall assume tort liabilities where the defects in products that have caused damages to others are attributable to the sellers. The aggrieved party may claim for compensation from the manufacturer or the seller of the defected product that has caused damage.

The Law of the PRC on the Protection of the Rights and Interests of Consumers was promulgated on October 31, 1993 and was amended on August 27, 2009 and October 25, 2013 to protect consumers' rights when they purchase or use goods and accept services. All business operators must comply with this law when they manufacture or sell goods and/or provide services to customers. Under the amendment on October 25, 2013, all business operators shall pay high attention to protect the customers' privacy and strictly keep it confidential any consumer information they obtain during the business operation. In addition, in extreme situations, pharmaceutical product manufacturers and operators may be subject to criminal liability if their goods or services lead to the death or injuries of customers or other third parties.

Regulations Relating to Commercial Bribery

Pharmaceutical companies involved in a criminal investigation or administrative proceedings related to bribery are listed in the Adverse Records of Commercial Briberies by the provincial health and family planning administrative departments, which have been merged into the provincial health commissions. Pursuant to the Provisions on the Establishment of Adverse Records of Commercial Briberies in the Medicine Purchase and Sales Industry which became effective on March 1, 2014, provincial health commissions formulate the implementing measures for establishment of Adverse Records of Commercial Briberies. If a pharmaceutical company or its agent is listed in the Adverse Records of Commercial Briberies at the provincial level, public medical institutions located in the local provincial level region are prohibited from making any purchase from the company for two years. Where a pharmaceutical company or its agent is listed in the adverse records on two or more occasions within five years, all public medical institutions in China are not permitted to purchase any products from that company for two years.

Regulations Relating to Foreign Exchange

The Foreign Exchange Administration Regulations are the principal regulations governing foreign currency exchange in China. Under the PRC foreign exchange regulations, payments of current account items, such as profit distributions and trade and service-related foreign exchange transactions, may be made in foreign currencies without prior approval from the State Administration of Foreign Exchange ("SAFE") by complying with certain procedural requirements. In contrast, approval from or registration with appropriate government authorities or designated banks is required when RMB is to be converted into a foreign currency and remitted out of China to pay capital expenses such as the repayment of foreign currency-denominated loans.

Under current regulations, the capital of a foreign-invested enterprise and capital in RMB obtained by the foreign-invested enterprise from foreign exchange settlement must not be used for the following purposes: directly or indirectly used for the payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations; directly or indirectly used for investment in securities, unless otherwise provided by relevant laws and regulations; extending loans to non-related parties, unless permitted by the scope of business; and/or paying the expenses related to the purchase of real estate that is not for self-use, except for the real estate enterprises.

In 2017, new regulations were adopted which, among other things, relax the policy restriction on foreign exchange inflow to further enhance trade and investment facilitation and tighten genuineness and compliance verification of cross-border transactions and cross-border capital flows.

On October 23, 2019, SAFE issued the Circular of the State Administration of Foreign Exchange on Further Promoting the Facilitation of Cross-border Trade and Investment ("Circular 28"), which took effect on the same day. Circular 28 allows non-investment foreign-invested enterprises to use their capital funds to make equity investments in China, provided that such investments do not violate the effective special entry management measures for foreign investment (negative list) and the target investment projects are

genuine and in compliance with laws. Since Circular 28 was only issued recently, its interpretation and implementation in practice are still subject to substantial uncertainty.

Regulations Relating to Dividend Distributions

The principal laws, rules and regulations governing dividend distributions by foreign-invested companies in the PRC are the PRC Company Law, as amended, the Foreign Investment Law and its Implementing Rules. Under these requirements, foreign-invested companies may pay dividends only out of their accumulated profit, if any, as determined in accordance with PRC accounting standards and regulations. Both PRC domestic companies and foreign invested PRC companies are required to allocate at least 10% of their respective accumulated after-tax profits each year, if any, to fund certain capital reserve funds until the aggregate amount of these reserve funds have reached 50% of the registered capital of the companies. A PRC company is not permitted to distribute any profits until any losses from prior fiscal years have been offset. Profits retained from prior fiscal years may be distributed together with distributable profits from the current fiscal year.

Labor Laws and Social Insurance

Pursuant to the PRC Labor Law and the PRC Labor Contract Law, employers must execute written labor contracts with full-time employees. All employers must comply with local minimum wage standards. Employers must establish a comprehensive management system to protect the rights of their employees, including a system governing occupational health and safety to provide employees with occupational training to prevent occupational injury, and employers are required to truthfully inform prospective employees of the job description, working conditions, location, occupational hazards and status of safe production as well as remuneration and other conditions. Violations of the PRC Labor Contract Law and the PRC Labor Law may result in the imposition of fines and other administrative and criminal liability in the case of serious violations.

In addition, according to the PRC Social Insurance Law, employers like our PRC subsidiaries in China must provide employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds. These payments are made to local administrative authorities, and any employer who fails to contribute may be fined and ordered to pay the deficit amount within a stipulated time limit.

Rest of World Regulation

For other countries outside of the United States and the PRC, the requirements governing the conduct of clinical trials, drug licensing, pricing and reimbursement vary from country to country. In all cases the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles having their origin in the Declaration of Helsinki.

Employees

As of January 31, 2020, we had approximately 3,500 employees. We have also engaged and may continue to engage independent contractors to assist us with our operations. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have never experienced any employment-related work stoppages, and we consider our relations with our employees to be good.

Financial Information

The financial information required under this Item 1 is incorporated herein by reference to the section of this Annual Report titled "Part II-Item 8-Financial Statements and Supplementary Data." For financial information regarding our business, see "Part II-Item 7-Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report and our consolidated audited financial statements and related notes included elsewhere in this Annual Report.

Corporate Information

We are an exempted company incorporated in the Cayman Islands with limited liability on October 28, 2010. Any company that is registered in the Cayman Islands but conducts business mainly outside of the

Cayman Islands may apply to be registered as an exempted company. The principal executive office of our research and development operations is located at No. 30 Science Park Road, Zhong-Guan-Cun Life Science Park, Changping District, Beijing 102206, PRC. Our telephone number at this address is +86 10 58958000. Our current registered office in the Cayman Islands is located at the offices of Mourant Governance Services (Cayman) Limited, 94 Solaris Avenue, Camana Bay, Grand Cayman KY1-1108, Cayman Islands. Our website address is www.beigene.com. We do not incorporate the information on or accessible through our website into this Annual Report, and you should not consider any information on, or that can be accessed through, our website as part of this Annual Report.

We own various registered trademarks, trademark applications and unregistered trademarks and service marks, including the name "BeiGene" and our corporate logo. All other trade names, trademarks and service marks of other companies appearing in this Annual Report are the property of their respective holders. Solely for convenience, some of the trademarks and trade names in this document are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Available Information

We make available on or through our website certain reports and amendments to those reports that we file with or furnish to the SEC, in accordance with the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These include our annual reports on Form 10-K, our quarterly reports on Form 10-Q, and our current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. We also make available, free of charge on our website, the reports filed with the SEC by our executive officers, directors and 10% shareholders pursuant to Section 16 under the Exchange Act. Additionally, we make available on our website our securities filings with the HKEx. We make this information available on or through our website free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC and the HKEx. We use our website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD.

Item 1A. Risk Factors

The following section includes the most significant factors that we believe may adversely affect our business and operations. You should carefully consider the risks and uncertainties described below and all information contained in this Annual Report, including our financial statements and the related notes and "Part II-Item 7-Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding to invest in our ADSs or ordinary shares. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our ADSs and ordinary shares could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.

Risks Related to Commercialization of Our Drugs and Drug Candidates

Our drugs and any future approved drug candidates may fail to achieve the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community necessary for commercial success.

Our drugs and any future approved drug candidates may fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. For example, current cancer treatments like chemotherapy and radiation therapy are well established in the medical community, and doctors may continue to rely on these treatments to the exclusion of our drugs and drug candidates. In addition, physicians, patients and third-party payors may prefer other novel or generic products to ours. If our drugs and drug candidates do not achieve an adequate level of acceptance, the sales of our drugs may be limited and we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of our drugs and drug candidates, if approved for commercial sale, will depend on a number of factors, including:

- the clinical indications for which our drugs and drug candidates are approved;
- physicians, hospitals, cancer treatment centers, and patients considering our drugs and drug candidates as safe and effective treatments;
- government agencies, professional societies, practice management groups, insurance carriers, physicians' groups, private health and science foundations, and organizations publishing guidelines and recommendations recommending our drugs and reimbursement;
- the potential and perceived advantages of our drugs and drug candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of regulatory authorities;
- limitations or warnings contained in the labeling approved by regulatory authorities;
- the timing of market introduction of our drugs and drug candidates as well as competitive drugs;
- the cost of treatment in relation to alternative treatments;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage and reimbursement by third-party payors and government authorities; and
- the effectiveness of our sales and marketing efforts.

If any drugs that we commercialize fail to achieve market acceptance among physicians, patients, hospitals, third-party payors, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue. Even if our drugs achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our drugs, are more cost effective or render our drugs obsolete.

We have limited experience in launching and marketing our internally developed drugs and third-party drugs. If we are unable to further develop marketing and sales capabilities or enter into agreements with third parties to market and sell our drugs and third-party drugs, we may not be able to generate substantial product sales revenue.

In 2017, in connection with our strategic collaboration with Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"), we were granted an exclusive license in the People's Republic of China ("PRC" or "China"), excluding Hong Kong, Macau and Taiwan, to commercialize BMS's approved cancer therapies, ABRAXANE®, REVLIMID®, and VIDAZA®, and acquired BMS's commercial operations in China, excluding certain functions. We started marketing BMS's approved drugs in September 2017.

In October 2019, we entered into a strategic collaboration with Amgen with respect to its commercial-stage oncology products XGEVA® (which received approval from the National Medical Products Administration ("NMPA") and was made available in China in September 2019), KYPROLIS® and BLINCYTO® and 20 clinical- and late-preclinical-stage oncology pipeline products, and the agreement became effective on January 2, 2020. In connection with this strategic collaboration, we are authorized to commercialize the oncology products of Amgen in China for five or seven years and have the option to retain one of the three oncology products to commercialize for as long as the product is sold in China. For each pipeline product that is approved in China, we will also have the right to commercialize the pipeline product for seven years in China and the right to retain approximately one of every three approved pipeline assets, up to a total of six, other than AMG 510, for commercialization in China.

In November 2019, our BTK inhibitor BRUKINSA™ (zanubrutinib) received accelerated approval from the FDA as a treatment for mantle cell lymphoma ("MCL") in adult patients who have received at least one prior therapy and we launched BRUKINSA in the United States soon after approval. In December 2019, our anti-PD-1 antibody tislelizumab received approval from the NMPA as a treatment for patients with classical Hodgkin's Lymphoma ("cHL") who have received at least two prior therapies. We expect to launch tislelizumab in China in the first quarter of 2020.

We continue to build our salesforce in China and the United States to commercialize our internally developed drugs (including BRUKINSA and tislelizumab) and third-party drugs, and any additional drugs or drug candidates that we may develop or in-license, which will require significant capital expenditures, management resources and time.

We have limited experience in commercializing our internally developed drugs, such as BRUKINSA and tislelizumab, and third-party drugs, such as ABRAXANE, REVLIMID, and VIDAZA, which we license from BMS, and XGEVA, KYPROLIS and BLINCYTO, which we have the right to commercialize under our strategic collaboration with Amgen. For example, we have limited experience in building and managing a commercial team, conducting a comprehensive market analysis, obtaining state licenses and reimbursement, or managing distributors and a sales force for our drugs. We will be competing with many companies that currently have extensive and well-funded sales and marketing operations. As a result, our ability to successfully commercialize our drug may involve more inherent risk, take longer, and cost more than it would if we were a company with substantial experience launching drugs.

We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel. If we are unable to, or decide not to, further develop internal sales, marketing, and commercial distribution capabilities for any or all of our drugs, we will likely pursue collaborative arrangements regarding the sales and marketing of our drugs. However, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will have effective sales forces. Any revenue we receive will depend upon the efforts of such third parties. We would have little or no control over the marketing and sales efforts of such third parties, and our revenue from product sales may be lower than if we had commercialized our drugs ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts for our drugs.

There can be no assurance that we will be able to further develop and successfully maintain internal sales and commercial distribution capabilities or establish or maintain relationships with third-party collaborators to successfully commercialize any drug, and as a result, we may not be able to generate substantial product sales revenue.

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

The development and commercialization of new drugs is highly competitive. We face competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of drugs for the treatment of cancer for which we are commercializing our drugs or developing our drug candidates. For example, both BRUKINSA and tislelizumab face substantial competition. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any drugs that we commercialize or may develop. Our competitors also may obtain approval from the U.S. Food and Drug Administration ("FDA"), NMPA, European Medicines Agency ("EMA") or other comparable regulatory authorities for their drugs more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market and or slow our regulatory approval.

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

The market opportunities for our drugs and drug candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small.

In markets with approved therapies, we have and expect to initially seek approval of our drug candidates as a later stage therapy for patients who have failed other approved treatments. Subsequently, for those drugs that prove to be sufficiently beneficial, if any, we would expect to seek approval as a second line therapy and potentially as a first-line therapy, but there is no guarantee that our drugs and drug candidates, even if approved, would be approved for second-line or first-line therapy.

Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive later stage therapy and who have the potential to benefit from treatment with our drugs and drug candidates, are based on our beliefs and estimates and may prove to be inaccurate or based on imprecise data. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our drugs and drug candidates may be limited or may not be amenable to treatment with our drugs and drug candidates. Even if we obtain significant market share for our drugs and drug candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications, including use as a first- or second-line therapy.

If we are not able to continue to obtain, or experience delays in obtaining, required regulatory approvals, we will not be able to commercialize our drugs and drug candidates, and our ability to generate revenue will be materially impaired.

Before obtaining regulatory approvals for the commercial sale of any drug candidate for a target indication, we must demonstrate in preclinical studies and well-controlled clinical trials, and, with respect to approval in the United States, to the satisfaction of the FDA, that the drug candidate is safe and effective,

or the biologic drug candidate is safe, pure, and potent, for use for that target indication and that the manufacturing facilities, processes and controls are adequate. In addition to preclinical and clinical data, the new drug application ("NDA") or biologics license application ("BLA") must include significant information regarding the chemistry, manufacturing and controls ("CMC") for the drug candidate. Obtaining approval of an NDA or BLA is a lengthy, expensive and uncertain process, and approval may not be obtained. If we submit an NDA or BLA to the FDA, the FDA decides whether to accept or reject the submission for filing. We cannot be certain that a submission will be accepted for filing and review by the FDA.

We have limited experience in obtaining regulatory approval for our drug candidates. For example, we have limited experience in preparing the required materials for regulatory submission and navigating the regulatory approval process. As a result, our ability to successfully submit an NDA or BLA and obtain regulatory approval for our drug candidates may involve more inherent risk, take longer, and cost more than it would if we were a company with substantial experience in obtaining regulatory approvals.

Regulatory authorities outside of the United States, such as the NMPA and EMA, also have requirements for approval of drugs for commercial sale with which we must comply prior to marketing in those areas. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our drug candidates. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and obtaining regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking non-U.S. regulatory approval could require additional nonclinical studies or clinical trials, which could be costly and time consuming. The non-U.S. regulatory approval process may include all of the risks associated with obtaining FDA approval. For all of these reasons, we may not obtain non-U.S. regulatory approvals on a timely basis, if at all.

The process to develop, obtain regulatory approval for and commercialize drug candidates is long, complex and costly both inside and outside the United States, China and Europe, and approval is never guaranteed. Even if our drug candidates were to successfully obtain approval from the regulatory authorities, any approval might significantly limit the approved indications for use, or require that precautions, contraindications or warnings be included on the product labeling, or require expensive and time-consuming post-approval clinical trials or surveillance as conditions of approval. Following any approval for commercial sale of our drug candidates, certain changes to the drug, such as changes in manufacturing processes and additional labeling claims, may be subject to additional review and approval by the FDA, NMPA and EMA and comparable regulatory authorities. Also, regulatory approval for any of our drug candidates may be withdrawn. If we are unable to obtain regulatory approval for our drug candidates in one or more jurisdictions, or any approval contains significant limitations, our target market will be reduced and our ability to realize the full market potential of our drug candidates will be harmed. Furthermore, we may not be able to obtain sufficient funding or generate sufficient revenue and cash flows to continue the development of any other drug candidate in the future.

We have limited manufacturing capability and must rely on third-party manufacturers to manufacture our commercial products and clinical supplies, and if they fail to meet their obligations, the development and commercialization of our drugs and drug candidates could be adversely affected.

We have limited manufacturing capabilities and experience. Our drugs and drug candidates are composed of multiple components and require specialized formulations for which scale-up and manufacturing could be difficult. We have limited experience in such scale-up and manufacturing, requiring us to depend on a limited number of third parties, who may not be able to deliver in a timely manner, or at all. In order to develop drugs and drug candidates, apply for regulatory approvals, and commercialize our drugs and drug candidates, we will need to develop, contract for, or otherwise arrange for the necessary manufacturing capabilities. There are risks inherent in pharmaceutical manufacturing that could affect the ability of our contract manufacturers to meet our delivery time requirements or provide adequate amounts of material to meet our needs.

We currently rely on third-party manufacturers to produce commercial quantities of drugs we are marketing, including in-licensed drugs and our internally developed drugs, BRUKINSA and tislelizumab.

In addition, if any of our other drug candidates or in-licensed drugs or drug candidates becomes approved for commercial sale, we will need to expand our internal capacity or establish additional third-party manufacturing capacity. Manufacturing partner requirements may require us to fund capital improvements, perhaps on behalf of third parties, to support the scale-up of manufacturing and related activities. We may not be able to establish scaled manufacturing capacity for an approved drug in a timely or economic manner, if at all. If we or our third-party manufacturers are unable to provide commercial quantities of such an approved drug, we will have to successfully transfer manufacturing technology to a different manufacturer. Engaging a new manufacturer for such an approved drug could require us to conduct comparative studies or utilize other means to determine bioequivalence of the new and prior manufacturers' products, which could delay or prevent our ability to commercialize such an approved drug. If we or any of these manufacturers is unable or unwilling to increase its manufacturing capacity or if we are unable to establish alternative arrangements on a timely basis or on acceptable terms, the development and commercialization of such an approved drug may be delayed or there may be a shortage in supply. Any inability to manufacture our drugs, drug candidates, in-licensed drugs and drug candidates or future approved drugs in sufficient quantities when needed could seriously harm our business and our financial results.

Manufacturers of our approved drugs, if any, must comply with good manufacturing practice ("GMP") requirements enforced by the FDA, NMPA, EMA and other comparable foreign health authorities through facilities inspection programs. These requirements include quality control, quality assurance, and the maintenance of records and documentation. Manufacturers of our approved drugs may be unable to comply with these GMP requirements and with other FDA, NMPA, EMA, state, and foreign regulatory requirements. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied is compromised due to a manufacturer's failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our drugs, which would seriously harm our business.

We may be subject, directly or indirectly, to applicable anti-kickback, false claims laws, physician payment transparency laws, fraud and abuse laws or similar healthcare and security laws and regulations in the United States and other jurisdictions, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and others play a primary role in the recommendation and prescription of any products for which we obtain regulatory approval. Our operations are subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician payment sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we are subject to patient privacy regulation by both the federal government and the states in which we conduct our business.

Additionally, we are subject to state equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply to healthcare services reimbursed by any third-party payor, not just governmental payors, but also private insurers. These laws are enforced by various state agencies and through private actions. Some states have passed laws that require pharmaceutical companies to comply with the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers and/or other voluntary industry codes of conduct that restrict the payments made to healthcare providers and other potential referral sources. Several states and local laws also impose other marketing restrictions or require pharmaceutical companies to make marketing or price disclosures to the state, require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, and require the registration of pharmaceutical sales representatives. State laws also govern the privacy and security of health information in some circumstances. These data privacy and security laws may differ from each other in significant ways and often are not pre-empted by HIPAA, which may complicate compliance efforts. There are ambiguities as to what is required to comply with these state requirements, and if we fail to comply with an applicable state law requirement, we could be subject to penalties.

Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including penalties, fines and/or exclusion or suspension from federal and state healthcare programs such as Medicare

and Medicaid and debarment from contracting with the U.S. government. In addition, private individuals have the ability to bring actions on behalf of the U.S. government under the federal False Claims Act as well as under the false claims laws of several states.

Neither the U.S. government nor the U.S. courts have provided definitive guidance on the applicability of fraud and abuse laws to our business. Law enforcement authorities are increasingly focused on enforcing these laws, and it is possible that some of our practices may be challenged under these laws. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, individual imprisonment, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws.

In addition, the approval, commercialization, and other activities related to any of our drugs and drug candidates outside the United States will also likely subject us to non-U.S. equivalents of the healthcare laws such as those mentioned above, among other non-U.S. laws. As with the state equivalents mentioned above, some of these non-U.S. laws may be broader in scope. Data privacy and security laws and regulations in non-U.S. jurisdictions may also be more stringent than those in the United States (such as the European Union ("EU"), which adopted the General Data Protection Regulation, which became effective in May 2018).

If any of the physicians or other providers or entities with whom we do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which may also adversely affect our business.

We may explore the licensing of development and/or commercialization rights or other forms of collaboration worldwide, which will expose us to additional risks of conducting business in additional international markets.

Non-U.S. markets are an important component of our strategy. For example, in connection with our collaboration with Amgen we have been granted the right to commercialize three of Amgen's oncology products in China for five or seven years and will have the option to retain one of the three oncology products to commercialize for as long as the product is sold in China. We have also agreed to collaborate with Amgen on the global development and commercialization in China of 20 Amgen oncology pipeline products. We initially intend to focus on opportunities in China, in particular. If we fail to obtain licenses or enter into collaborative arrangements with third parties in other markets, or if these parties are not successful, our revenue-generating growth potential will be adversely affected. Moreover, international business relationships subject us to additional risks that may materially adversely affect our ability to attain or sustain profitable operations, including:

- efforts to enter into collaboration or licensing arrangements with third parties in connection with our international sales, marketing and distribution efforts may increase our expenses or divert our management's attention from the acquisition or development of drug candidates;
- difficulty of effective enforcement of contractual provisions in local jurisdictions;
- potential third-party patent rights or potentially reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements, including the loss of normal trade status between China and the United States;
- economic weakness, including inflation;
- compliance with tax, employment, immigration and labor laws for employees traveling abroad;
- the effects of applicable non-U.S. tax structures and potentially adverse tax consequences;

- currency fluctuations, which could result in increased operating expenses and reduced revenue;
- workforce uncertainty and labor unrest;
- failure of our employees and contracted third parties to comply with Office of Foreign Asset Control rules and regulations and the Foreign Corrupt Practices Act and other anti-bribery and corruption laws; and
- business interruptions resulting from geo-political actions, including trade disputes, war and terrorism, disease or public health epidemics, such as the coronavirus impacting China and elsewhere, or natural disasters, including earthquakes, volcanoes, typhoons, floods, hurricanes and fires.

These and other risks may materially adversely affect our ability to attain or sustain revenue from international markets.

The illegal distribution and sale by third parties of counterfeit versions of our drugs or stolen products could have a negative impact on our reputation and business.

Third parties might illegally distribute and sell counterfeit or unfit versions of our drugs, which do not meet our or our collaborators' rigorous manufacturing and testing standards. A patient who receives a counterfeit or unfit drug may be at risk for a number of dangerous health consequences. Our reputation and business could suffer harm as a result of counterfeit or unfit drugs sold under our or our collaborators' brand name(s). In addition, thefts of inventory at warehouses, plants or while in-transit, which are not properly stored and which are sold through unauthorized channels, could adversely impact patient safety, our reputation and our business.

Risks Related to Clinical Development and Regulatory Approval of Our Drugs and Drug Candidates

We depend substantially on the success of the clinical development of our drugs and drug candidates. If we are unable to successfully complete clinical development, obtain additional regulatory approvals and commercialize our drugs and drug candidates, or experience significant delays in doing so, our business will be materially harmed.

Our business depends on the successful development, regulatory approval and commercialization of our drugs and drug candidates for the treatment of patients with cancer, such as BRUKINSA, for which we obtained FDA approval for the treatment for MCL in adult patients who have received at least one prior therapy, and tislelizumab, for which we obtained NMPA approval for the treatment of patients with cHL who have received at least two prior therapies, and other drug candidates we may develop. We have invested a significant portion of our efforts and financial resources in the development of our drugs and drug candidates. The success of our drugs and drug candidates depends on several factors, including:

- successful enrollment in, and completion of, clinical trials, as well as completion of preclinical studies;
- favorable safety and efficacy data from our clinical trials and other studies;
- receipt of regulatory approvals;
- establishing commercial manufacturing capabilities, either by building facilities ourselves or making arrangements with third-party manufacturers;
- the performance by contract research organizations ("CROs") or other third parties we may retain of their duties to us in a manner that complies with our protocols and applicable laws and that protects the integrity of the resulting data;
- obtaining and maintaining patent, trade secret and other intellectual property protection and regulatory exclusivity;
- ensuring we do not infringe, misappropriate or otherwise violate the valid patent, trade secret or other intellectual property rights of third parties;
- successfully launching our drugs and drug candidates, if and when approved;

- obtaining favorable reimbursement from third-party payors for drugs and drug candidates, if and when approved;
- competition with other products;
- continued acceptable safety profile following regulatory approval; and
- manufacturing or obtaining sufficient supplies of our drugs, drug candidates and any competitor drug products that may be necessary for use in clinical trials for evaluation of our drug candidates and commercialization of our drugs.

If we do not achieve and maintain one or more of these factors in a timely manner or at all, we could experience significant delays in our ability or be unable to obtain additional regulatory approvals for and/or to successfully commercialize our drugs and drug candidates, which would materially harm our business and we may not be able to generate sufficient revenues and cash flows to continue our operations.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our drug candidates may not be predictive of the results of later-stage clinical trials, and initial or interim results of a trial may not be predictive of the final results. Drug candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same drug candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, including genetic differences, patient adherence to the dosing regimen and other trial protocol elements and the rate of dropout among clinical trial participants. In the case of any trials we conduct, results may differ from earlier trials due to the larger number of clinical trial sites and additional countries and languages involved in such trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Our future clinical trial results may not be favorable.

Even if our future clinical trial results show favorable efficacy and impressive durability of anti-tumor responses, not all patients may benefit. For certain drugs, including checkpoint inhibitors, and in certain indications, it is likely that the majority of patients may not respond to the agents at all, some responders may relapse after a period of response and certain tumor types may appear particularly resistant.

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

Before obtaining regulatory approval for the sale of our drug candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. We may experience numerous unexpected events during, or as a result of, clinical trials that could delay or prevent our ability to receive regulatory approval or commercialize our drug candidates, including but not limited to: regulators, institutional review boards ("IRBs"), or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site; our inability to reach agreements 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; manufacturing issues, including problems with manufacturing, supply quality, compliance with current GMP, or obtaining sufficient quantities of a drug candidate for use in a clinical trial or for commercialization; clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs; the number of patients required for clinical trials of our drug candidates may be larger than we anticipate, enrollment may be insufficient or slower than we anticipate or patients may drop out at a higher rate than we anticipate; our third-party contractors, including clinical investigators, may fail to comply with regulatory requirements

or meet their contractual obligations to us in a timely manner, or at all; we might have to suspend or terminate clinical trials of our drug candidates for various reasons, including a finding of a lack of clinical response or other unexpected characteristics or a finding that participants are being exposed to unacceptable health risks; regulators, IRBs or ethics committees may require that we or our investigators suspend or terminate clinical research or not rely on the results of clinical research for various reasons, including noncompliance with regulatory requirements; the cost of clinical trials of our drug candidates may be greater than we anticipate; and the supply or quality of our drugs and drug candidates, companion diagnostics or other materials necessary to conduct clinical trials of our drug candidates or commercialization of our drugs may be insufficient or inadequate.

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

- be delayed in obtaining regulatory approval for our drug candidates;
- not obtain regulatory approval at all;
- obtain approval for indications that are not as broad as intended;
- have the drug removed from the market after obtaining regulatory approval;
- be subject to additional post-marketing testing requirements;
- be subject to warning labels or restrictions on how the drug is distributed or used; or
- be unable to obtain reimbursement for use of the drug.

Significant clinical trial, manufacturing or regulatory delays may also increase our development costs and could shorten any periods during which we have the exclusive right to commercialize our drug candidates or allow our competitors to bring drugs to market before we do. This could impair our ability to commercialize our drug candidates and may harm our business and results of operations.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including the size and nature of the patient population and the patient eligibility criteria defined in the protocol, competition from competing companies, and natural disasters or public health epidemics, such as the coronavirus impacting China and elsewhere.

Our clinical trials will likely compete with other clinical trials for drug candidates that are in the same therapeutic areas as our drug candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Because the number of qualified clinical investigators and clinical trial sites is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. Even if we are able to enroll a sufficient number of patients in our clinical trials, delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could delay or prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates.

Risks Related to Extensive Government Regulation

All material aspects of the research, development, manufacturing and commercialization of pharmaceutical products are heavily regulated.

All jurisdictions in which we conduct or intend to conduct our pharmaceutical-industry activities regulate these activities in great depth and detail. We initially intend to focus our activities in the major

markets of the United States, China, EU, and other select countries. These geopolitical areas all strictly regulate the pharmaceutical industry, and in doing so they employ broadly similar regulatory strategies, including regulation of product development and approval, manufacturing, and marketing, sales and distribution of products. However, there are differences in the regulatory regimes-some minor, some significant-that make for a more complex and costly regulatory compliance burden for a company like ours that plans to operate in each of these regions.

The process of obtaining regulatory approvals and compliance with appropriate laws and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable requirements at any time during the product development process, approval process, or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include a regulator's refusal to approve pending applications, withdrawal of an approval, license revocation, a clinical hold, voluntary or mandatory product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. The failure to comply with these regulations could have a material adverse effect on our business. For example, although we obtained FDA approval of BRUKINSA for the treatment of adult patients with MCL who have received at least one prior therapy and NMPA approval of tislelizumab for patients with cHL who have received at least two prior therapies, the FDA and NMPA could later withdraw these approvals. In order to market approved products in any given jurisdiction, we must comply with numerous and varying regulatory requirements of such jurisdiction regarding safety, efficacy and quality. In any event, the receipt of FDA, NMPA or other regulatory approval does not assure ultimate success of our commercialization efforts for our drugs.

The approval processes of regulatory authorities in the United States, China, Europe and other comparable regulatory authorities are lengthy, time consuming and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our drug candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA, the NMPA, the EMA, and other comparable regulatory authorities is unpredictable and typically takes many years following the commencement of preclinical studies and clinical trials and depends on numerous factors, including the substantial discretion of the regulatory authorities.

Our drug candidates could be delayed or fail to receive regulatory approval for many reasons, including:

- failure to begin or complete clinical trials due to disagreements with regulatory authorities;
- failure to demonstrate that a drug candidate is safe and effective or that a biologic candidate is safe, pure, and potent for its proposed indication;
- failure of clinical trial results to meet the level of statistical significance required for approval;
- reporting or data integrity issues related to our clinical trials;
- disagreement with our interpretation of data from preclinical studies or clinical trials;
- changes in approval policies or regulations that render our preclinical and clinical data insufficient for approval or require us to amend our clinical trial protocols;
- regulatory requests for additional analyses, reports, data, nonclinical studies and clinical trials, or questions regarding interpretations of data and results and the emergence of new information regarding our drug candidates or other products;
- failure to satisfy regulatory conditions regarding endpoints, patient population, available therapies and other requirements for our clinical trials in order to support marketing approval on an accelerated basis or at all;
- our failure to conduct a clinical trial in accordance with regulatory requirements or our clinical trial protocols; and
- clinical sites, investigators or other participants in our clinical trials deviating from a trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial.

The FDA, NMPA, EMA or a comparable regulatory authority may require more information, including additional preclinical, CMC, and/or clinical data, to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program.

Changes in regulatory requirements and guidance may also occur, and we may need to amend clinical trial protocols submitted to applicable regulatory authorities to reflect these changes. Amendments may require us to resubmit clinical trial protocols to IRBs or ethics committees for re-examination, which may impact the costs, timing or successful completion of a clinical trial.

If we experience delays in the completion of, or the termination of, a clinical trial of any of our drug candidates, the commercial prospects of that drug candidate will be harmed, and our ability to generate product sales revenues from any of those drug candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our drug candidate development and approval process, and jeopardize our ability to commence product sales and generate related revenues for that candidate. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our drug candidates.

Our development activities and regulatory filings also could be harmed or delayed by a shutdown of the U.S. government, including the FDA, or other governments and regulatory authorities.

We believe that our drug candidates' designation in China as Category 1 products should confer certain regulatory advantages to us. These advantages may not result in commercial benefits to us as we expect, and they might be changed in the future in a manner adverse to us.

In China, prior to seeking approval from the NMPA, a pharmaceutical company needs to determine the drug's registration category, which will determine the requirements for its clinical trial and marketing application. These categories range from Category 1, for drugs incorporating a new chemical entity that has not previously been marketed anywhere in the world, to Category 2, for drugs with new indications, dosage forms or routes of administration and the like, to Categories 3 and 4, for certain generic drugs, to Category 5, for "originator" (what would be known elsewhere as innovative) or generic drugs previously marketed abroad but not yet approved for marketing in China. Therapeutic biologics follow a similar classification system. All of our internally developed drug candidates are classified as Category 1 based on the respective clinical trial approval from the NMPA, which is a favored category for regulatory review and approval.

The NMPA has adopted several mechanisms for expedited review and approval for drug candidates that apply to Category 1 drug candidates. While we believe that the Category 1 designation of our internally developed drug candidates should provide us with a significant regulatory, and therefore commercial, advantage over non-Chinese companies seeking to market products in China, we cannot be sure that this will be the case. The pharmaceutical regulatory environment is evolving quickly, and changes in laws, regulations, enforcement and internal policies could result in the "favored" status of Category 1 products changing or being eliminated altogether or our products classification in Category 1 changing. We cannot be certain that the advantages we believe will be conferred by our Category 1 classifications will be realized or result in any material development or commercial advantage.

The absence of patent-linkage, patent-term extension and regulatory exclusivity for NMPA-approved pharmaceutical products could increase the risk of early generic competition with our products in China.

In the United States, the Federal Food, Drug, and Cosmetic Act, as amended by the law commonly referred to as the "Hatch-Waxman Amendments," provides the opportunity for patent-term restoration of up to five years to reflect patent term lost during certain portions of product development and the FDA regulatory review process. The Hatch-Waxman Amendments also have a process for patent linkage, pursuant to which FDA will stay approval of certain follow-on applications during the pendency of litigation between the follow-on applicant and the patent holder or licensee, generally for a period of 30 months. Finally, the Hatch-Waxman Amendments provide for statutory exclusivities that can prevent submission or approval of certain follow-on marketing applications. For example, federal law provides a five-year period of exclusivity within the United States to the first applicant to obtain approval of a new chemical entity

(as defined) and three years of exclusivity protecting certain innovations to previously approved active ingredients where the applicant was required to conduct new clinical investigations to obtain approval for the modification. Similarly, the Orphan Drug Act provides seven years of market exclusivity for certain drugs to treat rare diseases, where FDA designates the drug candidate as an orphan drug and the drug is approved for the designated orphan indication. These provisions, designed to promote innovation, can prevent competing products from entering the market for a certain period of time after FDA grants marketing approval for the innovative product.

In China, however, there is no currently effective law or regulation providing patent term extension, patent linkage, or data exclusivity (referred to as regulatory data protection). Therefore, a lower-cost generic drug can emerge onto the market much more quickly. Chinese regulators have set forth a framework for integrating patent linkage and data exclusivity into the Chinese regulatory regime, as well as for establishing a pilot program for patent term extension. The Economic and Trade Agreement Between the United States of America and the People's Republic of China announced in January 2020 (the "Trade Agreement") also provides for patent linkage systems and patent term extension systems. To be implemented, this framework will require adoption of legislation and regulations. To date, the NMPA has issued several draft implementing regulations in this regard for public comment but no regulations have been formally issued, and these concepts were not included in the revised Drug Administration Law that became effective on December 1, 2019 and contains significant other changes to the drug regulatory landscape in China. These factors result in weaker protection for us against generic competition in China than could be available to us in the United States until the relevant implementing regulations for extension, patent linkage, or data exclusivity are put into effect officially in China.

Chinese manufacturing facilities have historically experienced issues operating in line with established GMPs and international best practices, and passing FDA, NMPA and EMA inspections, which may result in a longer and costlier current GMP inspection and approval process by the FDA, NMPA or EMA for our Chinese manufacturing processes and third-party contract manufacturers.

To obtain FDA, NMPA and EMA approval for our drug candidates in the United States, China and Europe, we will need to undergo strict pre-approval inspections of our manufacturing facilities, which we have located in China, or the manufacturing facilities of our contract manufacturers located in China and elsewhere. Historically, some manufacturing facilities in China have had difficulty meeting the FDA's, NMPA's or EMA's standards. When inspecting our or our contractors' Chinese manufacturing facilities, the FDA, NMPA or EMA might cite GMP deficiencies, both minor and significant, which we may not be required to disclose. Remediating deficiencies can be laborious and costly and consume significant periods of time. Moreover, if the FDA, NMPA or EMA notes deficiencies as a result of its inspection, it will generally reinspect the facility to determine if the deficiency was remediated to its satisfaction. The FDA, NMPA or EMA may note further deficiencies as a result of its reinspection, either related to the previously identified deficiency or otherwise. If we cannot satisfy the FDA, NMPA and EMA as to our compliance with GMP in a timely basis, marketing approval for our drug candidates could be seriously delayed, which in turn would delay commercialization of our drug candidates.

Undesirable adverse events caused by our drugs and drug candidates could interrupt, delay or halt clinical trials, delay or prevent regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any regulatory approval.

Undesirable adverse events ("AEs") caused by our drugs and drug candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, NMPA, EMA or other comparable regulatory authorities, or could result in limitations or withdrawal following approvals. If the conduct or results of our trials or patient experience following approval reveal a high and unacceptable severity or prevalence of AEs, our trials could be suspended or terminated and the FDA, NMPA, EMA or other comparable regulatory authorities could order us to cease further development of, or deny approval of, our drug candidates or require us to cease commercialization following approval.

Numerous drug-related AEs and serious AEs ("SAEs") have been reported in our clinical trials. Some of these events have led to patient death. Drug-related AEs or SAEs could affect patient recruitment or the

ability of enrolled subjects to complete the trial and could result in product liability claims. Any of these occurrences may harm our reputation, business, financial condition and prospects significantly. In our periodic and current reports filed with the SEC and our press releases and scientific and medical presentations released from time to time we disclose clinical results for our drug candidates, including the occurrence of AEs and SAEs. Each such disclosure speaks only as of the date of the data cutoff used in such report, and we undertake no duty to update such information unless required by applicable law. Also, a number of immune-related adverse events ("IRAEs") have been associated with treatment with checkpoint inhibitors such as tislelizumab, including immune-mediated pneumonitis, colitis, hepatitis, endocrinopathies, nephritis and renal dysfunction, skin adverse reactions, and encephalitis. These IRAEs may be more common in certain patient populations (potentially including elderly patients) and may be exacerbated when checkpoint inhibitors are combined with other therapies.

Additionally, undesirable side effects caused by our drugs and drug candidates, or caused by our drugs and drug candidates when used in combination with other drugs, could potentially cause significant negative consequences, including:

- regulatory authorities could delay or halt pending clinical trials;
- we may suspend, delay or alter development of the drug candidate or marketing of the drug;
- regulatory authorities may withdraw approvals or revoke licenses of the drug, or we may determine to do so even if not required;
- regulatory authorities may require additional warnings on the label;
- we may be required to implement a Risk Evaluation Mitigation Strategy ("REMS") for the drug, as is the case with REVLIMID, or, if a REMS is already in place, to incorporate additional requirements under the REMS, or to develop a similar strategy as required by a regulatory authority;
- we may be required to conduct post-market studies; and
- we could be sued and held liable for harm caused to subjects or patients.

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

Our drugs and any future approved drug candidates will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our drugs and drug candidates.

Our drugs and any additional drug candidates that are approved will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable regulatory authorities in China and other countries. For example, BRUKINSA and tislelizumab will continue to be subject to post-approval development and regulatory requirements, which may limit how they are manufactured and marketed, and could materially impair our ability to generate revenue. As such, we and our third-party manufacturers will be subject to ongoing review and periodic inspections to assess compliance with applicable post-approval regulations. Additionally, to the extent we want to make certain changes to the approved products, product labeling, or manufacturing processes, we will need to submit new applications or supplements to regulatory authorities for approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA, NMPA, EMA and comparable regulatory authority requirements, including, in the United States, ensuring that quality control and manufacturing procedures conform to GMP regulations. As such, we and our contract manufacturers are and will be subject to continual review and inspections to assess compliance with GMP and adherence to commitments made in any NDA or BLA, other marketing application, and previous responses to any inspection observations. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

The regulatory approvals for our drugs and any approvals that we receive for our drug candidates are and may be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, which could adversely affect the drug's commercial potential or contain requirements for potentially costly post-marketing testing and surveillance to monitor the safety and efficacy of the drug or drug candidate. The FDA, NMPA, EMA or comparable regulatory authorities may also require a REMS program or comparable program as a condition of approval of our drug candidates or following approval, as is the case with REVLIMID. In addition, if the FDA, NMPA, EMA or a comparable regulatory authority approves our drug candidates, we will have to comply with requirements including, for example, submissions of safety and other post-marketing information and reports, establishment registration, as well as continued compliance with GMP and GCP for any clinical trials that we conduct post-approval.

The FDA, NMPA, EMA or comparable regulatory authorities may seek to impose a consent decree or withdraw marketing approval if compliance with regulatory requirements is not maintained or if problems occur after the drug reaches the market. Later discovery of previously unknown problems with our drugs or drug candidates or with our drug's manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our drugs, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, untitled or warning letters, or holds on clinical trials;
- refusal by the FDA, NMPA, EMA or comparable regulatory authorities to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals or withdrawal of approvals;
- product seizure or detention, or refusal to permit the import or export of our drugs and drug candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA, NMPA, EMA and other regulatory authorities strictly regulate the marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for their approved indications and for use in accordance with the provisions of the approved label. The FDA, NMPA, EMA and other regulatory authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. The policies of the FDA, NMPA, EMA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad, particularly in China, where the regulatory environment is constantly evolving. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained and we may not achieve or sustain profitability.

In addition, if we are able to obtain accelerated approval of any of our drug candidates, as we have done with the initial approval of BRUKINSA in the United States, the FDA would require us to conduct a confirmatory study to verify the predicted clinical benefit and may also require post-marketing safety studies. Other comparable regulatory authorities outside the United States, such as the NMPA or EMA, may have similar requirements. The results from the confirmatory study may not support the clinical benefit, which would result in the approval being withdrawn. While operating under accelerated approval, we will be subject to certain restrictions that we would not be subject to upon receiving regular approval.

If safety, efficacy, or other issues arise with any medical product that is used in combination with our drugs, we may be unable to market such drug or may experience significant regulatory delays or supply shortages, and our business could be materially harmed.

We plan to develop certain of our drug candidates for use as a combination therapy. If the FDA, NMPA, EMA or another comparable regulatory agency revokes its approval of another therapeutic we use

in combination with our drug candidates, we will not be able to market our drug candidates in combination with such revoked therapeutic. If safety or efficacy issues arise with these or other therapeutics that we seek to combine with our drug candidates in the future, we may experience significant regulatory delays, and we may be required to redesign or terminate the applicable clinical trials. In addition, if manufacturing or other issues result in a supply shortage of any component of our combination drug candidates, we may not be able to complete clinical development of our drug candidates on our current timeline or at all, or we may experience disruptions in the commercialization of our approved drugs. For example, we have in-licensed drug candidates from third parties to conduct clinical trials in combination with our drug candidates. We may rely on those third parties to manufacture the in-licensed drug candidates and may not have control over their manufacturing process. If these third parties encounter any manufacturing difficulties, disruptions or delays and are not able to supply sufficient quantities of drug candidates, our drug combination study program may be delayed.

Reimbursement may be limited or unavailable for our drugs and drug candidates. Even if we are able to commercialize our drugs and any approved drug candidates, the drugs may become subject to unfavorable pricing regulations or third-party reimbursement practices, which could harm our business.

The regulations that govern regulatory approvals, pricing and reimbursement for new therapeutic products vary widely from country to country. Historically, products launched in the EU do not follow price structures of the U.S. and generally prices tend to be significantly lower. The EU provides options for its Member States to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost effectiveness of a particular product candidate to currently available therapies. A Member State may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market.

Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or licensing approval is granted. In some non-U.S. markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain regulatory approval for a drug in a particular country, but then be subject to price regulations that delay our commercial launch of the drug and negatively impact our revenues and results of operations.

Our ability to commercialize any drugs successfully also will depend in part on the extent to which reimbursement for these drugs and related treatments will be available on adequate terms, or at all, from government health administration authorities, private health insurers and other organizations. In the United States and markets in other countries, patients generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors.

A primary trend in the global healthcare industry is cost containment. Government authorities and these third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications.

In the United States, no uniform policy of coverage and reimbursement for drugs exists among third-party payors. As a result, obtaining coverage and reimbursement approval of a drug from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our drugs on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. The principal decisions about reimbursement for new medicines are typically made by CMS. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. Factors payors consider in determining reimbursement are based on

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

Coverage may be more limited than the purposes for which the medicine is approved by the FDA or comparable regulatory authorities in other countries. Even if we obtain coverage for a given drug, the resulting reimbursement rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Additionally, third-party payors may not cover, or provide adequate reimbursement for, long-term follow-up evaluations required following the use of our drugs. Patients are unlikely to use our drugs and any approved drug candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of the drug. Because some of our drugs and drug candidates have a higher cost of goods than conventional therapies and may require long-term follow-up evaluations, the risk that coverage and reimbursement rates may be inadequate for us to achieve profitability may be greater.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price ("ASP") and best price. Penalties may apply in some cases when such metrics are not submitted accurately and timely. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs.

Furthermore, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products. For example, there have been several recent Congressional inquiries, proposed bills or announced plans intended to, among other things, bring more transparency to drug pricing, set patient spending caps, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer's patient programs, reform government program reimbursement methodologies for drug products, and allow import of lower-priced drugs from other countries. While some proposed measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. We cannot be sure whether additional legislative changes will be enacted, or whether existing regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our drug candidates, if any, may be.

In the United States, since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the Affordable Care Act (the "ACA"), and we expect there will be additional challenges and amendments to the ACA in the future. Various portions of the ACA are currently undergoing legal and constitutional challenges in the Fifth Circuit Court and the United States Supreme Court; the Trump Administration has issued various Executive Orders which eliminated cost sharing subsidies and various provisions that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices; and Congress has introduced several pieces of legislation aimed at significantly revising or repealing the ACA. It is unclear whether the ACA will be overturned, repealed, replaced, or further amended. We cannot predict what affect further changes to the ACA would have on our business.

Additionally, the current administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. HHS has already started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. It is not clear what effect these measures may have on our business if we receive coverage for our drugs and drug candidates

In China, drug prices are typically lower than in the United States and Europe, and until recently, the market has been dominated by generic drugs. The PRC Ministry of Human Resources and Social Security

or provincial or local human resources and social security authorities, together with other government authorities, review the inclusion or removal of drugs from China's National Drug Catalog for Basic Medical Insurance, Work-related Injury Insurance and Maternity Insurance, or the National Reimbursement Drug List (the "NRDL"), or provincial or local medical insurance catalogues for the National Medical Insurance Program regularly, and the tier under which a drug will be classified, both of which affect the amounts reimbursable to program participants for their purchases of those drugs. There can be no assurance that our drugs and any approved drug candidates will be included in the NRDL or provincial reimbursements lists, or if they are, that they will be included at a price that allows us to be commercially successful. Products included in the NRDL have been typically generic and essential drugs. Innovative drugs similar to our drugs and drug candidates have historically been more limited on their inclusion in the NRDL due to the affordability of the government's Basic Medical Insurance, although this has been changing in recent years.

In addition, in January 2019, the Chinese government launched a national program for volume-based, centralized drug procurement with minimum quantity commitments in an attempt to negotiate lower prices from drug manufacturers and reduce the price of drugs. The program was initially rolled out in 11 pilot cities and was expanded nationwide in September 2019. Under the program, one of the key determining factors for a successful bid is the price. The government will award a contract to the lowest bidders who are able to satisfy the quality and quantity requirements. The successful bidders will be guaranteed a sale volume for at least a year. A volume guarantee gives the winner an opportunity to gain or increase market share. The volume guarantee is intended to make manufacturers more willing to cut their prices to win a bid. It may also enable manufacturers to lower their distribution and commercial costs. Many types of drugs are covered under the program, including drugs made by international pharmaceutical companies and generics made by domestic Chinese manufacturers. For example, in January 2020, ABRAXANE and its generic forms were included in the program. We won the bid and became one of the three companies who were awarded a government contract, with a price that will be significantly lower than the price that we have been charging in 2019 and into 2020. Once ABRAXANE is included in the centralized procurement process, we anticipate that demand will increase significantly, which could have a material impact on our commercialization efforts and results of operations. Moreover, the program may change how generic drugs are priced and procured in China and is likely to accelerate the replacement of originator drugs with generics. We cannot be sure whether there will be any changes to the program in the future. The implementation of the program may negatively impact our existing commercial operations in China as well as our strategies on how to commercialize our drugs in China, especially if one of our drugs is included in the program but does not win the bid, which could have a material adverse effect on our business, financial condition and results of operations.

Increasingly, third-party payors are requiring that companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any drug that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Reimbursement may impact the demand for, or the price of, any drug which we commercialize. Obtaining or maintaining reimbursement for our drugs may be particularly difficult because of the higher prices often associated with drugs administered under the supervision of a physician. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any drug and drug candidate that we in-license or successfully develop.

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

drugs that we develop could have a material adverse effect on our business, our operating results, and our overall financial condition.

We intend to seek approval to market our drug candidates in the United States, China, Europe and in other jurisdictions. In some non-U.S. countries, for example those in the EU, the pricing of drugs and biologics is subject to governmental control, which can take considerable time even after obtaining regulatory approval. Market acceptance and sales of our drugs will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for drugs and may be affected by existing and future health care reform measures.

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

In the United States, China, the EU and some other jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding healthcare that could prevent or delay regulatory approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to profitably sell our drugs and any drug candidates for which we obtain regulatory approval. We expect that healthcare reform measures may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved drug. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our drugs and drug candidates.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of our drug candidates, if any, may be.

In recent years, there have been and will likely continue to be efforts to enact administrative or legislative changes to healthcare laws and policies, including modification, repeal, or replacement of all, or certain provisions of, the ACA. The implications of the ACA, its possible repeal, any legislation that may be proposed to replace the ACA, modifications to the implementation of the ACA, and the political uncertainty surrounding any repeal or replacement legislation for our business and financial condition, if any, are not yet clear.

Risks Related to Our Financial Position and Need for Additional Capital

We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We are a commercial-stage biotechnology company formed in October 2010. Our operations to date have focused on organizing and staffing our company, business planning, raising capital, establishing our intellectual property portfolio, conducting preclinical studies and clinical trials of our drug candidates, developing and operating internal manufacturing capabilities, and the commercialization of our in-licensed and internally-discovered drugs. We have limited experience in completing large-scale, pivotal or registrational clinical trials and obtaining, maintaining or expanding regulatory approvals for our drugs and drug candidates. Additionally, we have limited experience in manufacturing, sales, marketing or distribution of pharmaceutical products. We have two internally developed drugs approved for commercial sale and have only generated limited revenue from internally developed product sales. Since September 2017, we have generated revenues from the sale of drugs in China licensed from BMS and we expect to begin generating revenues from our internally developed products in 2020. Our limited operating history, particularly in light of the rapidly evolving cancer treatment field, may make it difficult to evaluate our current business and reliably predict our future performance. We may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. If we do not address these risks and difficulties successfully, our business will suffer.

We have incurred significant net losses since our inception and anticipate that we will continue to incur net losses for the foreseeable future and may never become profitable.

Investment in pharmaceutical drug development is highly speculative. It entails substantial upfront capital expenditures and significant risk that a drug candidate will fail to gain regulatory approval or become commercially viable. We continue to incur significant expenses related to our ongoing operations. As a result, we have incurred losses in each period since our inception, except in the third quarter of 2017, when we were profitable due to revenue recognized from an up-front license fee from BMS. As of December 31, 2019 and 2018, we had an accumulated deficit of $2.0 billion and $1.0 billion, respectively. Substantially all of our operating losses have resulted from costs incurred in connection with our research and development programs and from selling, general and administrative expenses associated with our operations.

We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase in the near term as we continue and expand our development of, and seek regulatory approvals for, our drug candidates, and our manufacturing facilities, commercialize our drugs and launch new drugs, if approved, maintain and expand regulatory approvals, contribute up to $1.25 billion to the global development of 20 Amgen pipeline assets, and commercialize the drugs that we have licensed from BMS and drugs that we have the right to commercialize under our collaboration with Amgen in China and any other drugs that we may successfully develop or license. Typically, it takes many years to develop one new drug from the time it is discovered to when it is available for treating patients. In addition, we will continue to incur costs associated with operating as a public company in the United States and Hong Kong. We will also incur costs in support of our growth as a commercial-stage global biotechnology company. The size of our future net losses will depend, in part, on the number and scope of our drug development programs and the associated costs of those programs, the cost of our manufacturing activities, the cost of commercializing our approved products, our ability to generate revenues and the timing and amount of milestones and other payments we make or receive with arrangements with third parties. If any of our drug candidates fail in clinical trials or do not gain regulatory approval, or if approved, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research, development, manufacturing and commercialization efforts, expand our business or continue our operations.

We may need to obtain additional financing to fund our operations, and if we are unable to obtain such financing, we may be unable to complete the further development and commercialization of our drugs and drug candidates.

Our drugs and drug candidates will require the completion of clinical development, regulatory review, scale up and availability of manufacturing resources, significant marketing efforts and substantial investment before they can provide us with product sales revenue. Our operations have consumed substantial amounts of cash since inception. Our operating activities used $750.3 million and $547.7 million of net cash during the years ended December 31, 2019 and 2018, respectively. We recorded negative net cash flows from operating activities in 2019 and 2018 primarily due to our net losses of $950.6 million and $674.0 million, respectively. Although we recorded positive net cash flows from operating activities in 2017, primarily due to the upfront fees received from the BMS collaboration, we cannot assure you that we will be able to generate positive cash flows from operating activities in the future. In January 2020, we received gross proceeds of approximately $2.78 billion from the issuance of our ordinary shares in the form of ADSs to Amgen. Under the collaboration with Amgen, we will equally share profits/losses with Amgen for Amgen's oncology products in China during each product's respective commercialization period and will also be eligible to receive royalties on sales of Amgen's products in China or outside of China in the future, based on specified terms.

Our liquidity and financial condition may be materially and adversely affected by the negative net cash flows, and we cannot assure you that we will have sufficient cash from other sources to fund our operations. If we resort to other financing activities to generate additional cash, we will incur financing costs and we cannot guarantee that we will be able to obtain the financing on terms acceptable to us, or at all, and if we raise financing by issuing further equity securities your interest in our company may be diluted. If we have negative operating cash flows in the future, our liquidity and financial condition may be materially and adversely affected.

We expect to continue to spend substantial amounts on drug discovery, advancing the clinical development of our drug candidates, contributing to the global development of 20 Amgen pipeline assets, developing our manufacturing capabilities and securing drug supply, and launching and commercializing our and our collaborators' drugs and any additional drug candidates for which we receive regulatory approval, including building and maintaining a commercial organization to address markets in China, the United States and other countries.

Since September 2017, we have generated revenues from the sale of drugs in China licensed from BMS, and we expect to begin generating revenues from our internally developed products in 2020. These revenues are not sufficient to support our operations. Although it is difficult to predict our liquidity requirements, based upon our current operating plan, we believe that we have sufficient cash, cash equivalents and short-term investments to meet our projected operating requirements for at least the next 12 months. However, we believe that our existing cash, cash equivalents and short-term investments may not be sufficient to enable us to complete all global development or commercially launch all of our current drugs and drug candidates for the currently anticipated indications and to invest in additional programs. Accordingly, we may require further funding through public or private offerings, debt financing, collaboration and licensing arrangements or other sources. Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this "Risk Factors" section. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we currently expect. Our future funding requirements will depend on many factors, including:

- our ability to successfully market our approved drugs;
- the progress, timing, scope and costs of our clinical trials, including the ability to timely enroll patients in our planned and potential future clinical trials;
- the outcome, timing and cost of regulatory approvals of our drug candidates;
- the number and characteristics of drugs and drug candidates that we may in-license and develop;
- the amount and timing of the development, milestone and royalty payments we receive from our collaborators;
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- selling and marketing costs associated with our drugs and any future drug candidates that may be approved, including the cost and timing of expanding our marketing and sales capabilities;
- the terms and timing of any potential future collaborations, licensing or other arrangements that we may establish;
- cash requirements of any future acquisitions, licensing and/or the development of other drug candidates;
- the cost and timing of development and completion of commercial-scale internal or outsourced manufacturing activities; and
- our headcount growth and associated costs.

Adequate additional funding may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts. Our inability to obtain additional funding when we need it could seriously harm our business.

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

We may seek additional funding through a combination of equity offerings, debt financings, collaborations and licensing arrangements. To the extent that we raise additional capital through the sale of

equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a holder of our ordinary shares and/or ADSs. The incurrence of additional indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations and could also result in certain additional restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. In addition, issuance of additional equity securities, or the possibility of such issuance, may cause the market price of our ADSs and/or ordinary shares to decline. In the event that we enter into collaborations or licensing arrangements in order to raise capital, we may be required to accept unfavorable terms, including relinquishing or licensing to a third party on unfavorable terms our rights to technologies or drug candidates that we otherwise would seek to develop or commercialize ourselves or potentially reserve for future potential arrangements when we might be able to achieve more favorable terms.

Fluctuations in exchange rates could result in foreign currency exchange losses and could materially reduce the value of your investment.

We incur portions of our expenses, and derive revenues, in currencies other than the U.S. dollar or Hong Kong dollar, in particular, the RMB, the Euro, and Australian dollar. As a result, we are exposed to foreign currency exchange risk as our results of operations and cash flows are subject to fluctuations in foreign currency exchange rates. We do not regularly engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the U.S. dollar. A decline in the value of the U.S. dollar against currencies in countries in which we conduct clinical trials could have a negative impact on our research and development costs. We cannot predict the impact of foreign currency fluctuations, and foreign currency fluctuations in the future may adversely affect our financial condition, results of operations and cash flows.

The value of the RMB against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions and the foreign exchange policy proposed or adopted by the PRC, Australia and other non-U.S. governments. It is difficult to predict how market forces or PRC, Australia, other non-U.S. governments and U.S. government policies may impact the exchange rate of RMB and the U.S. dollar or any other currencies in the future. There remains significant international pressure on the PRC government to adopt a more flexible currency policy, including from the U.S. government, which has threatened to label China as a "currency manipulator," which could result in greater fluctuation of the RMB against the U.S. dollar.

Substantially all of our revenues are denominated in U.S. dollars and RMB, and our costs are denominated in U.S. dollars, Australian dollars, RMB and Euro, and a large portion of our financial assets and a significant portion of our debt is denominated in U.S. dollars and RMB. Any significant revaluation of the RMB may materially reduce any dividends payable on our ordinary shares and/or ADSs in U.S. dollars. To the extent that we need to convert U.S. dollars into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we would receive. Conversely, if we decide to convert RMB into U.S. dollars for the purpose of making payments for dividends on our ADSs or for other business purposes, appreciation of the U.S. dollar against the RMB would have a negative effect on the U.S. dollar amount we would receive.

In addition, there are limited instruments available for us to reduce our foreign currency risk exposure at reasonable costs. Furthermore, we are also currently required to obtain the State Administration of Foreign Exchange ("SAFE")'s approval before converting significant sums of foreign currencies into RMB. All of these factors could materially and adversely affect our business, financial condition, results of operations and prospects, and could reduce the value of, and dividends payable on, our ordinary shares and/or ADSs in foreign currency terms.

Our business, profitability and liquidity may be adversely affected by deterioration in the credit quality of, or defaults by, our distributors and customers, and an impairment in the carrying value of our short-term investments could negatively affect our consolidated results of operations.

We are exposed to the risk that our distributors and customers may default on their obligations to us as a result of bankruptcy, lack of liquidity, operational failure or other reasons. As we continue to expand our

business, the amount and duration of our credit exposure will be expected to increase over the next few years, as will the breadth of the entities to which we have credit exposure. Although we regularly review our credit exposure to specific distributors and customers that we believe may present credit concerns, default risks may arise from events or circumstances that are difficult to detect or foresee.

Also, the carrying amounts of cash and cash equivalents, restricted cash and short-term investments represent the maximum amount of loss due to credit risk. We had cash and cash equivalents of $618.0 million and $712.9 million, restricted cash of $2.8 million and $27.8 million and short-term investments of $364.7 million and $1.1 billion at December 31, 2019 and 2018, respectively, most of which are deposited in financial institutions outside of China. Although our cash and cash equivalents in China are deposited with various major reputable financial institutions, the deposits placed with these financial institutions are not protected by statutory or commercial insurance. In the event of bankruptcy of one of these financial institutions, we may be unlikely to claim our deposits back in full. As of December 31, 2019 and 2018, our short-term investments consisted of U.S. Treasury securities.

Although we believe that U.S. Treasury securities are of high credit quality, concerns about, or a default by, one or more institutions in the market could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect us.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain patent protection for our drug candidates and drugs through intellectual property rights, or if the scope of such intellectual property rights obtained is not sufficiently broad, third parties may compete directly against us.

Our success depends in large part on our ability to protect our proprietary technology and drug candidates and drugs from competition by obtaining, maintaining and enforcing our intellectual property rights, including patent rights. We seek to protect the drugs, drug candidates and technology that we consider commercially important by filing patent applications in the United States, the PRC and other countries, relying on trade secrets or pharmaceutical regulatory protection or employing a combination of these methods. This process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent prosecution process is expensive, time-consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patents and/or patent applications at a reasonable cost or in a timely manner. As a result, we may not be able to prevent competitors from developing and commercializing competitive drugs in all such fields and territories.

Patents may be invalidated and patent applications may not be granted for a number of reasons, including known or unknown prior art, deficiencies in the patent applications or the lack of novelty of the underlying invention or technology. It is also possible that we will fail to identify patentable aspects of our research and development output in time to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and any other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases, not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications or that we were the first to file for patent protection of such inventions. Furthermore, the PRC and, recently, the United States have adopted the "first-to-file" system under which whoever first files a patent application will be awarded the patent if all other patentability requirements are met. Under the first-to-file system, third parties may be granted a patent relating to a technology which we invented.

In addition, under the PRC Patent Law, any organization or individual that applies for a patent in a foreign country for an invention or utility model accomplished in China is required to report to the National Intellectual Property Administration, or NIPA, for security examination. Otherwise, if an application is later filed in China, the patent right will not be granted.

The coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we license or own currently or in the future issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. In addition, the patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States, PRC and other countries. We may be subject to a third-party preissuance submission of prior art to the United States Patent and Trademark Office (the "USPTO") or become involved in opposition, derivation, revocation, re-examination, post-grant and *inter partes* review, or interference proceedings or similar proceedings in foreign jurisdictions challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or drugs or drug candidates and compete directly with us without payment to us, or result in our inability to manufacture or commercialize drugs or drug candidates without infringing, misappropriating or otherwise violating third-party patent rights. Moreover, we may have to participate in interference proceedings declared by the USPTO to determine priority of invention or in post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge the priority of our invention or other features of patentability of our patents and patent applications. Such challenges may result in loss of patent rights, loss of exclusivity, or in patent claims being narrowed, invalidated, or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology, drugs, and drug candidates. Such proceedings also may result in substantial costs and require significant time from our scientists and management, even if the eventual outcome is favorable to us. Consequently, we do not know whether any of our technology or drugs or drug candidates will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner.

Furthermore, although various extensions may be available, the life of a patent and the protection it affords, is limited. For example, the approved cancer therapies we have licensed from BMS in China, ABRAXANE, REVLIMID, and VIDAZA, face or are expected to face competition from generic medications, and we may face similar competition for any approved drugs even if we successfully obtain patent protection. Manufacturers of generic drugs may challenge the scope, validity or enforceability of our patents in court, and we may not be successful in enforcing or defending those intellectual property rights and, as a result, may not be able to develop or market the relevant product exclusively, which would have a material adverse effect on any potential sales of that product. The issued patents and pending patent applications, if issued, for our drugs and drug candidates are expected to expire on various dates as described in "Part I-Item 1-Business-Intellectual Property" of our Annual Report on Form 10-K for the year ended December 31, 2019. Upon the expiration of our issued patents or patents that may issue from our pending patent applications, we will not be able to assert such patent rights against potential competitors and our business and results of operations may be adversely affected.

Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such drug candidates might expire before or shortly after such drug candidates are commercialized. As a result, our patents and patent applications may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. Moreover, some of our patents and patent applications are, and may in the future be, co-owned with or licensed from third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our

competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners or the licensors of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

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

Filing, prosecuting, maintaining and defending patents on drugs or drug candidates in all countries throughout the world could be prohibitively expensive for us, and our intellectual property rights in some non-U.S. countries can have a different scope and strength than do those in the United States. In addition, the laws of certain non-U.S. countries do not protect intellectual property rights to the same extent as U.S. federal and state laws do. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing drugs made using our inventions in and into the United States or non-U.S. jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drugs and further, may export otherwise infringing drugs to non-U.S. jurisdictions where we have patent protection, but where enforcement rights are not as strong as those in the United States. These drugs may compete with our drugs and drug candidates and our patent rights or other intellectual property rights may not be effective or adequate to prevent them from competing. In addition, we may not be able to enforce patents that we in-license from third parties, who may delay or decline to enforce patents in the licensed territory.

We currently hold issued trademark registrations and have trademark applications pending, any of which may be the subject of a governmental or third-party objection, which could prevent the maintenance or issuance of the same. If we are unsuccessful in obtaining trademark protection for our primary brands, we may be required to change our brand names, which could materially adversely affect our business. Moreover, as our products mature, our reliance on our trademarks to differentiate us from our competitors will increase, and as a result, if we are unable to prevent third parties from adopting, registering or using trademarks and trade dress that infringe, dilute or otherwise violate our trademark rights, our business could be materially adversely affected.

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain jurisdictions, including China. The legal systems of some countries do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, or the marketing of competing drugs in violation of our proprietary rights.

We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful. Our patent rights relating to our drugs and drug candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable non-U.S. authority.

Competitors may infringe our patent rights or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others. This can be expensive and time consuming. Any claims that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property rights. Many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce and/or defend their intellectual property rights than we can. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. An adverse result in any litigation proceeding could put our patent, as well as any patents that may issue in the future from our pending patent applications, at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include *ex parte* re-examination, *inter partes* review, post-grant review, derivation and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our drugs or drug candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our drugs or drug candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may not be able to prevent misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our drugs or drug candidates.

Our commercial success depends in part on our avoiding infringement of the valid patents and other intellectual property rights of third parties. We are aware of numerous issued patents and pending patent applications belonging to third parties that exist in fields of our drugs and drug candidates. There may also be third-party patents or patent applications of which we are currently unaware, and given the dynamic area in which we operate, additional patents are likely to issue that relate to aspects of our business. There is a substantial amount of litigation and other claims and proceedings involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries generally. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our drugs and drug candidates may give rise to claims of infringement of the patent rights of others.

Third parties may assert that we are using technology in violation of their patent or other proprietary rights. Defense of these claims, regardless of their merit, could involve substantial litigation expense and divert our technical personnel, management personnel, or both from their normal responsibilities. Even in the absence of litigation, we may seek to obtain licenses from third parties to avoid the risks of litigation, and if a license is available, it could impose costly royalty and other fees and expenses on us.

If third parties bring successful claims against us for infringement of their intellectual property rights, we may be subject to injunctive or other equitable relief, which could prevent us from developing and commercializing one or more of our drugs and drug candidates. Defense of these claims, regardless of their

merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim against us of infringement or misappropriation, or a settlement by us of any such claims, we may have to pay substantial damages, including treble damages and attorneys' fees in the case of willful infringement, pay royalties or redesign our infringing drugs and drug candidates, which may be impossible or require substantial time and cost. In the event of an adverse result in any such litigation, or even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our drugs or drug candidates. Any such license might not be available on reasonable terms or at all. In the event that we are unable to obtain such a license, we would be unable to further develop and commercialize one or more of our drug and drug candidates, which could harm our business significantly. We may also elect to enter into license agreements in order to settle patent infringement claims or to resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could significantly harm our business.

We are aware of U.S. patents with claims covering certain antibodies that are relevant to tislelizumab for which patents are expected to expire in 2023 or 2024; complexes of irreversible BTK inhibitors that are relevant to BRUKINSA for which the patent is expected to expire in 2027; and the use of PARP inhibitors to treat certain cancers that are relevant to pamiparib for which patents are expected to expire between 2027 and 2031. We are also aware of issued patents in Europe and China relevant to pamiparib. Although we believe that the relevant claims of these patents would likely be held invalid, we can provide no assurance that a court or an administrative agency would agree with our assessment. If the validity of the relevant claims of one or more of these patents were to be upheld upon a validity challenge, and our related drug or drug candidate was to be approved for sale in the United States before the expiration of the relevant patents, we would need a license to commercialize the drug or drug candidate in the United States before the expiration of the relevant patents. In addition, depending upon the circumstances, we may need licenses for jurisdictions outside of the United States where we wish to commercialize a particular drug or drug candidate before the expiration of corresponding patents covering that drug or drug candidate. In such cases, we can provide no assurance that we would be able to obtain a license or licenses on commercially reasonable terms or at all, which could materially and adversely affect our business.

Even if litigation or other proceedings are resolved in our favor, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of the ordinary shares and/or ADSs. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

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

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and other patent agencies in several stages over the lifetime of the patent. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Although an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

If we do not obtain patent term extension and regulatory exclusivity for any drugs or drug candidates we may develop, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any drugs or drug candidates we may develop, one or more of our U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during clinical trials and the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of drug approval, only one patent may be extended and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. In addition, no patent term extension system has been established in the PRC yet, and implementation of the patent term extension proposed in the Innovation Opinion and the Trade Agreement may not occur quickly. As a result, the patents we have in the PRC are not yet eligible to be extended for patent term lost during clinical trials and the regulatory review process. If we are unable to obtain patent term extension or term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our drugs or drug candidates.

The United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained, if any. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. There could be similar changes in the laws of foreign jurisdictions that may impact the value of our patent rights or our other intellectual property rights.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed. We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

In addition to our issued patent and pending patent applications, we rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position and to protect our drugs and drug candidates. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties that have access to them, such as our employees, corporate collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. However, any of these parties may breach such agreements and disclose our proprietary information, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us and our competitive position would be harmed.

Furthermore, many of our employees, including our senior management, were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, including each member of our senior management, executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although

we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our management and scientific personnel.

We may not be successful in obtaining or maintaining necessary rights for our development pipeline through acquisitions and in-licenses.

Because our programs may involve additional drug candidates that may require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire and maintain licenses or other rights to use these proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, or other third-party intellectual property rights from third parties that we identify. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. If we are unable to successfully obtain rights to required third-party intellectual property rights, our business, financial condition and prospects for growth could suffer.

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

We have entered into license agreements with third parties providing us with rights under various third-party patents and patent applications. These license agreements impose diligence, development or commercialization timelines and milestone payment, royalty, insurance and other obligations on us. If we fail to comply with our obligations under our current or future license agreements, our counterparties may have the right to terminate these agreements, in which event we might not be able to develop, manufacture or market any drug or drug candidate that is covered by the licenses provided for under these agreements or we may face claims for monetary damages or other penalties under these agreements. Such an occurrence could diminish the value of these products and our company. Termination of the licenses provided for under these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

Risks Related to Our Reliance on Third Parties

If we fail to maintain an effective distribution channel for our drugs, our business and sales of the relevant drugs could be adversely affected.

We rely on third-party distributors to distribute our approved drugs. For example, we rely on a sole third-party distributor to distribute BMS's approved cancer therapies, ABRAXANE, REVLIMID, and VIDAZA, and multiple third-party distributors for the distribution of BRUKINSA and tislelizumab. We also expect to rely on third-party distributors to distribute our other internally developed drug products, if approved, and the oncology products of Amgen to be commercialized by us in China under the collaboration with Amgen. Our ability to maintain and grow our business will depend on our ability to maintain an

effective distribution channel that ensures the timely delivery of our drugs to the relevant markets where we generate market demand through our sales and marketing activities. However, we have relatively limited control over our distributors, who may fail to distribute our drugs in the manner we contemplate. For example, while we have long-standing business relationship with our sole distributor for the in-licensed products from BMS, the agreement we entered into with our sole distributor can be terminated by both parties upon six months' written notice. If price controls or other factors substantially reduce the margins our distributors can obtain through the resale of our products to hospitals, medical institutions and sub-distributors, they may terminate their relationship with us. While we believe alternative distributors are readily available, there is a risk that, if the distribution of our drugs is interrupted, our sales volumes and business prospects could be adversely affected.

We rely on third parties to manufacture at least a portion of our commercial and clinical drug supplies. Our business could be harmed if those third parties fail to provide us with sufficient quantities of product or fail to do so at acceptable quality levels or prices.

Although we currently have manufacturing facilities that may be used for clinical-scale manufacturing and processing and are building a biologics manufacturing facility in China, we intend to at least partially rely on outside vendors to manufacture supplies and process our drugs and drug candidates. For example, we have entered into a commercial supply agreement for tislelizumab with Boehringer Ingelheim Biopharmaceuticals (China) Ltd. ("Boehringer Ingelheim") and entered into a commercial supply agreement for BRUKINSA with Catalent Pharma Solutions, LLC ("Catalent"). In addition, we rely on BMS and its third-party manufacturers for supply of ABRAXANE, REVLIMID, and VIDAZA in China. We will be dependent on Amgen for the supply of the drugs that we plan to develop and commercialize in China under the collaboration with Amgen. We have limited experience in manufacturing or processing our drugs and drug candidates on a commercial scale, including BRUKINSA and tislelizumab. Additionally, we have limited experience in managing the manufacturing process, and our process may be more difficult or expensive than the approaches currently in use.

Although we intend to further develop our own manufacturing facilities, we also intend to use third parties as part of our manufacturing process and for the clinical and commercial supply of our drugs and drug candidates. Our anticipated reliance on a limited number of third-party manufacturers exposes us to the following risks:

- we may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA, NMPA, EMA or other comparable regulatory authorities must evaluate and/or approve any manufacturers as part of their regulatory oversight of our drugs and drug candidates. This evaluation would require new testing and GMP-compliance inspections by FDA, NMPA, EMA or other comparable regulatory authorities;
- our manufacturers may have little or no experience with manufacturing our drugs and drug candidates, and therefore may require a significant amount of support from us in order to implement and maintain the infrastructure and processes required to manufacture our drugs and drug candidates;
- our third-party manufacturers might be unable to timely manufacture our drugs and drug candidates or produce the quantity and quality required to meet our clinical and commercial needs, if any. For example, we encountered supply disruptions of ABRAXANE in 2019, which may recur in the future;
- manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies in the United States to ensure strict compliance with GMPs and other government regulations and by other comparable regulatory authorities for corresponding non-U.S. requirements. We do not have control over third-party manufacturers' compliance with these regulations and requirements;
- we may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our drugs and drug candidates;
- raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier, may not be available or may not be suitable or acceptable for use due to material or component defects; and

- our contract manufacturers and critical drug component suppliers may be subject to disruptions in their business, including unexpected demand for or shortage of raw materials or components, cyber-attacks on supplier systems, labor disputes or shortage and inclement weather, as well as natural or man-made disasters.

Each of these risks could delay or prevent the completion of our clinical trials or the approval of any of our drug candidates, result in higher costs or adversely impact development or commercialization of our drugs. In addition, we will rely on third parties to perform certain specification tests on our drugs and drug candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm and regulatory authorities could place significant restrictions on our company until deficiencies are remedied.

Currently, the raw materials for our manufacturing activities are supplied by multiple source suppliers, although portions of our supply chain may rely on sole source suppliers. We have agreements for the supply of drug materials with manufacturers or suppliers that we believe have sufficient capacity to meet our demands. In addition, we believe that adequate alternative sources for such supplies exist. However, there is a risk that, if supplies are interrupted, it would materially harm our business. For example, the COVID-19 outbreak could have a broad impact on the production and supplies of active ingredients or other raw materials and result in a potential shortage of supply, as a large portion of such active ingredients or raw materials used by drug manufacturers worldwide are from China. Therefore, drug manufacturers including us could be negatively impacted.

Manufacturers of drug and biological products often encounter difficulties in production, particularly in scaling up or out, validating the production process, and assuring high reliability of the manufacturing process (including the absence of contamination). These problems include logistics and shipping, difficulties with production costs and yields, quality control, including stability of the product, product testing, operator error, availability of qualified personnel, as well as compliance with strictly enforced federal, state and non-U.S. regulations. Furthermore, if contaminants are discovered in the supply of our drugs and drug candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability failures or other issues relating to the manufacture of our drugs and drug candidates will not occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our drugs for commercial sale and our drug candidates to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to begin new clinical trials at additional expense or terminate clinical trials completely.

If third-party manufacturers fail to comply with manufacturing regulations, our financial results and financial condition will be adversely affected.

Before a third party can begin commercial manufacture of our drugs and drug candidates, contract manufacturers are subject to regulatory inspections of their manufacturing facilities, processes and quality systems. Due to the complexity of the processes used to manufacture drug and biological products and our drug candidates, any potential third-party manufacturer may be unable to initially pass federal, state or international regulatory inspections in a cost-effective manner in order for us to obtain regulatory approval of our drug candidates. If our contract manufacturers do not pass their inspections by the relevant regulatory authorities, our commercial supply of drug product or substance will be significantly delayed and may result in significant additional costs, including the delay or denial of any marketing application for our drug candidates or disruption in sales. In addition, drug and biological manufacturing facilities are continuously subject to inspection by regulatory authorities, before and after drug approval, and must comply with GMPs. Our contract manufacturers may encounter difficulties in achieving quality control and quality assurance and may experience shortages in qualified personnel. In addition, contract manufacturers' failure to achieve and maintain high manufacturing standards in accordance with applicable regulatory requirements, or the incidence of manufacturing errors, could result in patient injury, product liability claims, product shortages, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other

problems that could seriously harm our business. If a third-party manufacturer with whom we contract is unable to comply with manufacturing regulations, we may also be subject to fines, unanticipated compliance expenses, recall or seizure of our drugs, product liability claims, total or partial suspension of production and/or enforcement actions, including injunctions, and criminal or civil prosecution. These possible sanctions could materially adversely affect our financial results and financial condition.

Furthermore, changes in the manufacturing process or procedure, including a change in the location where the product is manufactured or a change of a third-party manufacturer, could require prior review by regulatory authorities and/or approval of the manufacturing process and procedures in accordance with applicable requirements. This review may be costly and time consuming and could delay or prevent the launch of a product or impact commercialization or continuous supply of approved drugs. The new facility will also be subject to pre-approval inspection. In addition, we have to demonstrate that the product made at the new facility is equivalent to the product made at the former facility by physical and chemical methods, which are costly and time consuming. It is also possible that regulatory authorities may require clinical testing as a way to prove equivalency, which would result in additional costs and delay.

We rely on third parties to conduct our preclinical studies and clinical trials and we must work effectively with collaborators to develop our drug candidates. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our drugs and drug candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third-party CROs to monitor and manage data for our ongoing preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on the CROs does not relieve us of our regulatory responsibilities. We, our CROs for our clinical programs and our clinical investigators are required to comply with GCPs, which are regulations and guidelines enforced by the FDA, NMPA, EMA and other comparable regulatory authorities for all of our drugs in clinical development. If we or any of our CROs or clinical investigators fail to comply with applicable GCPs and other regulatory requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, NMPA, EMA or comparable regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our pivotal clinical trials must be conducted with product produced under GMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. We could also be subject to government investigation and enforcement actions.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical and nonclinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they or our clinical investigators obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our drug candidates. As a result, our results of operations and the commercial prospects for our drug candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

Switching or adding additional CROs involves additional cost and delays, which can materially influence our ability to meet our desired clinical development timelines. There can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse effect on our business, financial condition and prospects.

Our future revenues are dependent on, among other factors, our ability to identify a collaboration partner and negotiate acceptable terms for a collaboration agreement and to work effectively with collaborators to develop our drugs and drug candidates, including to obtain regulatory approval. Our arrangements with collaborators will be critical to successfully bringing products to market and

commercializing them. We rely on collaborators in various respects, including to undertake research and development programs and conduct clinical trials, manage or assist with the regulatory filings and approval process and to assist with our commercialization efforts. We do not control our collaborators; therefore, we cannot ensure that these third parties will adequately and timely perform all of their obligations to us. If they fail to complete the remaining studies successfully, or at all, it could delay, adversely affect or prevent regulatory approval. We cannot guarantee the satisfactory performance of any of our collaborators and if any of our collaborators breach or terminate their agreements with us, we may not be able to successfully commercialize the licensed product which could materially and adversely affect our business, financial condition, cash flows and results of operations.

We have entered into collaborations and may form or seek collaborations or strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such collaborations, alliances or licensing arrangements.

We may form or seek strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our research, development and commercialization efforts with respect to our drugs and drug candidates and any future drugs and drug candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing shareholders, or disrupt our management and business.

In August 2017, we acquired Celgene Corporation's commercial operations in China and an exclusive license to Celgene's (now BMS's) commercial cancer portfolio in China, ABRAXANE, REVLIMID, and VIDAZA (the "BMS China License"). On October 31, 2019, we entered into a strategic collaboration with Amgen with respect to its commercial-stage oncology products XGEVA, KYPROLIS and BLINCYTO and 20 clinical- and late-preclinical-stage oncology pipeline products. We are authorized to commercialize the three oncology products in China for five or seven years and have the option to retain one of the three oncology products to commercialize for as long as the product is sold in China. For each pipeline product that is approved in China, we have the right to commercialize the pipeline product for seven years in China and the right to retain approximately one of every three approved pipeline assets, up to a total of six, other than AMG 510, for commercialization in China.

Our strategic collaborations with Amgen and BMS involve numerous risks. For our collaboration with Amgen, we cannot be certain that we will achieve the financial and other benefits that led us to enter into the collaboration. Moreover, we may not achieve the revenue and cost synergies expected from our collaborations with Amgen or BMS for their commercial products in China, and our management's attention may be diverted from our drug discovery and development business. These synergies are inherently uncertain, and are subject to significant business, economic and competitive uncertainties and contingencies, many of which are difficult to predict and are beyond our control. If we achieve the expected benefits, they may not be achieved within the anticipated time frame. Lastly, strategic collaborations can be terminated for various reasons. For example, our strategic collaboration with Celgene for the development and commercialization of tislelizumab, which we entered into in connection with the BMS China License in 2017, was terminated in June 2019 in advance of the acquisition of Celgene by BMS, and we received a $150 million payment and regained global rights to tislelizumab. The termination of the collaboration agreement for tislelizumab did not impact the BMS China License, which remains in effect.

Additionally, from time to time, we may enter into joint ventures with other companies. Establishment of a joint venture involves significant risks and uncertainties, including (i) our ability to cooperate with our strategic partner, (ii) our strategic partner having economic, business, or legal interests or goals that are inconsistent with ours, and (iii) the potential that our strategic partner may be unable to meet its economic or other obligations, which may require us to fulfill those obligations alone.

We face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our drugs and drug candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our drugs and drug candidates as having the requisite potential to demonstrate safety and efficacy or commercial viability. If and when we collaborate with a third party for development and commercialization of a drug

or drug candidate, we can expect to relinquish some or all of the control over the future success of that drug or drug candidate to the third party. For any drugs or drug candidates that we may seek to in-license from third parties, we may face significant competition from other pharmaceutical or biotechnology companies with greater resources or capabilities than us, and any agreement that we do enter may result in the anticipated benefits.

Further, collaborations involving our drugs and drug candidates are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- collaborators may not pursue development and commercialization of our drugs and drug candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to the acquisition of competitive drugs, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a drug candidate, repeat or conduct new clinical trials, or require a new formulation of a drug candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, drugs that compete directly or indirectly with our drugs or drug candidates;
- a collaborator with marketing and distribution rights to one or more drugs may not commit sufficient resources to their marketing and distribution;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our drugs and drug candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable drugs and drug candidates; and
- collaborators may own or co-own intellectual property covering our drugs that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property.

As a result, we may not be able to realize the benefit of current or future collaborations, strategic partnerships or the license of our third-party drugs and drug candidates if we are unable to successfully integrate such products with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a drug candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our drugs and drug candidates or bring them to market and generate product sales revenue, which would harm our business prospects, financial condition and results of operations.

Risks Related to Our Industry, Business and Operations

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

We are highly dependent on Xiaodong Wang, Ph.D., our Co-Founder, Chairman of our scientific advisory board, which may from time to time provide us assistance upon our request, and director; John V. Oyler, our Co-Founder, Chief Executive Officer and Chairman of the board of directors; and the other principal members of our management and scientific teams. Although we have formal employment agreements or offer letters with each of our executive officers, these agreements do not prevent our executives from terminating their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees. The loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided share option, restricted share unit and restricted share grants that vest over time. The value to employees of these equity grants that vest over time may be significantly affected by movements in the ADS and/or ordinary share price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have employment agreements or offer letters with our key employees, any of our employees could leave our employment at any time, with or without notice.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating and executing our discovery, clinical development, manufacturing and commercialization strategy. The loss of the services of our executive officers or other key employees and consultants could impede the achievement of our research, development, manufacturing and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

Furthermore, replacing executive officers, key employees or consultants may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel or consultants on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel.

We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We have significantly increased the size and capabilities of our organization, and we may experience difficulties in managing our growth.

At the beginning of 2019, we had 2,070 employees, and we ended the year with 3,359 employees, an increase of approximately 62%. Most of our employees are full-time. As our research, development, manufacturing and commercialization plans and strategies evolve, we must add a significant number of additional managerial, operational, manufacturing, sales, marketing, financial and other personnel. Our recent growth and any future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining, and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and regulatory authority review process for our drug candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

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

We currently rely, and for the foreseeable future will continue to rely, on certain independent organizations, advisors and consultants to provide certain services. There can be no assurance that the services of these independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, if at all.

If we are not able to effectively manage our growth and further expand our organization by hiring new employees and expanding our groups of consultants and contractors as needed, we may not be able to successfully implement the tasks necessary to further develop, manufacture and commercialize our drugs and drug candidates and, accordingly, may not achieve our research, development, manufacturing and commercialization goals.

We incur significant costs as a result of operating as a public company in the United States and Hong Kong, and our management is required to devote substantial time to compliance requirements, including establishing and maintaining internal controls over financial reporting. We may be exposed to potential risks if we are unable to comply with these requirements.

As a public company in the United States and Hong Kong, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the listing rules of the Nasdaq Stock Market ("Nasdaq"), and The Stock Exchange of Hong Kong Limited (the "HKEx"), and incur significant legal, accounting and other expenses under the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), together with rules implemented by the U.S. Securities and Exchange Commission, or SEC, and applicable market regulators, and the listing rules of the Nasdaq and HKEx. These rules impose various requirements on public companies, including requiring certain corporate governance practices. Our management and other personnel devote a substantial amount of time to these requirements. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly.

For example, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluations and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. We have limited experience in complying with Section 404, and such compliance may require that we incur substantial accounting expenses and expend significant management efforts. Our testing may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. In the event we identify significant deficiencies or material weaknesses in our internal controls that we cannot remediate in a timely manner, the market price of our ordinary shares and/or ADSs could decline if investors and others lose confidence in the reliability of our financial statements, we could be subject to sanctions or investigations by the SEC, HKEx or other applicable regulatory authorities and our business could be harmed.

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

From time to time, we may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any completed, in-process or potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent or unforeseen liabilities;
- the issuance of our equity securities;

- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing drugs or drug candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. For example, in connection with the Amgen transaction, we issued to Amgen a total of 206,635,013 ordinary shares in the form of ADSs, representing 20.5% of the issued share capital of the Company after giving effect to the share issuance, which resulted in Amgen becoming our largest shareholder and the ownership of our existing shareholders being diluted.

PRC regulations and rules concerning mergers and acquisitions, including the Regulations on Mergers and Acquisitions of Domestic Companies by Foreign Investors (the "M&A Rules"), and other recently adopted regulations and rules with respect to mergers and acquisitions established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time consuming and complex. For example, the M&A Rules require that the Ministry of Commerce of the PRC (the "MOFCOM") be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise, if (i) any important industry is concerned, (ii) such transaction involves factors that have or may have impact on the national economic security, or (iii) such transaction will lead to a change in control of a domestic enterprise which holds a famous trademark or PRC time-honored brand. Moreover, according to the Anti-Monopoly Law of the PRC and the Provisions on Thresholds for Prior Notification of Concentrations of Undertakings (the "Prior Notification Rules") issued by the State Council, the concentration of business undertakings by way of mergers, acquisitions or contractual arrangements that allow one market player to take control of or to exert decisive impact on another market player must also be notified in advance to the State Administration of Market Regulation (the "SAMR") when the threshold is crossed and such concentration shall not be implemented without the clearance of prior notification. In addition, the Regulations on Implementation of Security Review System for the Merger and Acquisition of Domestic Enterprise by Foreign Investors (the "Security Review Rules") issued by the MOFCOM specify that mergers and acquisitions by foreign investors that raise "national defense and security" concerns and mergers and acquisitions through which foreign investors may acquire the de facto control over domestic enterprises that raise "national security" concerns are subject to strict review by the MOFCOM, and the rules prohibit any activities attempting to bypass a security review by structuring the transaction through, among other things, trusts, entrustment or contractual control arrangements.

We may also be subject to similar review and regulations in other jurisdictions, such as the laws and regulations on foreign investment in the United States under the jurisdiction of the Committee on Foreign Investment in the United States (the "CFIUS") and other agencies, including the Foreign Investment Risk Review Modernization Act (the "FIRRMA"), adopted in August 2018.

In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the above-mentioned regulations and other relevant rules to complete such transactions could be time consuming, and any required approval processes, including obtaining approval from CFIUS, the SAMR, the MOFCOM or its local counterparts may delay or inhibit our ability to complete such transactions. It is unclear whether those complementary businesses we may acquire in the future would be deemed to be in an industry that raises "national defense and security" or "national security" concerns.

However, CFIUS, MOFCOM or other government agencies may publish explanations in the future determining that certain of the complementary business is in an industry subject to the security review, in

which case our future acquisitions in the United States and the PRC, including those by way of entering into contractual control arrangements with target entities, may be closely scrutinized or prohibited. Our ability to expand our business or maintain or expand our market share through future acquisitions would as such be materially and adversely affected.

If we fail to comply with the U.S. Foreign Corrupt Practices Act or other anti-bribery and corruption laws, our reputation may be harmed and we could be subject to penalties and significant expenses that have a material adverse effect on our business, financial condition and results of operations.

We are subject to the Foreign Corrupt Practices Act (the "FCPA"). The FCPA generally prohibits us from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. We are also subject to the anti-bribery and corruption laws of other jurisdictions, particularly China. The anti-bribery laws in China generally prohibit companies and their intermediaries from making payments to government officials for the purpose of obtaining or retaining business or securing any other improper advantage. As our business has expanded, the applicability of the FCPA and other anti-bribery and corruption laws to our operations has increased.

We do not fully control the interactions our employees, distributors and third-party promoters have with hospitals, medical institutions and doctors, and they may try to increase sales volumes of our products through means that constitute violations of United States, PRC or other countries' anti-corruption and related laws. If our employees, distributors or third-party promoters engage in corrupt or other improper conduct that results in violation of applicable anti-corruption laws in the United States, PRC or other jurisdictions, our reputation could be harmed. Furthermore, we could be held liable for actions taken by our employees, distributors or third-party promoters, which could expose us to regulatory investigations and penalties.

Although we have policies and procedures designed to ensure that we, our employees and our agents comply with anti-bribery laws, there is no assurance that such policies or procedures will prevent our agents, employees and intermediaries from engaging in bribery activities. Our procedures and controls to monitor anti-bribery and corruption compliance may fail to protect us from reckless or criminal acts committed by our employees or agents. If we, due to either our own deliberate or inadvertent acts or those of others, fail to comply with applicable anti-bribery and corruption laws, our reputation could be harmed and we could incur criminal or civil penalties, including but not limited to imprisonment, criminal and civil fines, suspension of our ability to do business with the government, denial of government reimbursement for our products and/or exclusion from participation in government healthcare programs, other sanctions and/or significant expenses, which could have a material adverse effect on our business, including our financial condition, results of operations, cash flows and prospects.

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

We and third parties, such as our CROs or CMOs, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. In addition, our construction projects can only be put into operation after certain regulatory procedures with the relevant administrative authorities in charge of environmental protection, health and safety have been completed. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources or insurance coverage. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses that we may incur due to injuries to our employees resulting from the use of or exposure to hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance

for environmental liability or toxic tort claims that may be asserted against us in connection with our storage, use or disposal of biological or hazardous materials.

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

Our internal information technology systems, or those used by our CROs, CMOs, or other collaborators, contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development and commercialization programs.

Despite the implementation of security measures, our internal information technology systems and those of our CROs, CMOs and other collaborators, contractors and consultants are vulnerable to damage from internal or external events, such as computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures, which compromise the confidentiality, integrity and availability of the systems. Although to our knowledge we have not experienced any material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our research, development, manufacturing, gaining regulatory approval for our drug candidates and commercialization efforts and our business operations.

In the ordinary course of our business, we collect and store sensitive data, including, among other things, legally protected patient health information, personally identifiable information about our employees, intellectual property, and proprietary business information. We manage and maintain our applications and data utilizing on-site systems and outsourced vendors. These applications and data encompass a wide variety of business-critical information including research and development information, commercial information and business and financial information. Because information systems, networks and other technologies are critical to many of our operating activities, shutdowns or service disruptions at our company or vendors that provide information systems, networks, or other services to us pose increasing risks. Such disruptions may be caused by events such as computer hacking, phishing attacks, ransomware, dissemination of computer viruses, worms and other destructive or disruptive software, denial of service attacks and other malicious activity, as well as power outages, natural disasters (including extreme weather), terrorist attacks or other similar events. Such events could cause loss of data, damage to system and data and leave us unable to utilize key business systems or access important data needed to operate our business, including conducting research and development, gaining regulatory approval for our drug candidates or manufacturing and selling our products. Our CROs, CMOs or other collaborators, contractors or consultants may face similar risks, and service disruptions or security breaches of their systems could adversely affect our security, leave us without access to important systems, products, raw materials, components, services or information or expose our confidential data. In addition, system redundancy may be ineffective or inadequate, and our disaster recovery planning may not be sufficient to cover all eventualities. Significant events could result in a disruption of our operations, damage to our reputation or a loss of revenues. In addition, we may not have adequate insurance coverage to compensate for any losses associated with such events.

We could be subject to risks caused by misappropriation, misuse, leakage, falsification or intentional or accidental release or loss of information maintained in the information systems and networks of our company and our vendors, including personal information of our employees and patients, and company and vendor confidential data. In addition, outside parties may attempt to penetrate our systems or those of our vendors or fraudulently induce our personnel or the personnel of our vendors to disclose sensitive information in order to gain access to our data and/or systems. Like other companies, we have on occasion experienced, and will continue to experience, threats to our data and systems, including malicious codes and viruses, phishing, business email compromise attacks, or other cyber-attacks. The number and complexity of these threats continue to increase over time. If a material breach of our information technology systems or those of our vendors occurs, the market perception of the effectiveness of our security measures could be harmed and our reputation and credibility could be damaged. We could be required to expend significant amounts of money and other resources to respond to these threats or breaches and to repair or replace information systems or networks and could suffer financial loss or the loss of valuable confidential information. In addition, we could be subject to regulatory actions and/or claims made by individuals and groups in private

litigation involving privacy issues related to data collection and use practices and other data privacy laws and regulations, including claims for misuse or inappropriate disclosure of data, as well as unfair or deceptive practices. Although we develop and maintain systems and controls designed to prevent these events from occurring, and we have a process to identify and mitigate threats, the development and maintenance of these systems, controls and processes is costly and requires ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated. Moreover, despite our efforts, the possibility of these events occurring cannot be eliminated entirely. As we outsource more of our information systems to vendors, engage in more electronic transactions with payors and patients, and rely more on cloud-based information systems, the related security risks will increase and we will need to expend additional resources to protect our technology and information systems. In addition, there can be no assurance that our internal information technology systems or those of our CROs, CMOs and other collaborators, contractors, or our consultants' efforts to implement adequate security and control measures, will be sufficient to protect us against breakdowns, service disruption, data deterioration or loss in the event of a system malfunction, or prevent data from being stolen or corrupted in the event of a cyberattack, security breach, industrial espionage attacks or insider threat attacks that could adversely affect our business and operations and/or result in the loss or exposure of critical, proprietary, private, confidential or otherwise sensitive data, which could result in financial, legal, business or reputational harm to us.

Our failure to comply with data protection laws and regulations could lead to government enforcement actions and significant penalties against us, and adversely impact our operating results.

The regulatory framework for the collection, use, safeguarding, sharing, transfer and other processing of personal information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Regulatory authorities in virtually every jurisdiction in which we operate have implemented and are considering a number of legislative and regulatory proposals concerning personal data protection.

In the United States, we are subject to laws and regulations that address privacy, personal information protection and data security at both the federal and state levels. Numerous laws and regulations, including security breach notification laws, health information privacy laws, and consumer protection laws, govern the collection, use, disclosure and protection of health-related and other personal information. Given the variability and evolving state of these laws, we face uncertainty as to the exact interpretation of the new requirements, and we may be unsuccessful in implementing all measures required by regulators or courts in their interpretation.

Regulatory authorities in Europe have implemented and are considering a number of legislative and regulatory proposals concerning data protection. For example, the General Data Protection Regulation (EU) 2016/679 ("GDPR"), which became effective in May 2018, imposes a broad range of strict requirements on companies subject to the GDPR, such as us, including, but not limited to, requirements relating to having legal bases for processing personal information, including personal health data, relating to identifiable individuals and transferring such information outside the European Economic Area (including to the United States), providing information to those individuals regarding the data processing of their personal information, implementing safeguards to keep personal information secure and confidential, having data processing agreements with third parties who process personal information, acquiring consent of the individuals to whom the personal data relates, responding to individuals' requests to exercise their rights in respect of their personal information, reporting security breaches involving personal data to the competent national data protection authority and affected individuals, and recordkeeping. The GDPR imposes strict rules on the transfer of personal data to countries outside the European Economic Area, including the United States, and also imposes restrictions on cross-border data transfers. The GDPR substantially increases the penalties to which we could be subject in the event of any non-compliance, including fines of up to €10 million or up to 2% of our total worldwide annual turnover for certain comparatively minor offenses, or up to €20 million or up to 4% of our total worldwide annual turnover for more serious offenses. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Given the new law, we face uncertainty as to the exact interpretation of the new requirements, and we may be unsuccessful in implementing all measures required by data protection authorities or courts in interpretation of the new law. Despite our best efforts to comply, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European

activities. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. National laws of member states of the EU are in the process of being adapted to the requirements under the GDPR. Because the GDPR specifically gives member states flexibility with respect to certain matters, national laws may partially deviate from the GDPR and impose different obligations from country to country, leading to additional complexity and uncertainty. Further, the United Kingdom's decision to leave the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated now that the United Kingdom has left the EU.

Regulatory authorities in China have implemented and are considering a number of legislative and regulatory proposals concerning data protection. For example, the Cyber Security Law of the PRC (the "Cyber Security Law"), which became effective in June 2017, created China's first national-level data protection for "network operators," which may include all organizations in China that provide services over the internet or another information network. Numerous regulations, guidelines and other measures are expected to be adopted under the umbrella of the Cyber Security Law. Drafts of some of these measures have now been published, including the draft rules on cross-border transfer of personal information published by the China Cyberspace Administration in 2017 and 2019, which may, upon enactment, require security review before transferring human health-related data out of China. In addition, certain industry- specific laws and regulations affect the collection and transfer of personal data in China. For example, the Regulation on the Administration of Human Genetic Resources promulgated by the State Council (the "HGR Regulation"), which became effective on July 1, 2019, applies to activities that involve sampling, biobanking, use of HGR materials and associated data, in China, and provision of such to foreign parties. The HGR Regulation prohibits both onshore or offshore entities established or actually controlled by foreign entities and individuals from sampling or biobanking any China HGR in China and require approval for the sampling of certain HGR and biobanking of all HGR by Chinese parties. Approval for any export or cross- border transfer of the HGR material is also required. The HGR Regulation also requires that foreign parties should ensure the full participation of Chinese parties in international collaborations and all records and data must be shared with the Chinese parties. If the Chinese parties fail to comply with data protection laws, regulations and practice standards, and our research data is obtained by unauthorized persons, used or disclosed inappropriately or destroyed, it could result in a loss of our confidential information and subject us to litigation and government enforcement actions. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices, potentially resulting in confiscation of HGR samples and associated data and administrative fines, disgorgement of illegal gains, or temporary or permanent debarment of our entities and responsible persons from further HGR projects. In addition, the interpretation and application of data protection laws in China and elsewhere are often uncertain and in flux.

We expect that these areas will receive greater attention and focus from regulators going forward and we will continue to face uncertainty as to whether our efforts to comply with evolving obligations under global data protection, privacy and security laws will be sufficient. Any failure or perceived failure by us to comply with applicable laws and regulations could result in reputational damage or proceedings or actions against us by governmental entities, individuals or others. These proceedings or actions could subject us to significant civil or criminal penalties and negative publicity, result in the delayed or halted transfer or confiscation of certain personal information, require us to change our business practices, increase our costs and materially harm our business, prospects, financial condition and results of operations. In addition, our current and future relationships with customers, vendors, pharmaceutical partners and other third parties could be negatively affected by any proceedings or actions against us or current or future data protection obligations imposed on them under applicable law, including the GDPR and Cyber Security Law. In addition, a data breach affecting personal information, including health information, could result in significant management resources, legal and financial exposure and reputational damage that could potentially have an adverse effect on our business.

We may be restricted from transferring our scientific data from China abroad.

In March 2018, the General Office of the State Council promulgated the Measures for the Management of Scientific Data (the "Scientific Data Measures"), which provides a broad definition of scientific data and

relevant rules for the management of scientific data in China. According to the Scientific Data Measures, enterprises in China must seek governmental approval before any scientific data involving a state secret may be transferred abroad or to foreign parties. Further, any researcher conducting research funded at least in part by the Chinese government is required to submit relevant scientific data for management by the entity to which such researcher is affiliated before such data may be published in any foreign academic journal. Given that the term state secret is not clearly defined, if and to the extent our research and development of drug candidates will be subject to the Scientific Data Measures and any subsequent laws as required by the relevant government authorities, we cannot assure you that we can always obtain relevant approvals for sending scientific data (such as the results of our preclinical studies or clinical trials conducted within China) abroad or to our foreign partners in China. If we are unable to obtain necessary approvals in a timely manner, or at all, our research and development of drug candidates may be hindered, which may materially and adversely affect our business, results of operations, financial condition and prospects. If the relevant government authorities consider the transmission of our scientific data to be in violation of the requirements under the Scientific Data Measures, we may be subject to fines and other administrative penalties imposed by those government authorities.

If we or parties on whom we rely fail to maintain the necessary licenses for the development, production, sales and distribution of our products, our ability to conduct our business could be materially impaired.

We are required to obtain, maintain and renew various permits, licenses and certificates to develop, produce, promote and sell our products. Third parties, such as distributors, third-party promoters and third-party manufacturers, on whom we may rely to develop, produce, promote, sell and distribute our products may be subject to similar requirements. We and third parties on whom we rely may be also subject to regular inspections, examinations, inquiries or audits by the regulatory authorities, and an adverse outcome of such inspections, examinations, inquiries or audits may result in the loss or non-renewal of the relevant permits, licenses and certificates. Moreover, the criteria used in reviewing applications for, or renewals of permits, licenses and certificates may change from time to time, and there can be no assurance that we or the parties on whom we rely will be able to meet new criteria that may be imposed to obtain or renew the necessary permits, licenses and certificates. Many of such permits, licenses and certificates are material to the operation of our business, and if we or parties on whom we rely fail to maintain or renew material permits, licenses and certificates, our ability to conduct our business could be materially impaired. Furthermore, if the interpretation or implementation of existing laws and regulations change, or new regulations come into effect, requiring us or parties on whom we rely to obtain any additional permits, licenses or certificates that were previously not required to operate our business, there can be no assurance that we or parties on whom we rely will successfully obtain such permits, licenses or certificates.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our third-party research institution collaborators, CROs, CMOs, suppliers and other contractors and consultants, could be subject natural or man-made disasters, public health epidemics or other business interruptions, for which we are predominantly self-insured. In addition, we partially rely on our third-party research institution collaborators for conducting research and development of our drug candidates, and they may be affected by such business interruptions, government shutdowns or withdrawn funding. The occurrence of any of these business interruptions could seriously harm our operations and financial condition and increase our costs and expenses. We partially rely on third-party manufacturers to produce and process our drugs and drug candidates. Our ability to obtain supplies of our drugs and drug candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disasters, public health epidemics or other business interruptions. Damage or extended periods of interruption to our or our vendors' corporate, development, research or manufacturing facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry, public health epidemics or other events could cause us to delay or cease development or commercialization of some or all of our drugs and drug candidates. Although we maintain insurance coverage on these facilities, our insurance might not cover all losses under such circumstances and our business may be seriously harmed by such delays and interruption. For example, the COVID-19 outbreak could negatively impact our business and our financial performance. Our clinical development and commercial efforts could be delayed or otherwise negatively impacted, as patients may be reluctant to go to the hospitals to receive treatment. Additionally,

the commercial or clinical supply of our drugs and drug candidates could be negatively impacted due to reduced operations or a shutdown of our or our third-party manufacturing facilities, distribution channels and transportation systems, or shortages of raw materials and drug product.

Our business and results of operations could be adversely affected by public health crises and natural catastrophes or other disasters outside of our control in the locations in which we, our suppliers, CROs, CMOs and other contractors operate.

Our global operations expose us to risks associated with public health crises, such as epidemics and pandemics, natural catastrophes, such as earthquakes, hurricanes, typhoons, or floods, or other disasters such as fires, explosions and terrorist activity or war that are outside of our control, including government reactions due to such events. Our business operations and those of our suppliers, CROs, CMOs and other contractors may potentially suffer interruptions caused by any of these events.

In December 2019, the COVID-19 virus began to impact the population of Wuhan, China and other cities. The COVID-19 outbreak has caused the Chinese government to implement various temporary measures, including quarantines of Wuhan and surrounding areas, travel and work restrictions at the national level, and the shutdown of certain businesses. As a result, our operations in China have and may continue to be impacted by delays in business activities and commercial transactions, workplace disruptions, and general uncertainties about the adverse impact on the Chinese economy. We expect that the COVID-19 outbreak will have a negative impact on our operations in China, including clinical trial recruitment and participation, regulatory interactions and inspections, and commercial revenue, particularly in the first quarter of 2020 and possibly longer depending on the scope and duration of the disruption.

Currently, it is unclear if the Chinese government will further extend any of the current restrictions or if further measures will be put into place. Additionally, the COVID-19 virus has spread to other countries outside of China, which has caused a broader impact globally, such as restrictions on travel and quarantine policies put into place by businesses and governments. The potential economic impact brought by and the duration of the COVID-19 outbreak may be difficult to assess or predict, where actual effects will depend on many factors beyond our control. The extent to which the COVID-19 outbreak impacts our operations remains uncertain, and we are closely monitoring its impact on us. Our business and results of operations could be adversely affected directly, as well as to the extent that the COVID-19 outbreak or any other epidemic harms the Chinese, United States, and global economy in general.

Product liability claims or lawsuits could cause us to incur substantial liabilities.

We face an inherent risk of product liability as a result of the commercialization of our drugs in China and the United States and the clinical testing and any future commercialization of our drug candidates globally. For example, we may be sued if our drugs or drug candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the drug, negligence, strict liability or a breach of warranties. Claims could also be asserted under applicable consumer protection acts. If we cannot successfully defend ourselves against or obtain indemnification from our collaborators for product liability claims, we may incur substantial liabilities or be required to limit commercialization of our drugs and drug candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in: decreased demand for our drugs; injury to our reputation; withdrawal of clinical trial participants and inability to continue clinical trials; initiation of investigations by regulators; costs to defend the related litigation; a diversion of management's time and our resources; substantial monetary awards to trial participants or patients; product recalls, withdrawals or labeling, marketing or promotional restrictions; loss of revenue; exhaustion of any available insurance and our capital resources; the inability to commercialize any drug or drug candidate; and a decline in our ADS or ordinary share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of our drugs and drug candidates. Although we currently hold product liability coverage which we believe to be sufficient in light of our current products and clinical programs, the amount of such insurance coverage may not be adequate, and we may be unable to maintain such insurance at a reasonable cost or in an amount adequate to satisfy

any liability that may arise, or we may not be able to obtain additional or replacement insurance at a reasonable cost, if at all. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

We are subject to the risks of doing business globally.

Because we operate in China and other countries outside of the United States, our business is subject to risks associated with doing business globally. Accordingly, our business and financial results could be adversely affected due to a variety of factors, including: changes in a specific country's or region's political and cultural climate or economic condition; unexpected changes in laws and regulatory requirements in local jurisdictions; difficulty of effective enforcement of contractual provisions in local jurisdictions; inadequate intellectual property protection in certain countries; enforcement of anti-corruption and anti-bribery laws, such as the FCPA; trade-protection measures or disputes, import or export licensing requirements such as Export Administration Regulations promulgated by the United States Department of Commerce and fines, penalties or suspension or revocation of export privileges; laws and regulations on foreign investment in the United States under the jurisdiction of the CFIUS and other agencies, including the FIRRMA adopted in August 2018; the effects of applicable local tax regimes and potentially adverse tax consequences; the impact of public health epidemics on employees, our operations and the global economy, such as the COVID-19 outbreak impacting China and elsewhere; restrictions on international travel and commerce; and significant adverse changes in local currency exchange rates. For example, the withdrawal of the United Kingdom from the EU effective on January 31, 2020, commonly referred to as "Brexit," may cause increased economic volatility, affecting our operations and business. In addition, on July 27, 2017, the United Kingdom Financial Conduct Authority, which regulates London Interbank Offered Rate ("LIBOR"), announced that it will no longer require banks to submit rates for the calculation of LIBOR to the LIBOR administrator after 2021, and it is anticipated that LIBOR will be phased out and replaced by 2022. While various replacement reference rates have been proposed, an alternative reference rate to LIBOR has not yet been widely adopted. As such, the replacement of LIBOR could have an adverse effect on the market for, or value of, LIBOR-linked financial instruments.

We manufacture and intend to continue to manufacture ourselves at least a portion of our drug candidates and our drugs, if approved. Delays in completing and receiving regulatory approvals for our manufacturing facilities, or damage to, destruction of or interruption of production at such facilities, could delay our development plans or commercialization efforts.

We currently have manufacturing facilities in Beijing, Guangzhou, and Suzhou, China. These facilities may encounter unanticipated delays and expenses due to a number of factors, including regulatory requirements. If construction or expansion, regulatory evaluation and/or approval of our facilities are delayed, we may not be able to manufacture sufficient quantities of our drugs and drug candidates, which would limit our development and commercialization activities and our opportunities for growth. Cost overruns associated with constructing or maintaining our facilities could require us to raise additional funds from other sources.

In addition to the similar manufacturing risks described in "Risks Related to Our Reliance on Third Parties," our manufacturing facilities will be subject to inspection in connection with clinical development and new drug approvals and ongoing, periodic inspection by the FDA, NMPA, EMA or other comparable regulatory agencies to ensure compliance with GMP and other regulatory requirements. Our failure to follow and document our adherence to such GMP regulations or other regulatory requirements may lead to significant delays in the availability of products for clinical or commercial use, may result in the termination of or a hold on a clinical trial, or may delay or prevent filing or approval of marketing applications for our drug candidates or the commercialization of our drugs. We also may encounter problems with the following:

- achieving adequate or clinical-grade materials that meet FDA, NMPA, EMA or other comparable regulatory agency standards or specifications with consistent and acceptable production yield and costs;

- shortages of qualified personnel, raw materials or key contractors; and
- ongoing compliance with GMP regulations and other requirements of the FDA, NMPA, EMA or other comparable regulatory agencies.

Failure to comply with applicable regulations could also result in sanctions being imposed on us, including fines, injunctions, civil penalties, a requirement to suspend or put on hold one or more of our clinical trials, failure of regulatory authorities to grant marketing approval of our drug candidates, delays, suspension or withdrawal of approvals, supply disruptions, license revocation, seizures or recalls of drug candidates or drugs, operating restrictions and criminal prosecutions, any of which could harm our business.

Developing advanced manufacturing techniques and process controls is required to fully utilize our facilities. Advances in manufacturing techniques may render our facilities and equipment inadequate or obsolete.

To supply commercial quantities for our marketed products, produce our drugs in the quantities that we believe will be required to meet anticipated market demand, and to supply clinical drug material to support the continued growth of our clinical programs, we will need to increase, or "scale up," the production process by a significant factor over the initial level of production, which will require substantial additional expenditures and various regulatory approvals and permits. If we are unable to do so, are delayed, or if the cost of this scale up is not economically feasible for us or we cannot find a third-party supplier, we may not be able to produce our drugs in a sufficient quantity to meet future demand.

In addition to the similar manufacturing risks described in "— Risks Related to Our Reliance on Third Parties," if our manufacturing facilities or the equipment in them is damaged or destroyed, we may not be able to quickly or inexpensively replace our manufacturing capacity or replace it at all. In the event of a temporary or protracted loss of the facilities or equipment, we might not be able to transfer manufacturing to a third party. Even if we could transfer manufacturing to a third party, the shift would likely be expensive and time-consuming, particularly since the new facility would need to comply with the necessary regulatory requirements and we would need regulatory agency approval before selling any drugs manufactured at that facility. Such an event could delay our clinical trials or reduce our product sales. Any interruption in manufacturing operations at our manufacturing facilities could result in our inability to satisfy the demands of our clinical trials or commercialization. Any disruption that impedes our ability to manufacture our drug candidates or drugs in a timely manner could materially harm our business, financial condition and operating results.

Currently, we maintain insurance coverage against damage to our property, plant and equipment in amounts we believe are reasonable. However, our insurance coverage may not reimburse us, or may not be sufficient to reimburse us, for any expenses or losses we may suffer. We may be unable to meet our requirements for our drug candidates and drugs if there were a catastrophic event or interruption or failure of our manufacturing facilities or processes.

Future operating results could be negatively affected by changes in tax rates, the adoption of new tax legislation in the jurisdictions in which we operate, or exposure to additional tax liabilities.

The nature of our international operations subjects us to local, state, regional and national tax laws in jurisdictions around the world. Our future tax expense could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities or changes in tax laws or their interpretation. Additionally, tax rules governing cross-border activities are continually subject to modification as a result of both coordinated actions by governments and unilateral measures designed by individual countries, both intended to tackle concerns over base erosion and profit shifting (BEPS) and perceived international tax avoidance techniques. For example, the Cayman Islands has enacted the International Tax Co-operation (Economic Substance) Law (2020 Revision) (the "Economic Substance Law"), which originally took effect on January 1, 2019, and which is accompanied by Guidance on Economic Substance for Geographically Mobile Activities (Version 2.0; April 30, 2019) published by the Cayman Islands Tax Information Authority. The Economic Substance Law embraces a global initiative to combat BEPS and demonstrates the continued commitment of the Cayman Islands to international best practice. The Economic Substance Law provides that relevant entities that existed before January 1, 2019

and that had been conducting relevant activities by that date must comply with the economic substance requirements from July 1, 2019, and relevant entities that are established from January 1, 2019 onwards have to comply with the requirements from the date they commence the relevant activity. Although we believe that we currently are not required to comply with the economic substance requirements under the Economic Substance Law, we cannot predict any changes to the legislation or its interpretation in the future. If we are subject to compliance with the economic substance requirements in the future, our business and results of operations could be negatively impacted if we are required to make changes to our business in order to gain compliance or if we fail to comply.

We have received tax rulings from various governments that have jurisdictional authority over our operations. If we are unable to meet the requirements of such agreements, or if they expire or are renewed on less favorable terms, the result could negatively impact our future earnings. Additionally, the European Commission has opened formal investigations into specific tax rulings granted by several countries to specific taxpayers. While we believe that our rulings are different than those being discussed, the ultimate resolution of such activities cannot be predicted and could also have an adverse impact on future operating results.

If we are not able to successfully develop and commercialize Amgen's oncology products in China, the expected benefits of the collaboration will not materialize.

We have a Collaboration Agreement with Amgen pursuant to which we and Amgen have agreed to collaborate on (i) the commercialization of Amgen's oncology products XGEVA, KYPROLIS and BLINCYTO in China, and (ii) the global development and commercialization in China of 20 Amgen clinical- and late-preclinical-stage pipeline products. The Amgen transaction involves numerous risks, including unanticipated costs and diversion of our management's attention from our other drug discovery and development business. There can be no assurance that we will be able to successfully develop and commercialize Amgen's oncology products in China, which could disrupt our business and harm our financial results.

Moreover, we may not achieve the revenue and cost synergies expected from the Amgen transaction. These synergies are inherently uncertain, and are subject to significant business, economic and competitive uncertainties and contingencies, many of which are difficult to predict and are beyond our control. If we achieve the expected benefits, they may not be achieved within the anticipated time frame. Also, the synergies from the Amgen transaction may be offset by increases in other expenses, operating losses or problems in our business unrelated to the Amgen transaction. As a result, there can be no assurance that such synergies will be achieved.

Risks Related to Our Doing Business in the PRC

The pharmaceutical industry in China is highly regulated, and such regulations are subject to change, which may affect approval and commercialization of our drugs and drug candidates.

A large portion of our business is conducted in China. The pharmaceutical industry in China is subject to comprehensive government regulation and supervision, encompassing the approval, registration, manufacturing, packaging, licensing and marketing of new drugs. In recent years, the regulatory framework in China regarding the pharmaceutical industry has undergone significant changes, which we expect will continue. While we believe our strategies regarding pharmaceutical research, development, manufacturing and commercialization in China are aligned with the Chinese government's policies, they may in the future diverge, requiring a change in our strategies. Any such change may result in increased compliance costs on our business or cause delays in or prevent the successful research, development, manufacturing or commercialization of our drug candidates or drugs in China and reduce the current benefits we believe are available to us from developing and manufacturing drugs in China.

Chinese authorities have become increasingly vigilant in enforcing laws in the pharmaceutical industry. Any failure by us or our partners to maintain compliance with applicable laws and regulations or obtain and maintain required licenses and permits may result in the suspension or termination of our business activities in China. Reports of what have come to be viewed as significant quality-control failures by Chinese vaccine manufacturers have led to enforcement action against officials responsible for implementing

national reforms favorable to innovative drugs (such as ours). While not directly affecting us, this macro-industry event could cause state or private resources to be diverted away from fostering innovation and be redirected toward regulatory enforcement, which could adversely affect our research, development, manufacturing and commercialization activities and increase our compliance cost.

Changes in the political and economic policies of the PRC government or in relations between China and the United States or other governments may materially and adversely affect our business, financial condition and results of operations and may result in our inability to sustain our growth and expansion strategies.

Due to our extensive operations in China, our business, results of operations, financial condition and prospects may be influenced to a significant degree by economic, political, legal and social conditions in the PRC or changes in government relations between China and the United States or other governments, such as the ongoing trade war between the United States and China. China's economy differs from the economies of developed countries in many respects, including with respect to the amount of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. While the PRC economy has experienced significant growth over the past four decades, growth has been uneven across different regions and among various economic sectors of the PRC. The PRC government has implemented various measures to encourage economic development and guide the allocation of resources. Some of these measures may benefit the overall PRC economy, but may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations that are currently applicable to us. In addition, in the past the PRC government implemented certain measures, including interest rate increases, to control the pace of economic growth. These measures may cause decreased economic activity in the PRC, which may adversely affect our business and results of operation. More generally, if the business environment in the PRC deteriorates from the perspective of domestic or international investment, or if relations between China and the United States or other governments deteriorate, our business in the PRC may also be adversely affected.

There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations.

A large portion of our operations are conducted in the PRC through our PRC subsidiaries, and are governed by PRC laws, rules and regulations. Our PRC subsidiaries are subject to laws, rules and regulations applicable to foreign investment in China. The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but have limited precedential value.

In 1979, the PRC government began to promulgate a comprehensive system of laws, rules and regulations governing economic matters in general. The overall effect of legislation over the past four decades has significantly enhanced the protections afforded to various forms of foreign investment in China. However, China has not developed a fully integrated legal system, and recently enacted laws, rules and regulations may not sufficiently cover all aspects of economic activities in China or may be subject to significant degrees of interpretation by PRC regulatory agencies. In particular, because these laws, rules and regulations are relatively new and often give the relevant regulator significant discretion in how to enforce them, and because of the limited number of published decisions and the nonbinding nature of such decisions, the interpretation and enforcement of these laws, rules and regulations involve uncertainties and can be inconsistent and unpredictable. In addition, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all, and which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until after the occurrence of the violation.

The Foreign Investment Law of the PRC (the "Foreign Investment Law") and the Implementing Rules to the Foreign Investment Law of the PRC (the "Implementing Rules") came into force on January 1, 2020. The Foreign Investment Law and the Implementing Rules embody an expected regulatory trend to rationalize China's foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. The Foreign Investment Law and its Implementing Rules are drafted at a level of general principle, there is a reasonable possibility that various other new regulations and legislative changes will be issued to implement the Foreign Investment Law. There are still uncertainties with respect to the interpretation and

implementation of the Foreign Investment Law and the Implementing Rules. For example, the Foreign Investment Law and its Implementing Rules provide that foreign invested entities established according to the previous laws regulating foreign investment prior to the implementation of the Foreign Investment Law may maintain their structure and corporate governance within a five-year transition period. It is uncertain whether the PRC governmental authorities may require us to adjust the structure and corporate governance of certain of our PRC subsidiaries in such transition period. Failure to take timely and appropriate measures to meet any of these or similar regulatory compliance requirements could materially affect our current corporate governance practices and business operations and our compliance costs may increase significantly.

Additionally, the NMPA's recent reform of the drug and approval system may face implementation challenges. The timing and full impact of such reforms is uncertain and could prevent us from commercializing our drug candidates in a timely manner.

In addition, any administrative and court proceedings in the PRC may be protracted, resulting in substantial costs and diversion of resources and management attention. Since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. These uncertainties may impede our ability to enforce the contracts we have entered into and could materially and adversely affect our business, financial condition and results of operations.

Any failure to comply with PRC regulations regarding our employee equity plans and investments in offshore companies by PRC residents may subject the PRC plan participants and PRC-resident beneficial owners or us to fines and other legal or administrative sanctions.

We and our directors, executive officers and other employees who are PRC residents have participated in our employee equity plans. We are an overseas listed company, and therefore, we and our directors, executive officers and other employees who are PRC citizens or who have resided in the PRC for a continuous period of not less than one year and who have been granted restricted share units, restricted shares, options or other forms of equity incentives or rights to acquire equity are subject to the Notice on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Share Incentive Plan of Overseas Publicly Listed Company, according to which, employees, directors, supervisors and other management members participating in any share incentive plan of an overseas publicly listed company who are PRC citizens or who are non-PRC citizens residing in the PRC for a continuous period of not less than one year, subject to limited exceptions, are required to register with the SAFE through a domestic qualified agent, which could be a PRC subsidiary of such overseas listed company, and complete certain other procedures. We also face regulatory uncertainties that could restrict our ability to adopt additional equity incentive plans for our directors and employees under PRC law.

Some of our existing shareholders, each of whom owns our ordinary shares as a result of exercising share options, are PRC residents under the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles ("SAFE Circular 37"). These shareholders have undertaken to (i) apply to register with local SAFE branch or its delegated commercial bank as soon as possible after exercising their options, and (ii) indemnify and hold harmless us and our subsidiaries against any loss suffered arising from their failure to complete the registration. We do not have control over such shareholders and our other beneficial owners and cannot assure you that all of our PRC-resident beneficial owners have complied with, and will in the future comply with, SAFE Circular 37 and subsequent implementation rules.

If we or our directors, executive officers or other employees who are PRC citizens or who have resided in the PRC for a continuous period of not less than one year and who have been granted equity awards or other rights to acquire equity fail to register the employee equity plans or their exercise of options or vesting of equity awards, or such PRC-resident beneficial owners fails to register or amend their SAFE registrations in a timely manner pursuant to SAFE Circular 37, we and such employees and PRC-beneficial owners may be subject to (i) legal or administrative sanctions imposed by the SAFE or other PRC authorities, including fines; (ii) restrictions on our cross-border investment activities; (iii) limits on the ability of our wholly owned subsidiaries in China to distribute dividends or the proceeds from any reduction in capital,

share transfer or liquidation to us; and (iv) prohibitions on our ability to inject additional capital into these subsidiaries. Moreover, failure to comply with the various foreign exchange registration requirements described above could result in liability under PRC law for circumventing applicable foreign exchange restrictions.

We may rely on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business.

We are a holding company incorporated in the Cayman Islands, and we may rely on dividends and other distributions on equity paid by our PRC subsidiaries for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders or to service any debt we may incur. If any of our PRC subsidiaries incur debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Under PRC laws and regulations, our PRC subsidiaries may pay dividends only out of their respective accumulated profits as determined in accordance with PRC accounting standards and regulations. In addition, a wholly foreign-owned enterprise is required to set aside at least 10% of its accumulated after-tax profits each year, if any, to fund a certain statutory reserve fund, until the aggregate amount of such fund reaches 50% of its registered capital. Such reserve funds cannot be distributed to us as dividends. At its discretion, a wholly foreign-owned enterprise may allocate a portion of its after-tax profits based on PRC accounting standards to an enterprise expansion fund, or a staff welfare and bonus fund. In addition, registered share capital and capital reserve accounts are also restricted from withdrawal in the PRC, up to the amount of net assets held in each operating subsidiary. As of December 31, 2019 and 2018, these restricted assets totaled $109.6 million and $93.3 million, respectively.

Our PRC subsidiaries generate primarily all of their revenue in RMB, which is not freely convertible into other currencies. As a result, any restriction on currency exchange may limit the ability of our PRC subsidiaries to use their RMB revenues to pay dividends to us.

In response to the persistent capital outflow in the PRC and RMB's depreciation against the U.S. dollar in the fourth quarter of 2016, China's People's Bank of China ("PBOC") and the SAFE promulgated a series of capital control measures, including stricter vetting procedures for domestic companies to remit foreign currency for overseas investments, dividends payments and shareholder loan repayments.

The PRC government may continue to strengthen its capital controls, and more restrictions and substantial vetting process may be put forward by the SAFE for cross-border transactions falling under both the current account and the capital account. Any limitation on the ability of our PRC subsidiaries to pay dividends or make other kinds of payments to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

The Enterprise Income Tax Law (the "EIT Law") and its implementation rules provide that China-sourced income of foreign enterprises, such as dividends paid by a PRC subsidiary to its equity holders that are non-PRC resident enterprises, will normally be subject to PRC withholding tax at a rate of 10%, unless any such foreign investor's jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. As a result, dividends paid to us by our PRC subsidiaries are expected to be subject to PRC withholding tax at a rate of 10%.

Pursuant to the Arrangement between Mainland China and Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Prevention of Fiscal Evasion with respect to Taxes on Income (the "Hong Kong Tax Treaty"), BeiGene HK, the shareholder of some of our PRC subsidiaries, may be subject to a withholding tax at a rate of 5% on dividends received from our PRC operating subsidiaries as a Hong Kong tax resident. Pursuant to the Hong Kong Tax Treaty, subject to certain conditions, this reduced withholding tax rate will be available for dividends from PRC entities provided that the recipient can demonstrate it is a Hong Kong tax resident and it is the beneficial owner of the dividends. The SAT promulgated SAT Circular 9 in February 2018, which became effective from April 2018 and stipulates that in determining whether a non-resident enterprise has the status as a beneficial owner, comprehensive analysis shall be conducted based on the factors listed therein and the actual circumstances of the specific case shall be taken into consideration. Specifically, it expressly excludes an agent or a designated payee from being

considered as a "beneficial owner." BeiGene HK currently does not hold a Hong Kong tax resident certificate from the Inland Revenue Department of Hong Kong and there is no assurance that the reduced withholding tax rate will be available.

We may be treated as a resident enterprise for PRC tax purposes under the EIT Law and we may therefore be subject to PRC income tax on our worldwide taxable income. Dividends payable to foreign investors and gains on the sale of our ADSs or ordinary shares by our foreign investors may become subject to PRC tax.

Under the EIT Law an enterprise established outside the PRC with "de facto management bodies" within the PRC is considered a "resident enterprise," meaning that it is treated in a manner similar to a Chinese enterprise for PRC enterprise income tax ("EIT") purposes. The implementing rules of the EIT Law define "de facto management bodies" as "management bodies that exercise substantial and overall management and control over the production and operations, personnel, accounting, and properties" of the enterprise. In addition, the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies ("Circular 82") specifies that certain Chinese-controlled offshore incorporated enterprises, defined as enterprises incorporated under the laws of foreign countries or territories and that have PRC enterprises or enterprise groups as their primary controlling shareholders, will be classified as resident enterprises if all of the following are located or resident in China: (i) senior management personnel and departments that are responsible for daily production, operation and management; (ii) financial and personnel decision-making bodies; (iii) key properties, accounting books, company seal, and minutes of board meetings and shareholders' meetings; and (iv) half or more of senior management or directors having voting rights. The State Administration of Taxation (the "SAT") has subsequently provided further guidance on the implementation of Circular 82.

Although BeiGene, Ltd. does not have a PRC enterprise or enterprise group as its primary controlling shareholder and is therefore not a Chinese-controlled offshore incorporated enterprise within the meaning of Circular 82, in the absence of guidance specifically applicable to us, we have applied the guidance set forth in Circular 82 to evaluate the tax residence status of BeiGene, Ltd. and its subsidiaries organized outside of the PRC.

We are not aware of any offshore holding company with a corporate structure similar to ours that has been deemed a PRC "resident enterprise" by the PRC tax authorities. Accordingly, we do not believe that our company or any of our overseas subsidiaries should be treated as a PRC resident enterprise.

However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body." If the PRC tax authorities determine that our Cayman Islands holding company is a resident enterprise for PRC enterprise income tax purposes, a number of unfavorable PRC tax consequences could follow and we may be subject to enterprise income tax at a rate of 25% on our worldwide taxable income, as well as to PRC enterprise income tax reporting obligations. If we are deemed a PRC resident enterprise, dividends paid on our ordinary shares or ADSs, and any gain realized from the transfer of our ordinary shares or ADSs, may be treated as income derived from sources within the PRC. As a result, dividends paid to non-PRC resident enterprise ADS holders or shareholders may be subject to PRC withholding tax at a rate of 10% (or 20% in the case of non-PRC individual ADS holders or shareholders) and gains realized by non-PRC resident enterprises ADS holders or shareholders from the transfer of our ordinary shares or ADSs may be subject to PRC tax at a rate of 10% (or 20% in the case of non-PRC individual ADS holders or shareholders).

We and our shareholders face uncertainties with respect to indirect transfers of equity interests in PRC resident enterprises or other assets attributed to a PRC establishment of a non-PRC company, or other assets attributable to a PRC establishment of a non-PRC company.

Pursuant to the Bulletin on Issues of Enterprise Income Tax and Indirect Transfers of Assets by Non-PRC Resident Enterprises ("Bulletin 7"), which was amended by the Announcement on Issues Relating to Withholding at Source of Income Tax on Non-resident Enterprises issued by SAT ("Announcement 37"), an "indirect transfer" of "PRC taxable assets," including equity interests in a PRC resident enterprise, by non-PRC resident enterprises may be recharacterized and treated as a direct transfer of PRC taxable assets, if such arrangement does not have a reasonable commercial purpose and was

established for the purpose of avoiding payment of PRC enterprise income tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax. When determining whether there is a "reasonable commercial purpose" of the transaction arrangement, factors to be taken into consideration include: whether the main value of the equity interest of the relevant offshore enterprise derives from PRC taxable assets; whether the assets of the relevant offshore enterprise mainly consists of direct or indirect investment in the PRC or if its income mainly derives from the PRC; whether the offshore enterprise and its subsidiaries directly or indirectly holding PRC taxable assets have real commercial nature which is evidenced by their actual function and risk exposure; the duration of existence of the business model and organizational structure; the replicability of the transaction by direct transfer of PRC taxable assets; and the tax situation of such indirect transfer and applicable tax treaties or similar arrangements. In respect of an indirect offshore transfer of assets of a PRC establishment, the resulting gain is to be reported on with the enterprise income tax filing of the PRC establishment or place of business being transferred and would consequently be subject to PRC enterprise income tax at a rate of 25%. Where the underlying transfer relates to equity investments in a PRC resident enterprise, which is not related to a PRC establishment or place of business of a non-resident enterprise, a PRC enterprise income tax at the rate of 10% would apply, subject to available preferential tax treatment under applicable tax treaties or similar arrangements. Late payment of applicable tax will subject the transferor to default interest. Gains derived from the sale of shares by investors through a public stock exchange are not subject to the PRC enterprise income tax pursuant to Bulletin 7 where such shares were acquired in a transaction through a public stock exchange. As such, the sale of the ADSs or ordinary shares on a public stock exchange will not be subject to PRC enterprise income tax pursuant to Bulletin 7. However, the sale of our ordinary shares or ADSs by a non-PRC resident enterprise outside a public stock exchange may be subject to PRC enterprise income tax under Bulletin 7.

There are uncertainties as to the application of Bulletin 7. Bulletin 7 may be determined by the tax authorities to be applicable to sale of the shares of our offshore subsidiaries or investments where PRC taxable assets are involved. The transferors and transferees may be subject to the tax filing and withholding or tax payment obligation, while our PRC subsidiaries may be requested to assist in the filing. Furthermore, we, our non-resident enterprises and PRC subsidiaries may be required to spend valuable resources to comply with Bulletin 7 or to establish that we and our non-resident enterprises should not be taxed under Bulletin 7, for our previous and future restructuring or disposal of shares of our offshore subsidiaries, which may have a material adverse effect on our financial condition and results of operations.

The PRC tax authorities have the discretion under Bulletin 7 to make adjustments to the taxable capital gains based on the difference between the fair value of the taxable assets transferred and the cost of investment. If the PRC tax authorities make adjustments to the taxable income of the transactions under Announcement 37, or Bulletin 7, our income tax costs associated with such potential acquisitions or disposals will increase, which may have an adverse effect on our financial condition and results of operations.

Restrictions on currency exchange may limit our ability to utilize our revenue effectively.

The PRC government imposes controls on the convertibility of RMB into foreign currencies and, in certain cases, the remittance of currency out of the PRC. A portion of our revenue is denominated in RMB. Shortages in availability of foreign currency may then restrict the ability of our PRC subsidiaries to remit sufficient foreign currency to our offshore entities for our offshore entities to pay dividends or make other payments or otherwise to satisfy our foreign currency denominated obligations. The RMB is currently convertible under the "current account," which includes dividends, trade and service-related foreign exchange transactions, but not under the "capital account," which includes foreign direct investment and loans, including loans we may secure from our onshore subsidiaries. Currently, our PRC subsidiaries may purchase foreign currency for settlement of "current account transactions," including payment of dividends to us, without the approval of SAFE by complying with certain procedural requirements. However, the relevant PRC governmental authorities may limit or eliminate our ability to purchase foreign currencies in the future for current account transactions. Since a portion of our revenue is denominated in RMB, any existing and future restrictions on currency exchange may limit our ability to utilize revenue generated in RMB to fund our business activities outside of the PRC or pay dividends in foreign currencies to holders of our ordinary shares and the ADSs. Foreign exchange transactions under the capital account remain subject to limitations and require approvals from, or registration with, SAFE and other relevant PRC governmental authorities or designated banks. This could affect our ability to obtain foreign currency through debt or equity financing for our subsidiaries.

Our business benefits from certain financial incentives and discretionary policies granted by local governments. Expiration of, or changes to, these incentives or policies would have an adverse effect on our results of operations.

Local governments in the PRC have granted certain financial incentives from time to time to our PRC subsidiaries as part of their efforts to encourage the development of local businesses. The timing, amount and criteria of government financial incentives are determined within the sole discretion of the local government authorities and cannot be predicted with certainty before we actually receive any financial incentive. We generally do not have the ability to influence local governments in making these decisions. Local governments may decide to reduce or eliminate incentives at any time. In addition, some of the government financial incentives are granted on a project basis and subject to the satisfaction of certain conditions, including compliance with the applicable financial incentive agreements and completion of the specific project therein. We cannot guarantee that we will satisfy all relevant conditions, and if we do so we may be deprived of the relevant incentives. We cannot assure you of the continued availability of the government incentives currently enjoyed by us. Any reduction or elimination of incentives would have an adverse effect on our results of operations. Government grant and subsidies recognized in the income statement for the years ended December 31, 2019 and 2018 were $6.2 million and $4.4 million, respectively.

The audit report included in our Annual Report on Form 10-K filed with the SEC is prepared by auditors who are not inspected fully by the Public Company Accounting Oversight Board (the "PCAOB"), and as such, investors are deprived of the benefits of such inspection.

As an auditor of companies that are publicly traded in the United States and a firm registered with the PCAOB, Ernst & Young Hua Ming LLP is required under the laws of the United States to undergo regular inspections by the PCAOB. However, because we have substantial operations within the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese government authorities, our auditor and its audit work is not currently inspected fully by the PCAOB.

Inspections of other auditors conducted by the PCAOB outside the PRC have at times identified deficiencies in those auditors' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections of audit work undertaken in the PRC prevents the PCAOB from regularly evaluating our auditor's audits and its quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections and may lose confidence in our reported financial information and procedures and the quality of our financial statements.

As part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular China's, in June 2019, a bipartisan group of lawmakers introduced bills in both houses of the U.S. Congress, which if passed, would require the SEC to maintain a list of issuers for which PCAOB is not able to inspect or investigate an auditor report issued by a foreign public accounting firm. The proposed Ensuring Quality Information and Transparency for Abroad-Based Listings on our Exchanges ("EQUITABLE") Act prescribes increased disclosure requirements for these issuers and, beginning in 2025, the delisting from U.S. national securities exchanges such as the NASDAQ Global Market of issuers included on the SEC's list for three consecutive years. Enactment of this legislation or other efforts to increase U.S. regulatory access to audit information could cause investor uncertainty for affected issuers, including us, and the market price of our ADSs and ordinary shares could be adversely affected. It is unclear if this proposed legislation will be enacted. Furthermore, there has been recent deliberations within the U.S. government regarding potentially limiting or restricting China-based companies from accessing U.S. capital markets. If any such policies were to materialize, the resulting legislation, if it were to apply to us, would likely have a material adverse impact on our business and the price of our ADSs and ordinary shares.

Proceedings instituted by the SEC against five PRC-based accounting firms, including our independent registered public accounting firm, could result in our financial statements being determined to not be in compliance with the requirements of the Exchange Act.

In December 2012, the SEC brought administrative proceedings against five accounting firms in China, including our independent registered public accounting firm, alleging that they had refused to produce audit work papers and other documents related to certain other PRC-based companies under

investigation by the SEC. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and suspending four of these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until reviewed and approved by the SEC. On February 12, 2014, four of these PRC-based accounting firms appealed to the SEC against this decision. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. These firms' ability to continue to serve all their respective clients is not affected by the settlement. The settlement requires these firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the China Securities Regulatory Commission (the "CSRC"). If these firms do not follow these procedures, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings. The settlement did not require these firms to admit to any violation of law and preserves these firms' legal defenses in the event the administrative proceeding is restarted. In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding PRC-based, U.S.-listed companies and the market price of the ADSs and/or ordinary shares may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to deregistration from the SEC, which would substantially reduce or effectively terminate the trading of the ADSs in the United States. Moreover, any negative news about the proceedings against these audit firms may adversely affect investor confidence in companies with substantial mainland China-based operations listed in the United States. All these would materially and adversely affect the market price of the ADSs and substantially reduce or effectively terminate the trading of the ADSs in the United States, and the market price of the ordinary shares may be adversely affected.

Risks Related to Our American Depositary Shares and Ordinary Shares

The trading prices of our ordinary shares and/or ADSs can be volatile, which could result in substantial losses to you.

The trading price of our ordinary shares and/or ADSs can be volatile and fluctuate widely in response to a variety of factors, many of which are beyond our control. In addition, the performance and fluctuation of the market prices of other companies with business operations located mainly in China that have listed their securities in Hong Kong or the United States may affect the volatility in the price of and trading volumes for our ordinary shares and/or ADSs. Some of these companies have experienced significant volatility. The trading performances of these PRC companies' securities may affect the overall investor sentiment towards other PRC companies listed in Hong Kong or the United States and consequently may impact the trading performance of our ordinary shares and/or ADSs.

In addition to market and industry factors, the price and trading volume for our ordinary shares and/or ADSs may be highly volatile for specific business reasons, including: announcements of regulatory approval or a complete response letter, or specific label indications or patient populations for its use, or changes or delays in the regulatory review process; announcements of therapeutic innovations, new products, acquisitions, strategic relationships, joint ventures or capital commitments by us or our competitors; adverse actions taken by regulatory agencies with respect to our clinical trials, manufacturing supply chain or sales and marketing activities; any adverse changes to our relationship with manufacturers or suppliers; the results of our testing and clinical trials; the results of our efforts to acquire or license additional drug candidates; variations in the level of expenses related to our existing drugs and drug candidates or preclinical, clinical development and commercialization programs; any intellectual property infringement actions in which we may become involved; announcements concerning our competitors or the pharmaceutical industry in general; fluctuations in product revenue, sales and marketing expenses and profitability; manufacture, supply or distribution shortages; variations in our results of operations; announcements about our results

of operations that are not in line with analyst expectations, the risk of which is enhanced because it is our policy not to give guidance on results of operations; publication of operating or industry metrics by third parties, including government statistical agencies, that differ from expectations of industry or financial analysts; changes in financial estimates by securities research analysts; media reports, whether or not true, about our business, our competitors or our industry; additions to or departures of our management; fluctuations of exchange rates between the RMB, the U.S. dollar and Hong Kong dollar; release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares or ADSs; sales or perceived potential sales of additional ordinary shares or ADSs by us, our executive officers and directors or our shareholders; general economic and market conditions and overall fluctuations in the United States or Hong Kong equity markets; changes in accounting principles; trade disputes or U.S.-China government relations; and changes or developments in the United States, PRC, EU or global regulatory environment.

In addition, the stock market, in general, and pharmaceutical and biotechnology companies, in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our ordinary shares and/or ADSs, regardless of our actual operating performance. Further, the current volatility in the financial markets and related factors beyond our control may cause the ordinary share and/or ADS price to decline rapidly and unexpectedly.

The characteristics of the U.S. capital markets and the Hong Kong capital markets are different.

The Nasdaq and HKEx have different trading hours, trading characteristics (including trading volume and liquidity), trading and listing rules, and investor bases (including different levels of retail and institutional participation). As a result of these differences, the trading prices of our ordinary shares and the ADSs representing them might not be the same, even allowing for currency differences. Fluctuations in the price of our ADSs due to circumstances peculiar to its home capital market could materially and adversely affect the price of the ordinary shares, and vice versa. Because of the different characteristics of the U.S. and Hong Kong equity markets, the historic market prices of our ADSs and ordinary shares may not be indicative of the performance of our securities going forward.

We may be subject to securities litigation, which is expensive and could divert management attention.

Companies that have experienced volatility in the volume and market price of their shares have been subject to an increased incidence of securities class action litigation, particularly in our industry in recent years. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, and, if adversely determined, could have a material adverse effect on our business, financial condition and results of operations.

Future sales of our ordinary shares and/or ADSs in the public market could cause the ordinary shares and/or ADS price to fall.

The price of our ordinary shares and/or ADSs could decline as a result of sales of a large number of the ordinary shares and/or ADSs or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

As of February 14, 2020, 1,007,975,711 ordinary shares, par value $0.0001 per share, were outstanding, of which 846,730,482 ordinary shares were held in the form of 65,133,114 ADSs, each representing 13 ordinary shares.

We filed a registration statement with the SEC on behalf of certain shareholders on May 26, 2017, registering 299,279,370 ordinary shares in the form of 23,021,490 ADSs to be resold by the selling shareholders identified therein and in any related prospectus supplement from time to time. Furthermore, we have registered or plan to register the offer and sale of all securities that we have issued and may issue in the future under our equity compensation plans, including upon the exercise of share options and vesting of restricted share units and under our employee share purchase plan. If these additional securities are sold, or if it is perceived that they will be sold, in the public market, the trading price of our ordinary shares

and/or ADSs could decline. We have also granted certain registration rights with respect to the shares issued to BMS in the event that they are not eligible for sale under Rule 144. Amgen also has specified registration rights upon expiration of the lock-up.

In addition, in the future, we may issue additional ordinary shares, ADSs or other equity or debt securities convertible into ordinary shares or ADSs in connection with a financing, acquisition, license, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing shareholders and could cause the ordinary share and/or ADS price to decline.

Because we do not expect to pay dividends in the foreseeable future, you must rely on price appreciation of the ordinary shares and/or ADSs for return on your investment.

We intend to retain most, if not all, of our available funds and earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in the ordinary shares and/or ADSs as a source for any future dividend income.

Our board of directors has significant discretion as to whether to distribute dividends. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on, among other things, our future results of operations and cash flow, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiaries, our financial condition, contractual and regulatory restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in the ordinary shares and/or ADSs will likely depend entirely upon any future price appreciation of the ordinary shares and/or ADSs. There is no guarantee that the ordinary shares and/or ADSs will appreciate in value or even maintain the price at which you purchased the ordinary shares and/or ADSs. You may not realize a return on your investment in the ordinary shares and/or ADSs and you may even lose your entire investment in the ordinary shares and/or ADSs.

If securities or industry analysts do not continue to publish research or publish inaccurate or unfavorable research about our business, the market price for the ordinary shares and/or ADSs and trading volume could decline.

The trading market for the ordinary shares and ADSs relies in part on the research and reports that equity research analysts publish about us or our business. We do not control these analysts. If research analysts do not maintain adequate research coverage or if one or more of the analysts who covers us downgrades the ordinary shares and/or ADSs or publishes inaccurate or unfavorable research about our business, the market price for the ordinary shares and/or ADSs would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for the ordinary shares and/or ADSs to decline significantly.

We are a Cayman Islands company. Because judicial precedent regarding the rights of shareholders is more limited under Cayman Islands law than under Hong Kong law or U.S. law, shareholders may have fewer shareholder rights than they would have under Hong Kong law or U.S. law and may face difficulties in protecting your interests.

We are an exempted company with limited liability incorporated in the Cayman Islands. Our corporate affairs are governed by our amended and restated memorandum and articles of association (as may be further amended from time to time), the Companies Law (as amended) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities of our directors are to a large extent governed by the common law of the Cayman Islands. This common law is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in Hong Kong and the United States. In particular, the Cayman Islands has a less developed body of securities law than Hong Kong or the United States. In addition, some states in the United States, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands.

In addition, as a Cayman Islands exempted company, our shareholders have no general rights under Cayman Islands law to inspect corporate records and accounts or to obtain copies of lists of shareholders of these companies with the exception that the shareholders may request a copy of the current amended and restated memorandum and articles of association. Our directors have discretion under our amended and restated articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest. As a Cayman Islands company, we may not have standing to initiate a derivative action in a Hong Kong or U.S. federal court. As a result, you may be limited in your ability to protect your interests if you are harmed in a manner that would otherwise enable you to sue in a United States federal court. In addition, shareholders of Cayman Islands companies may not have standing to initiate a shareholder derivative action in Hong Kong or U.S. federal courts.

Some of our directors and executive officers reside outside of Hong Kong and the United States and a substantial portion of their assets are located outside of Hong Kong and the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in Hong Kong or in the United States in the event that you believe that your rights have been infringed under the securities laws of Hong Kong, the United States or otherwise. To the extent our directors and executive officers reside outside China or their assets are located outside China, it may not be possible for investors to effect service of process upon us or our management inside China. Even if you are successful in bringing an action, the laws of the Cayman Islands and China may render you unable to enforce a judgment against our assets or the assets of our directors and officers. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, Hong Kong or China, although the courts of the Cayman Islands will generally recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits.

As a result of the above, public shareholders may have more difficulty protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as public shareholders of a Hong Kong company or a U.S. company.

Your voting rights as a holder of the ADSs are limited by the terms of the deposit agreement. The depositary for the ADSs will give us a discretionary proxy to vote our ordinary shares underlying your ADSs if you do not vote at shareholders' meetings, except in limited circumstances, which could adversely affect your interests.

You may exercise your voting rights with respect to the ordinary shares underlying your ADSs only in accordance with the provisions of the deposit agreement. Upon receipt of voting instructions from you in the manner set forth in the deposit agreement, the depositary for the ADSs will endeavor to vote your underlying ordinary shares in accordance with these instructions. Under our articles of association, the minimum notice period required for convening an annual general meeting is twenty-one calendar days and the minimum notice period required for convening an extraordinary general meeting is fourteen calendar days. When a general meeting is convened, you may not receive sufficient notice of a shareholders' meeting to permit you to withdraw your ordinary shares to allow you to cast your vote with respect to any specific matter at the meeting. In addition, the depositary and its agents may not be able to send voting instructions to you or carry out your voting instructions in a timely manner. We will make all reasonable efforts to cause the depositary to extend voting rights to you in a timely manner, but you may not receive the voting materials in time to ensure that you can instruct the depositary to vote your shares. Furthermore, the depositary and its agents will not be responsible for any failure to carry out any instructions to vote, for the manner in which any vote is cast or for the effect of any such vote. As a result, you may not be able to exercise your right to vote and you may lack recourse if your ordinary shares are not voted as you requested.

Under the deposit agreement, for the ADSs, the depositary will give us a discretionary proxy to vote the ordinary shares underlying your ADSs at shareholders' meetings if you do not give voting instructions to the depositary, unless:

- we have failed to timely provide the depositary with our notice of meeting and related voting materials;
- we have instructed the depositary that we do not wish a discretionary proxy to be given;

- we have informed the depositary that there is substantial opposition as to a matter to be voted on at the meeting; or
- a matter to be voted on at the meeting would have a material adverse impact on shareholders.

The effect of this discretionary proxy is that, if you fail to give voting instructions to the depositary, you cannot prevent the ordinary shares underlying your ADSs from being voted, absent the situations described above, and it may make it more difficult for you to influence our management. Holders of our ordinary shares are not subject to this discretionary proxy.

Anti-takeover provisions in our constitutional documents may discourage our acquisition by a third party, which could limit our shareholders' opportunity to sell their shares at a premium.

Our amended and restated memorandum and articles of association include provisions that could limit the ability of others to acquire control of our company, could modify our structure or could cause us to engage in change-of-control transactions. These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares, at a premium over prevailing market prices by discouraging third parties from seeking to obtain control in a tender offer or similar transaction.

For example, our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix the powers and rights of these shares, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights associated with our ordinary shares. Preferred shares could thus be issued quickly with terms calculated to delay or prevent a change in control or make removal of management more difficult. In addition, if our board of directors authorizes the issuance of preferred shares, the market price of the ordinary shares and/or ADSs may fall and the voting and other rights of the holders of our ordinary shares and/or ADSs may be materially and adversely affected.

Furthermore, the amended and restated articles of association permit the directors to vary all or any of the rights attaching to any class of shares in issue without the consent of the shareholder but only if such variation is considered by the directors not to have a material adverse effect upon such holder. The directors cannot vary the rights of shares if such variation would have a material adverse effect of the holder. The amended and restated articles of association provide that the holders must consent to any such material adverse changes in the manner set out therein.

Because our directors are divided into three classes with staggered terms of three years each, shareholders can only elect or remove a limited number of our directors in any given year. The length of these terms could present an obstacle to certain actions, such as a merger or other change of control, which could be in the interest of our shareholders.

Our amended and restated memorandum and articles of association designate courts in the Cayman Islands as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our shareholders, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated memorandum and articles of association provide that, unless we consent in writing to the selection of an alternative forum, the courts of Cayman Islands will be the sole and exclusive forum for any derivative action or proceeding brought on behalf of us, any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of us to us or our shareholders, any action asserting a claim arising pursuant to any provision of the Companies Law of the Cayman Islands as amended from time to time, or the amended and restated memorandum and articles of association, or any action asserting a claim governed by the internal affairs doctrine (as such concept is recognized under the U.S. laws). This provision may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits. Alternatively, if a court were to find this provision of our amended and restated memorandum and articles of association inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions.

Our amended and restated memorandum and articles of association provide that any shareholder bringing an unsuccessful action against us may be obligated to reimburse us for any costs we have incurred in connection with such unsuccessful action.

Our amended and restated memorandum and articles of association provide that under certain circumstances the fees, costs, and expenses that we incur in connection with actions or proceedings brought by any person or entity, which we refer to as claiming parties, may be shifted to such person or entity. If a claiming party asserts any claim; initiates any proceeding; or joins, offers substantial assistance to, or has a direct financial interest in any claim or proceeding against us, and such claiming party or the third party that received substantial assistance from the claiming party or in whole claim the claiming party had a direct financial interest is unsuccessful in obtaining a judgment on the merits in which the claiming party prevails, then such claiming party shall (to the fullest extent permitted by law) be obligated to reimburse us for all fees, costs, and expenses, including but not limited to all reasonable attorneys' fees and other litigation expenses, that we may incur in connection with such claim or proceeding.

Fee-shifting articles are relatively new and untested in the Cayman Islands, the United States and Hong Kong. The case law and potential legislative action on fee-shifting articles are evolving and there exists considerable uncertainty regarding the validity of, and potential judicial and legislative responses to, such articles. The application of our fee-shifting article in connection with claims under the Cayman Islands, the United States or Hong Kong securities laws, if any, will depend in part on future developments of the law. We cannot assure you that we will or will not invoke our fee-shifting article in any particular dispute. Consistent with our directors' fiduciary duties to act in the best interests of the Company, the directors may in their sole discretion from time to time decide whether or not to enforce this article. In addition, given the unsettled state of the law related to fee-shifting articles, such as ours, we may incur significant additional costs associated with resolving disputes with respect to such articles, which could adversely affect our business and financial condition.

If a shareholder that brings any such claim or proceeding is unable to obtain the judgment sought, the attorneys' fees and other litigation expenses that might be shifted to a claiming party may be significant. This fee-shifting article, therefore, may dissuade or discourage current or former shareholders (and their attorneys) from initiating lawsuits or claims against us. In addition, it may impact the fees, contingency or otherwise, required by potential plaintiffs' attorneys to represent our shareholders or otherwise discourage plaintiffs' attorneys from representing our shareholders at all. As a result, this article may limit the ability of shareholders to affect the management and direction of our company, particularly through litigation or the threat of litigation.

Holders of the ADSs may be subject to limitations on transfer of their ADSs.

Your ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of your ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, as amended, or for any other reason, subject to your right to cancel your ADSs and withdraw the underlying ordinary shares. Temporary delays in the cancellation of your ADSs and withdrawal of the underlying common shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our ordinary shares.

In addition, you may not be able to cancel your ADSs and withdraw the underlying ordinary shares when you owe money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities.

The depositary for the ADSs is entitled to charge holders fees for various services, including annual service fees. Dealings in the ordinary shares registered in our Hong Kong register of members will be subject to Hong Kong stamp duty.

The depositary for the ADSs is entitled to charge holders fees for various services including for the issuance of ADSs upon deposit of ordinary shares, cancellation of ADSs, distributions of cash dividends

or other cash distributions, distributions of ADSs pursuant to share dividends or other free share distributions, distributions of securities other than ADSs and annual service fees. In the case of ADSs issued by the depositary into The Depository Trust Company ("DTC"), the fees will be charged by the DTC participant to the account of the applicable beneficial owner in accordance with the procedures and practices of the DTC participant as in effect at the time. Additionally, dealings in the ordinary shares registered in our Hong Kong register of members will be subject to Hong Kong stamp duty.

Holders of the ADSs may not receive distributions on our ordinary shares or any value for them if it is illegal or impractical to make them available to you.

The depositary of the ADSs has agreed to pay you the cash dividends or other distributions it or the custodian for the ADSs receives on our ordinary shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of our ordinary shares that your ADSs represent. However, the depositary is not responsible for making such payments or distributions if it is unlawful or impractical to make a distribution available to any holders of ADSs. For example, it would be unlawful to make a distribution to a holder of ADSs if it consists of securities that require registration under the Securities Act of 1933, as amended (the "Securities Act"), but that are not properly registered or distributed pursuant to an applicable exemption from registration. The depositary is not responsible for making a distribution available to any holders of ADSs if any government approval or registration required for such distribution cannot be obtained after reasonable efforts made by the depositary. We have no obligation to take any other action to permit the distribution of the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that you may not receive the distributions we make on our ordinary shares or any value for them if it is illegal or impractical for us to make them available to you. These restrictions may materially reduce the value of your ADSs.

Holders of the ADSs may not be able to participate in rights offerings and may experience dilution of their holdings.

From time to time, we may distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depositary will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act with respect to all holders of ADSs or are registered under the Securities Act. The depositary may, but is not required to, attempt to sell these undistributed rights to third parties and may allow the rights to lapse. We may be unable to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to try to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

Our corporate actions are substantially controlled by our directors, executive officers and other principal shareholders, who can exert significant influence over important corporate matters, which may reduce the price of the ordinary shares and/or ADSs and deprive you of an opportunity to receive a premium for your ordinary shares and/or ADSs.

Our directors, executive officers and principal shareholders beneficially owned approximately 68% of our outstanding ordinary shares as of February 14, 2020. These shareholders, if acting together, could exert substantial influence over matters such as electing directors and approving material mergers, acquisitions or other business combination transactions. This concentration of ownership may also discourage, delay or prevent a change in control of our company, which could have the dual effect of depriving our shareholders of an opportunity to receive a premium for their shares as part of a sale of our company and reducing the price of our ordinary shares and/or ADSs. These actions may be taken even if they are opposed by our other shareholders. In addition, these persons could divert business opportunities away from us to themselves or others.

We may be a passive foreign investment company in future taxable years, which may have adverse U.S. federal income tax consequences for U.S. shareholders.

A non-U.S. corporation will be classified as a "passive foreign investment company" ("PFIC") for any taxable year if either (1) 75% or more of its gross income consists of certain types of passive income or

(2) 50% or more of the average quarterly value of its assets during such year produce or are held for the production of passive income. Based upon the current and expected composition of our income and assets, we do not presently expect to be a PFIC for the current taxable year. Nevertheless, because our PFIC status must be determined annually with respect to each taxable year and will depend on the composition and character of our assets and income, and the value of our assets (which may be determined, in part, by reference to the market value of our ADSs and ordinary shares, which may be volatile) over the course of such taxable year, we may be a PFIC in any taxable year. If we determine not to deploy significant amounts of cash for active purposes, our risk of being a PFIC may substantially increase. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the current taxable year or any future taxable year. In addition, it is possible that the Internal Revenue Service may challenge our classification of certain income and assets as non-passive, which may result in our being or becoming a PFIC in the current or subsequent years. Further, U.S. investors should be aware that we determined we were a PFIC for 2016.

If we are a PFIC for any taxable year during a U.S. shareholder's holding period of the ordinary shares or ADSs, then such U.S. shareholder may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the ordinary shares or ADSs and on the receipt of distributions on the ordinary shares or ADSs to the extent such distribution is treated as an "excess distribution" under the United States federal income tax rules. In addition, such holders may be subject to burdensome reporting requirements.

Further, if we are classified as a PFIC for any year during which a U.S. shareholder holds our ordinary shares or ADSs, we will generally continue to be treated as a PFIC for all succeeding years during which such U.S. shareholder holds such ordinary shares or ADSs. Each U.S. shareholder should consult its tax advisor regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership and disposition of the ordinary shares and ADSs.

If you are a "Ten Percent Shareholder," you may be subject to adverse U.S. federal income tax consequences if we are classified as a Controlled Foreign Corporation.

Each "Ten Percent Shareholder" (as defined below) in a non-U.S. corporation that is classified as a "controlled foreign corporation," or a CFC, for U.S. federal income tax purposes is generally required to include in income for U.S. federal tax purposes such Ten Percent Shareholder's pro rata share of the CFC's "Subpart F income" and investment of earnings in U.S. property, even if the CFC has made no distributions to its shareholders. Each Ten Percent Shareholder is also required to include in gross income its "global intangible low-taxed income," which is determined by reference to the income of CFCs of which such Ten Percent Shareholder is a Ten Percent Shareholder. Ten Percent Shareholders that are corporations may be entitled to a deduction equal to the foreign portion of any dividend when a dividend is paid. A non-U.S. corporation will generally be classified as a CFC for U.S federal income tax purposes if Ten Percent Shareholders own in the aggregate, directly or indirectly, more than 50% of either the total combined voting power of all classes of stock of such corporation entitled to vote or of the total value of the stock of such corporation. A "Ten Percent Shareholder" is a U.S. person (as defined by the Internal Revenue Code of 1986, as amended), who owns or is considered to own 10% or more of the total combined voting power of all classes of stock entitled to vote of such corporation or 10% of the value of all classes of stock of such corporation. The determination of CFC status is complex and includes attribution rules, the application of which is not entirely certain. Although we believe we are not a CFC now, we may become one or own interests in one in the future. Holders are urged to consult their own tax advisors with respect to our potential CFC status and the consequences thereof.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We lease all of our facilities other than our manufacturing facility in Guangzhou, China and our offices and laboratories in Changping, Beijing, and believe that our facilities are currently suitable and sufficient to meet our needs. We also lease an aggregate of approximately 53,000 square meters of office space at approximately 25 other locations across China, the United States and Europe, in cities such as Beijing, Shanghai, Suzhou, and Guangzhou, China; Cambridge, Massachusetts; Ridgefield Park, New Jersey; Emeryville and San Mateo, California; and Basel, Switzerland, primarily for our offices and for our manufacturing facility in Suzhou, China, pursuant to leases with various expiration dates, with the latest expiring in 2024. We intend to add new facilities or expand existing facilities as we add employees and enter new locations, and we believe that suitable additional or substitute space will be available as needed to accommodate any such expansion of our operations.

Please refer to "Note 23: Commitments and Contingencies" in the notes to our consolidated financial statements in this Annual Report on Form 10-K for further information on our real property leases.

Item 3. Legal Proceedings

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our American Depositary Shares ("ADSs") have been publicly traded on the NASDAQ Global Select Market under the symbol "BGNE" since February 3, 2016. Our ordinary shares have been publicly traded on the HKEx under the stock code "06160" since August 8, 2018.

Shareholders

As of January 31, 2020, we had approximately 160 holders of record of our ordinary shares and nine holders of record of our ADSs. This number does not include beneficial owners whose ordinary shares or ADSs are held by nominees in street name. Because many ordinary shares and ADSs are held by broker nominees, we are unable to estimate the total number of beneficial holders represented by these record holders.

Dividend Policy

Our board of directors has adopted a dividend policy. As stated in such policy, we currently intend to retain all available funds and earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Subject to the applicable law and our amended and restated articles of association, any future determination to pay dividends will be made at the discretion of our board of directors and may be based on a number of factors, including our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant. If we pay dividends in the future, in order for us to distribute dividends to its shareholders and holders of ADSs, we may rely to some extent on any dividends distributed by our PRC subsidiaries. PRC regulations may restrict the ability of our PRC subsidiaries to pay dividends to us. This dividend policy reflects our board of directors' current views on our financial and cash flow position. We intend to continue to review our dividend policy from time to time, and there can be no assurance that dividends will be paid in any particular amount, if at all, for any given period.

We have never declared or paid any dividends on our ordinary shares or any other securities. We currently intend to retain all available funds and earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. If we pay dividends in the future, in order for us to distribute dividends to our shareholders, we will rely to some extent on any dividends distributed by our PRC subsidiaries. Any dividend distributions from our PRC subsidiaries to us will be subject to PRC withholding tax. In addition, PRC regulations currently permit payment of dividends of a PRC company only out of accumulated distributable after-tax profits as determined in accordance with its articles of association and the accounting standards and regulations in China.

Investors should not purchase our ordinary shares or ADSs with the expectation of receiving cash dividends.

Performance Comparison Graph

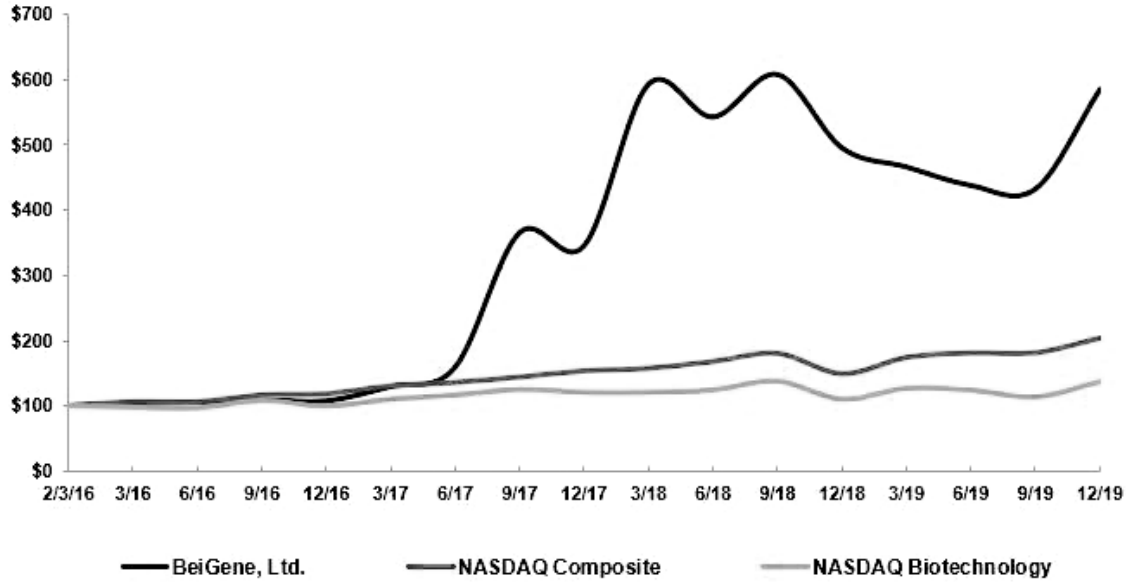
This graph is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference into any of our filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

The following graph shows the total stockholder return of an investment of $100 in cash at market close on February 3, 2016 (the first day of trading of our ADSs) through December 31, 2019 for our ADSs, the NASDAQ Composite Index (U.S.), and the NASDAQ Biotechnology Index.

Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of any dividends, although no dividends have been declared to date. The stockholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.

COMPARISON OF 47 MONTH CUMULATIVE TOTAL RETURN*

Among BeiGene, Ltd., the NASDAQ Composite Index
and the NASDAQ Biotechnology Index



*$100 invested on 2/3/16 in stock or 1/31/16 in index, including reinvestment of dividends.
Fiscal year ending December 31.

	2/3/16	3/31/16	6/30/16	9/30/16	12/31/16	3/31/17	6/30/17	9/30/17	12/31/17	3/31/18	6/30/18	9/30/18	12/31/18	3/31/19	6/30/19	9/30/19	12/31/19
BeiGene, Ltd.	100.00	103.50	105.23	108.79	107.20	129.27	158.90	365.32	345.06	593.22	542.83	608.12	495.27	466.10	437.68	432.42	585.31
NASDAQ Composite	100.00	105.84	105.60	116.17	118.10	130.06	135.47	143.69	153.10	157.06	167.44	179.86	148.75	173.75	180.47	180.80	203.33
NASDAQ Biotechnology	100.00	97.63	96.54	108.60	99.57	110.37	116.84	125.89	121.12	121.19	124.92	138.91	110.38	127.54	124.67	113.92	138.10

Equity Compensation Plan Information

Our equity compensation plan information required by this item is incorporated by reference to the information in "Part III — Item 12 — Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" of this Annual Report.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

None.

Taxation

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty or withholding tax applicable to us or to any holder of the ADSs and ordinary shares. There are no other taxes

likely to be material to us levied by the Government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or after execution brought within, the jurisdiction of the Cayman Islands. No stamp duty is payable in the Cayman Islands on the issue of shares by, or any transfers of shares of, Cayman Islands companies (except those which hold interests in land in the Cayman Islands). The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of the ADSs and ordinary shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of the ADSs or ordinary shares, as the case may be, nor will gains derived from the disposal of the ADSs or ordinary shares be subject to Cayman Islands income or corporation tax.

PRC Taxation

Under the Enterprise Income Tax Law, or EIT Law, an enterprise established outside the PRC with a "de facto management body" within the PRC is considered a "resident enterprise," which means that it is treated in a manner similar to a Chinese enterprise for PRC enterprise income tax purposes. The implementation rules of the EIT Law define "de facto management body" as a managing body that exercises substantial and overall management and control over the production and operations, personnel, accounting and properties of an enterprise. In addition, the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprise as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or Circular 82, issued by the State Administration of Taxation, which provides guidance on the determination of the tax residence status of a Chinese-controlled offshore incorporated enterprise, defines Chinese-controlled offshore incorporated enterprise as an enterprise that is incorporated under the laws of a foreign country or territory and that has a PRC enterprise or enterprise group as its primary controlling shareholder. Although BeiGene, Ltd. does not have a PRC enterprise or enterprise group as our primary controlling shareholder and is therefore not a Chinese-controlled offshore incorporated enterprise within the meaning of Circular 82, in the absence of guidance specifically applicable to us, we have applied the guidance set forth in Circular 82 to evaluate the tax residence status of BeiGene, Ltd. and its subsidiaries organized outside the PRC.

According to Circular 82, a Chinese-controlled offshore incorporated enterprise will be regarded as a PRC tax resident by virtue of having a "de facto management body" in China and will be subject to PRC enterprise income tax on its worldwide income only if all of the following criteria are met:

- the primary location of the enterprise's senior executives of the day-to-day operational management and senior management departments performing their duties is in the PRC;
- decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC;
- the enterprise's primary assets, accounting books and records, company seals, and board and shareholder meeting minutes are located or maintained in the PRC; and
- 50% or more of voting board members or senior executives habitually reside in the PRC.

Currently, some of the members of our management team are located in China. However, we do not believe that we meet all of the conditions outlined in the immediately preceding paragraph. BeiGene, Ltd. and its offshore subsidiaries are incorporated outside the PRC. As a holding company, our key assets and records, including the resolutions and meeting minutes of our board of directors and the resolutions and meeting minutes of our shareholders, are located and maintained outside the PRC. We are not aware of any offshore holding companies with a corporate structure similar to ours that has been deemed a PRC "resident enterprise" by the PRC tax authorities. Accordingly, we believe that BeiGene, Ltd. and its offshore subsidiaries should not be treated as a "resident enterprise" for PRC tax purposes if the criteria for "de facto management body" as set forth in Circular 82 were deemed applicable to us. However, as the tax residency status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body" as applicable to our offshore entities, we will continue to monitor our tax status.

The implementation rules of the EIT Law provide that, (1) if the enterprise that distributes dividends is domiciled in the PRC or (2) if gains are realized from transferring equity interests of enterprises domiciled in the PRC, then such dividends or capital gains are treated as China-sourced income. It is not clear how "domicile" may be interpreted under the EIT Law, and it may be interpreted as the jurisdiction where the enterprise is a tax resident. Therefore, if we are considered as a PRC tax resident enterprise for PRC tax purposes, any dividends we pay to our overseas shareholders or ADS holders as well as gains realized by such shareholders or ADS holders from the transfer of our shares or ADSs may be regarded as China-sourced income. As a result, dividends paid to non-PRC resident enterprise ADS holders or shareholders may be subject to PRC withholding tax at a rate of up to 10% (or 20% in the case of non-PRC individual ADS holders or shareholders) and gains realized by non-PRC resident enterprise ADS holders or shareholders from the transfer of our ordinary shares or ADSs may be subject to PRC tax at a rate of 10% (or 20% in the case of non-PRC individual ADS holders or shareholders). It is also unclear whether, if we are considered a PRC resident enterprise, holders of our shares or ADSs would be able to claim the benefit of income tax treaties or agreements entered into between China and other countries or areas.

Item 6. Selected Consolidated Financial Data

The selected financial data set forth below is derived from our audited consolidated financial statements and may not be indicative of future operating results. The following selected consolidated financial data should be read in conjunction with "Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the notes thereto included elsewhere in this Annual Report. The selected financial data in this section are not intended to replace our consolidated financial statements and the related notes. Our historical results are not necessarily indicative of our future results.

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	(in thousands, except share and per share data)				
Statements of Operations:					
Revenue:					
Product revenue, net	$ 222,596	$ 130,885	$ 24,428	$ —	$ —
Collaboration revenue	205,616	67,335	213,959	1,070	8,816
Total revenues	428,212	198,220	238,387	1,070	8,816
Expenses					
Cost of sales — product	(71,190)	(28,705)	(4,974)	—	—
Research and development[1]	(927,338)	(679,005)	(269,018)	(98,033)	(58,250)
Selling, general and administrative	(388,249)	(195,385)	(62,602)	(20,097)	(7,311)
Amortization of intangible assets	(1,326)	(894)	(250)	—	—
Total expenses	(1,388,103)	(903,989)	(336,844)	(118,130)	(65,561)
Loss from operations	(959,891)	(705,769)	(98,457)	(117,060)	(56,745)
Interest income (expense), net	9,131	13,947	(4,108)	383	559
Changes in fair value of financial instruments	—	—	—	(1,514)	(1,826)
Other income (expense), net	7,174	1,993	11,501	(972)	910
Loss before income tax expense	(943,586)	(689,829)	(91,064)	(119,163)	(57,102)
Income tax (expense) benefit	(6,992)	15,796	(2,235)	(54)	—
Net loss	(950,578)	(674,033)	(93,299)	(119,217)	(57,102)
Less: net loss attributable to noncontrolling interest	(1,950)	(264)	(194)	—	—
Net loss attributable to BeiGene, Ltd.	$ (948,628)	$ (673,769)	$ (93,105)	$ (119,217)	$ (57,102)
Loss per share attributable to BeiGene, Ltd, basic and diluted[2]	$ (1.22)	$ (0.93)	$ (0.17)	$ (0.30)	$ (0.52)
Weighted-average shares outstanding, basic and diluted	780,701,283	720,753,819	543,185,460	403,619,446	110,597,263

(1) Included in research and development expense is $50 million and $89 million of upfront payments related to collaboration agreements entered into in 2019 and 2018, respectively (see Note 3).

(2) See Note 17 to our audited consolidated financial statements appearing elsewhere in this Annual Report for a description of the method used to calculate basic and diluted loss per share of ordinary shares.

	As of December 31,				
	2019	2018	2017	2016	2015
			(in thousands)		
Balance Sheet Data:					
Cash, cash equivalents, and restricted cash	$ 620,775	$ 740,713	$ 239,602	$ 87,514	$ 17,869
Short-term investments	364,728	1,068,509	597,914	280,660	82,617
Working capital	862,384	1,697,390	763,509	339,341	71,097
Total assets	1,612,289	2,249,684	1,046,479	405,813	116,764
Total liabilities	633,934	496,037	362,248	52,906	42,445
Preferred shares	—	—	—	—	176,084
Noncontrolling interest	16,150	14,445	14,422	—	—
Total equity (deficit)	978,355	1,753,647	684,231	352,907	(101,765)

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

You should read the following discussion and analysis of our financial condition and results of operations together with "Item 6 — Selected Consolidated Financial Data" and our consolidated financial statements and related notes appearing elsewhere in this Annual Report. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors. We discuss factors that we believe could cause or contribute to these differences below and elsewhere in this report, including those set forth under "Part I — Item 1A — Risk Factors" and under "Forward-Looking Statements and Market Data" in this Annual Report.

Information pertaining to fiscal year 2017 was included in our Annual Report on Form 10-K for the year ended December 31, 2018 beginning on page 94 under Part II, Item 7, "Management's Discussion and Analysis of Financial Position and Results of Operations," which was filed with the SEC on February 28, 2019.

Overview

We are a global commercial-stage biotechnology company focused on developing and commercializing innovative molecularly-targeted and immuno-oncology cancer therapeutics. We started as a research and development company in Beijing in 2010. Over the last ten years, we have developed into a fully-integrated global biotechnology company, with significant commercial, manufacturing, and research and development capabilities.

We have built substantial commercial capabilities in China and the United States, and are currently marketing two internally-developed drugs and three in-licensed drugs. We also anticipate introducing five more in-licensed drugs into the China market in the next one to two years. In the United States, we market BRUKINSA™ (zanubrutinib) for adult patients with mantle cell lymphoma ("MCL") who have received at least one prior therapy and in China, we have received marketing approval and are in the process of launching tislelizumab for patients with classical Hodgkin's Lymphoma ("cHL") who have received at least two prior therapies. We have filed four additional supplementary new drug applications ("sNDA") for regulatory approvals in China and are planning for launches in these additional indications in 2020. Our in-licensed portfolio includes ABRAXANE®, REVLIMID® and VIDAZA®, which we have been marketing in China since 2017 under a license from Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"). We plan on launching additional in-licensed products in China from our collaborations, including XGEVA® (denosumab), KYPROLIS® (carfilzomib) and BLINCYTO® (blinatumomab) from Amgen Inc. ("Amgen"), and SYLVANT® (siltuximab) and QARZIBA® ▼ (dinutuximab beta), from EUSA Pharma ("EUSA").

We have built deep clinical development capabilities, including a more than 1,100-person global clinical development team that is running over 60 ongoing or planned clinical trials that have enrolled over 7,500 patients and healthy subjects. We are conducting late-stage clinical trials of BRUKINSA and tislelizumab, including 26 registration or registration-enabling trials in 15 discrete cancer indications. Our internal research capabilities have yielded another late-stage asset, pamiparib, and five other internally-developed drug candidates are currently in early-stage clinical development. In addition, we have been able to leverage our capabilities and China's rising importance as a clinical science center to expand our clinical and pre-clinical portfolio with in-licensed drug candidates. We are also working with high-quality contract manufacturing organizations ("CMOs") to manufacture our internally-developed commercial and clinical products in China and globally and have built state-of-the-art small molecule and biologic manufacturing facilities in China to support the launches and potential future demand of our internally-developed products.

Based on the strength of our China-inclusive global development and commercial capabilities, we have entered into collaborations with leading pharmaceutical and biotechnology companies to develop and commercialize innovative medicines in China and the Asia-Pacific region. In October 2019, we entered into a strategic collaboration with Amgen pursuant to which we have agreed to collaborate on the commercialization of Amgen's oncology products XGEVA, KYPROLIS and BLINCYTO in China, and the global development and future commercialization in China of up to 20 of Amgen's clinical- and late pre-clinical-stage pipeline products, including AMG 510, Amgen's first-in-class investigational KRAS G12C inhibitor.

Recent Developments

On January 13, 2020, we entered into an exclusive development and commercialization agreement for the orphan biologic products SYLVANT and QARZIBA in Greater China with EUSA Pharma ("EUSA"). Under the terms of the agreement, EUSA has granted us exclusive rights to SYLVANT in Greater China and to QARZIBA in mainland China. Under the agreement, we have agreed to fund and undertake all clinical development and regulatory submissions in the territories, and plan to launch and commercialize both products once approved. EUSA received a $40 million upfront payment and will be eligible to receive payments upon the achievement of regulatory and commercial milestones up to a total of $160 million. EUSA will also be eligible to receive tiered royalties on future product sales.

On January 2, 2020, following approval by our shareholders and satisfaction of other closing conditions, we announced the closing of our global strategic oncology collaboration with Amgen for the commercialization and development in China of Amgen's XGEVA, KYPROLIS, and BLINCYTO, and the joint global development of 20 oncology assets in Amgen's pipeline, with BeiGene responsible for development and commercialization in China. In connection with the collaboration, Amgen purchased a 20.5% stake in BeiGene for approximately $2.8 billion in cash at $174.85 per American Depositary Share ("ADS").

On December 27, 2019, we announced that our anti-PD-1 antibody tislelizumab received approval from the China National Medical Products Administration ("NMPA") as a treatment for patients with cHL who have received at least two prior therapies. The new drug application ("NDA") was previously granted priority review by the NMPA.

On December 22, 2019, we announced that the NMPA accepted a supplemental new drug application (sNDA) for REVLIMID (lenalidomide), in combination with rituximab, for the treatment of patients with relapsed or refractory indolent lymphoma (follicular lymphoma or marginal zone lymphoma).

On November 14, 2019, we announced that BRUKINSA received accelerated approval from the United States Food and Drug Administration (FDA) as a treatment for MCL in adult patients who have received at least one prior therapy.

Coronavirus Disease 2019 (COVID-19)

We expect that the worldwide health crisis of the coronavirus disease (COVID-19) will have a negative impact on our operations in China, including clinical trial recruitment and participation, regulatory interactions and inspections, and commercial revenue, particularly in the first quarter of 2020 and possibly longer depending on the scope and duration of the disruption. We continue to execute on our clinical development, regulatory and commercialization goals in China and are working to minimize delays and disruptions.

Components of Operating Results

Revenue

We began generating product revenue in September 2017 through our in-license agreement with BMS to distribute the approved cancer therapies ABRAXANE, REVLIMID and VIDAZA in China. Following FDA approval on November 14, 2019, we launched our first internally developed drug, BRUKINSA, in the United States. Revenues from product sales are recognized when there is a transfer of control from the Company to the customer. The Company determines transfer of control based on when the product is delivered, and title passes to the customer. Revenues from product sales are recognized net of variable consideration resulting from rebates, chargebacks, trade discounts and allowances, sales returns allowances and other incentives. Provisions for estimated reductions to revenue are provided for in the same period the related sales are recorded and are based on contractual terms, historical experience and trend analysis. We expect revenue from product sales to increase in 2020 as we launch our internally developed drugs, BRUKINSA and tislelizumab, and launch additional in-licensed products from our collaborations with Amgen and EUSA and continue to expand our efforts to promote our existing commercial products.

In January 2020, we were notified that our tender offer for ABRAXANE was one of the winning tenders in China's centralized procurement process, with a reduction from the current pricing, which is expected to take effect in the second quarter of 2020. Once ABRAXANE is included in the centralized procurement process, we anticipate that demand will increase significantly, although at a significantly lower price than we have been charging during 2019 and into 2020, which could have a material impact on our commercialization efforts and results of operations.

To date, we have also recorded revenue from our 2017 collaboration and license agreement with BMS for tislelizumab, which was terminated in June 2019. Under this agreement, we received an upfront payment related to the license fee, which was recognized upon the delivery of the license right. Additionally, the portion of the upfront payment related to the reimbursement of undelivered research and development services was deferred and recognized over the performance period of the collaboration arrangement. We recognized the remainder of the deferred research and development services revenue balance upon termination of the collaboration agreement. We also received research and development reimbursement revenue for the basket study trials that BMS opted into through the termination of the collaboration agreement. Pursuant to the terms of the termination agreement, we received a one-time payment of $150 million in June 2019. The entire payment was recognized in the period the termination occurred, as we had no further performance obligations under the collaboration. We also recognized revenue for upfront license fees and milestone payments from a prior collaboration agreement with Merck KGaA, Darmstadt Germany during the years ended December 31, 2017 and 2018, respectively.

Expenses

Cost of Sales

Cost of sales includes the acquisition costs of our commercial products that have been sold during the period. To date, cost of sales has consisted of the cost of products purchased from BMS and distributed in the People's Republic of China ("PRC" or "China"). Costs to manufacture inventory in preparation for commercial launch of a product incurred prior to regulatory approval are expensed to research and development expense as incurred. Cost of sales for newly launched products will not be recorded until the initial pre-launch inventory is depleted and additional inventory is manufactured.

Research and Development Expenses

Research and development expenses consist of the costs associated with our research and development activities, conducting preclinical studies and clinical trials and activities related to regulatory filings. Our research and development expenses consist of:

- expenses incurred under agreements with contract research organizations, or CROs, contract manufacturing organizations, and consultants that conduct and support our clinical trials and preclinical studies;
- costs of comparator drugs in certain of our clinical trials;
- manufacturing costs related to pre-commercial activities;
- costs associated with preclinical activities and development activities;
- costs associated with regulatory operations;
- employee-related expenses, including salaries, benefits, travel and share-based compensation expense for research and development personnel;
- in-process research and development costs expensed as part of collaboration agreements entered into; and
- other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies used in research and development activities.

Our current research and development activities mainly relate to the clinical advancement of our internally-developed drug candidates:

- zanubrutinib, an investigational small molecule inhibitor of BTK;
- tislelizumab, an investigational humanized monoclonal antibody against PD-1;
- pamiparib, an investigational small molecule inhibitor of PARP1 and PARP2;
- lifirafenib, a novel small molecule inhibitor of both the monomer and dimer forms of BRAF;
- BGB-A333, an investigational humanized monoclonal antibody against PD-L1;
- BGB-A425, an investigational humanized monoclonal antibody against TIM-3;
- BGB-A1217, an investigational humanized monoclonal antibody against TIGIT; and
- BGB-11417, an investigational small molecular inhibitor of Bcl-2.

Research and development activities also include costs associated with in-licensed drug candidates, including:

- sitravatinib, an investigational, spectrum-selective kinase inhibitor in clinical development by Mirati Therapeutics, Inc. ("Mirati");
- ZW25 and ZW49, two bispecific antibody-based product candidates targeting HER2, under development by Zymeworks Inc.; and
- BA3071, an investigational CAB-CTLA-4 antibody, under development by BioAtla LLC.

We expense research and development costs when we incur them. We record costs for certain development activities, such as clinical trials, based on an evaluation of the progress to completion of specific tasks using data such as subject enrollment, clinical site activations or information our vendors provide to us. We expense the manufacturing costs of our internally-developed products that are used in clinical trials as they are incurred, as research and development expense. We do not allocate employee-related costs, depreciation, rental and other indirect costs to specific research and development programs because these costs are deployed across multiple product programs under research and development and, as such, are separately classified as unallocated research and development expenses.

At this time, it is difficult to estimate or know for certain, the nature, timing and estimated costs of the efforts that will be necessary to complete the development of our internally-discovered drugs and drug candidates. We are also unable to predict when, if ever, material net cash inflows will commence from sales of our drugs and drug candidates. This is due to the numerous risks and uncertainties associated with developing such drugs and drug candidates, including the uncertainty of:

- successful enrollment in and completion of clinical trials;
- establishing an appropriate safety profile;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- receipt of marketing approvals from applicable regulatory authorities;
- successfully launching and commercializing our drugs and drug candidates, if and when approved, whether as monotherapies or in combination with our internally discovered drug candidates or third-party products;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our drugs and drug candidates;
- continued acceptable safety profiles of the products following approval;
- competition from competing products; and
- retention of key personnel.

A change in the outcome of any of these variables with respect to the development of any of our drug candidates would significantly change the costs, timing and viability associated with the development of that drug candidate.

Research and development activities are central to our business model. We expect research and development costs to increase significantly for the foreseeable future as our development programs progress, as we continue to support the clinical trials of our drugs and drug candidates as treatments for various cancers and as we move these drugs and drug candidates into additional clinical trials, including potential pivotal trials. There are numerous factors associated with the successful commercialization of any of our drugs and drug candidates, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at this time based on our stage of development. Additionally, future commercial and regulatory factors beyond our control may impact our clinical development and commercial programs and plans.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of product promotion costs, distribution costs, salaries and related benefit costs, including share-based compensation for selling, general and administrative personnel. Other selling, general and administrative expenses include professional fees for legal, consulting, auditing and tax services as well as other direct and allocated expenses for rent and maintenance of facilities, travel costs, insurance and other supplies used in selling, general and administrative activities. We anticipate that our selling, general and administrative expenses will increase in future periods to support planned increases in commercialization activities with respect to ABRAXANE , REVLIMID , VIDAZA and tislelizumab in China and BRUKINSA in the United States and the preparation for launch and potential commercialization of our in-licensed products from our collaborations with Amgen and EUSA and internally-discovered drugs and drug candidates, if approved. We also expect selling, general and administrative expenses to increase in future periods to support our research and development efforts, including the continuation of the clinical trials of our drugs and drug candidates as treatments for various cancers and the initiation of clinical trials for potential new indications or drug candidates. These cost increases will likely be due to increased promotional costs, increased headcount, increased share-based compensation expenses, expanded infrastructure and increased costs for insurance. We also anticipate increased legal, compliance, accounting, insurance and investor and public relations expenses associated with being a public company with our ADSs and ordinary shares listed for trading on The NASDAQ Global Select Market and Hong Kong Stock Exchange, respectively.

Interest Income (Expense), Net

Interest Income

Interest income consists primarily of interest generated from our cash and short-term investments in money market funds, time deposits, U.S. treasury securities and U.S. agency securities.

Interest Expense

Interest expense consists primarily of interest on our long-term bank loans and shareholder loan.

Other Income (Expense), Net

Other income consists primarily of government grants and subsidies received that involve no conditions or continuing performance obligations by us, realized and unrealized gains and losses related to foreign currency exchange rates and gains on the sale of investments.

Results of Operations

Comparison of the Years Ended December 31, 2019 and 2018

The following table summarizes our results of operations for the years ended December 31, 2019 and 2018:

	Year Ended December 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
Product revenue, net	$ 222,596	$ 130,885	$ 91,711	70%
Collaboration revenue	205,616	67,335	138,281	205%
Total revenues	428,212	198,220	229,992	116%
Expenses				
Cost of sales – product	(71,190)	(28,705)	(42,485)	148%
Research and development	(927,338)	(679,005)	(248,333)	37%
Selling, general and administrative	(388,249)	(195,385)	(192,864)	99%
Amortization of intangible assets	(1,326)	(894)	(432)	48%
Total expenses	(1,388,103)	(903,989)	(484,114)	54%
Loss from operations	(959,891)	(705,769)	(254,122)	36%
Interest income (expense), net	9,131	13,947	(4,816)	(35)%
Other income, net	7,174	1,993	5,181	260%
Loss before income tax expense	(943,586)	(689,829)	(253,757)	37%
Income tax (expense) benefit	(6,992)	15,796	(22,788)	(144)%
Net loss	(950,578)	(674,033)	(276,545)	41%
Less: Net loss attributable to noncontrolling interest	(1,950)	(264)	(1,686)	639%
Net loss attributable to BeiGene, Ltd.	$ (948,628)	$(673,769)	$(274,859)	41%

Revenue

Total revenue increased by $230.0 million to $428.2 million for the year ended December 31, 2019, from $198.2 million for the year ended December 31, 2018. The following table summarizes the components of our revenue for the year ended December 31, 2019 and 2018, respectively:

	Year Ended December 31,		Changes	
	2019	2018	$	%
Product revenue	$222,596	$130,885	$ 91,711	70%
Collaboration revenue:				
Reimbursement of research and development costs	27,634	56,776	(29,142)	(51)%
Research and development service revenue	27,982	10,559	17,423	165%
Other	150,000	—	150,000	NM
Total collaboration revenue	205,616	67,335	138,281	205%
Total	$428,212	$198,220	$229,992	116%

Net product revenue was $222.6 million for the year ended December 31, 2019, which related primarily to sales of ABRAXANE, REVLIMID and VIDAZA in China. We began recognizing product revenue with sales to our distributors in China, beginning in September 2017 following the closing of our strategic collaboration with BMS. For the year ended December 31, 2019, ABRAXANE, REVLIMID and VIDAZA represented 50%, 36% and 14%, respectively, of net product revenue for our marketed products in China.

Following FDA approval on November 14, 2019, we launched our first internally developed drug, BRUKINSA, in the United States. We had $130.9 million product revenue for the year ended December 31, 2018. Collaboration revenue totaled $205.6 million for the year ended December 31, 2019, and was comprised primarily of a $150.0 million payment received upon termination of the collaboration agreement with BMS for tislelizumab, as well as the revenue recognition of previously deferred amounts. Additionally, we recognized $27.6 million for the reimbursement of research and development costs for the clinical trials that BMS had opted into prior to the agreement being terminated.

Collaboration revenue was $67.3 million for the year ended December 31, 2018, and was comprised of $56.8 million for the reimbursement of research and development costs for the clinical trials that BMS had opted into, $9.1 million related to the recognition of deferred revenue for upfront fees allocated to undelivered research and development services to BMS and $1.5 million research and development services for achieving a milestone under the collaboration agreement with Merck KGaA, Darmstadt Germany.

Cost of Sales

Cost of sales increased to $71.2 million for the year ended December 31, 2019 from $28.7 million for the year ended December 31, 2018, primarily due to increased volume of sales compared to the prior year. Cost of sales for the year ended December 31, 2019 consisted entirely of the cost of products purchased from BMS and distributed in the PRC.

Research and Development Expense

Research and development expense increased by $248.3 million, or 36.6%, to $927.3 million for the year ended December 31, 2019, from $679.0 million for the year ended December 31, 2018. The following table summarizes external clinical, external non-clinical and internal research and development expense for the year ended December 31, 2019 and 2018:

	Year Ended December 31,		Changes	
	2019	2018	$	%
	(dollars in thousands)			
External cost of clinical-stage programs	$410,670	$291,176	$119,494	41%
In-process research and development expense	50,000	89,000	(39,000)	(44)%
External cost of non-clinical-stage programs	79,153	55,600	23,553	42%
Internal research and development expenses	387,515	243,229	144,286	59%
Total research and development expenses	$927,338	$679,005	$248,333	37%

The increase in external research and development expense was primarily attributable to the advancement of our clinical and preclinical drug candidates, and included the following:

- Increases of approximately $51.8 million and $64.9 million, respectively, for zanubrutinib and tislelizumab. The expense increases were primarily due to the expansion of clinical trials, including trials that were initiated in late 2018 or early 2019, including Phase 3 studies in patients with R/R CLL and treatment-naïve patients with MCL for zanubrutinib and treatment-naïve patients with gastric cancer and esophageal cancer for tislelizumab. In addition, the continuation of enrollment in ongoing pivotal trials for both drug candidates contributed to the period over period increase in expenses.
- A decrease of $39.0 million related to in-process research and development expense due to lower upfront payments made under collaboration agreements compared to the prior year; and
- External spending for our non-clinical-stage programs, which was primarily related to manufacturing costs for pre-commercial activities and costs associated with our preclinical candidates.

The increase in internal research and development expense was primarily attributable to the expansion of our development organization and our clinical and preclinical pipeline, and included the following:

- $66.2 million increase in employee salary and benefits, which was primarily attributable to hiring more research and development personnel to support our expanding research and development activities;
- $21.9 million increase in share-based compensation expense, primarily attributable to our increased headcount, resulting in more awards being expensed related to the growing employee population;
- $4.8 million increase in materials and reagent expenses, mainly in connection with the in-house manufacturing of drug candidates used for clinical purposes;
- $6.9 million increase in consulting fees, which was mainly attributable to increased scientific, regulatory and development consulting activities, in connection with the advancement of our drug candidates;
- $44.5 million increase of depreciation, travel, meeting and conferences, facility and IT allocable expenses, office expense, rental fees and other expenses to support the growth of our organization.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by $192.9 million, or 98.7%, to $388.2 million for the year ended December 31, 2019, from $195.4 million for the year ended December 31, 2018. The increase was primarily attributable to the following:

- $55.7 million increase in employee salary and benefits, which was primarily attributable to the hiring of more personnel to support our growing organization, including the expansion of our commercial organizations in China and the United States;
- $25.1 million increase of share-based compensation expense, primarily attributable to our increased headcount, resulting in more awards being expensed related to the growing employee population;
- $28.3 million increase in professional fees and consulting for general and administrative activities, including legal, recruiting, information technology, tax, accounting and audit services, mainly in connection with our growing business;
- $51.9 million increase in external selling and marketing expenses, including market access studies, meeting and seminar expenses, promotional activities, and sponsorship and grant expenses; and
- $31.9 million increase in facility expenses, rental fees, office expenses, travel and meals expenses and other administrative expenses, primarily attributable to the global expansion of our business, including the expansion of our commercial operations in China and the United States.

Interest Income (Expense), Net

Interest income (net) decreased to $9.1 million for the year ended December 31, 2019, from $13.9 million for the year ended December 31, 2018. The decrease in interest income was primarily attributable to a decrease in interest income on our short-term investment balances.

Other Income, Net

Other income, net increased by $5.2 million to $7.2 million for the year ended December 31, 2019, from $2.0 million for the year ended December 31, 2018. The increase was mainly attributable to increases in gain on the sale of investments and government grants and subsidies received in 2019.

Income Tax (Expense) Benefit

Income tax expense was $7.0 million for the year ended December 31, 2019 compared with $15.8 million of income tax benefit for the year ended December 31, 2018. In the year ended December 31, 2019, the increase in income tax expense was mainly attributable to an increase in income tax expense in certain of our PRC subsidiaries and a reduction of US deferred tax benefit attributable to increased research tax credits and stock compensation tax deductions, offset by establishment of a partial valuation allowance.

Liquidity and Capital Resources

Since our inception in 2010, we have incurred annual net losses and negative cash flows from our operations. Substantially all of our losses have resulted from the funding of our research and development programs and selling, general and administrative expenses associated with our operations. We incurred net losses of $950.6 million and $674.0 million for the years ended December 31, 2019 and 2018, respectively. As of December 31, 2019, we had an accumulated deficit of $2.0 billion. Our primary use of cash is to fund our research and development activities and to support the commercialization of our products in China and the United States and planned additional product launches in China and the United States. Our operating activities used $750.3 million and $547.7 million for the years ended December 31, 2019 and 2018, respectively. We have financed our operations principally through proceeds from public and private offerings of our securities and proceeds from our collaborations, together with product sales since September 2017.

As of December 31, 2019, we had cash, cash equivalents, restricted cash and short-term investments of $985.5 million, including approximately $123.7 million in cash and cash equivalents and $2.0 million of restricted cash held by our joint venture, BeiGene Biologics, to continue phased construction of our commercial biologics facility in Guangzhou, China and to fund research and development of our biologics drug candidates in China. On January 2, 2020, we received approximately $2.8 billion from the sale of our ADSs to Amgen in connection with the closing of our strategic collaboration, which is not included in our December 31, 2019 financial statements.

The following table provides information regarding our cash flows for the years ended December 31, 2019 and 2018:

	Year Ended December 31,	
	2019	2018
	(in thousands)	
Cash, cash equivalents and restricted cash at beginning of period	$ 740,713	$ 239,602
Net cash (used in) provided by operating activities	(750,269)	(547,717)
Net cash provided by (used in) investing activities	554,163	(637,613)
Net cash provided by financing activities	85,680	1,690,537
Net effect of foreign exchange rate changes	(9,512)	(4,096)
Net (decrease) increase in cash, cash equivalents and restricted cash	(119,938)	501,111
Cash, cash equivalents and restricted cash at end of period	$ 620,775	$ 740,713

Use of Funds

The use of cash in all periods presented resulted primarily from our net losses, adjusted for non-cash charges and changes in components of working capital. The primary use of our cash, cash equivalents and short-term investments in all periods presented was to fund research and development, regulatory and other clinical trial costs, selling costs and related supporting administrative expenses. Our prepaid expenses and other current assets, accounts payable and accrued expense balances in all periods presented were affected by the timing of vendor invoicing and payments.

Operating Activities

Operating activities used $750.3 million of cash for the year ended December 31, 2019, which resulted principally from our net loss of $950.6 million and an increase in our net operating assets and liabilities of $10.8 million, offset by non-cash charges of $211.1 million. The increase in our net operating assets was primarily due to an increase of $8.6 million in prepaid expenses and other current assets primarily related to prepayments to CROs for clinical trials, an increase of $20.8 million in other non-current assets primarily related to prepayments for acquiring long-term assets, an increase of $29.8 million in accounts receivable on products sales from our collaboration with BMS, a decrease of $28.0 million in deferred revenue, an increase of $12.3 million in inventories, and an increase of $11.5 million in operating lease right-of-use assets, all of which had a negative impact on operating cash flow. These cash uses were partially offset by an increase of $66.3 million in accounts payable and accrued expenses related to payments for external research

and development costs, payroll-related costs and selling, general and administrative expenses to support our growing business, an increase of $8.5 million in other long-term liabilities primary related to government subsidies, and a decrease in unbilled receivables of $8.6 million related to the BMS collaboration, an increase of $7.6 million in taxes payable, and an increase of $9.2 million in operating lease liabilities, all of which have a positive impact on operating cash flow. Our non-cash charges and other adjustments to our net loss during the year ended December 31, 2019 primarily consisted of $134.2 million of share-based compensation expense, $69.0 million of acquired in-process research and development related to upfront payments in our license agreements with Ambrx, BioAtla, Seattle Genetics and termination of our collaboration agreement with Merck KGaA, Darmstadt Germany, $8.0 million of non-cash interest expense and $18.6 million of depreciation expense, offset by $9.2 million related to deferred tax benefits, $3.9 million of amortization of bond discount and $5.6 million of disposal gain on available-for-sale securities and property and equipment.

Operating activities used $547.7 million of cash for the year ended December 31, 2018, which resulted principally from our net loss of $674.0 million and an increase in our net operating assets and liabilities of $17.2 million, offset by non-cash charges of $143.5 million. The increase in our net operating assets was primarily due to an increase of $46.3 million in prepaid expenses and other current assets primarily related to prepayments to CROs for clinical trials, an increase of $40.2 million in other non-current assets primarily related to prepayments for acquiring long-term assets, an increase of $11.6 million in accounts receivable on products sales from our collaboration with BMS, a decrease of $9.1 million in deferred revenue, an increase of $5.3 million in inventories and a decrease of $3.4 million in taxes payable, all of which had a negative impact on operating cash flow. These cash uses were partially offset by an increase of $74.0 million in accounts payable and accrued expenses related to payments for external research and development costs, payroll-related costs and selling, general and administrative expenses to support our growing business, an increase of $17.0 million in other long-term liabilities primary related to government subsidies, and a decrease in unbilled receivables of $7.7 million related to the BMS and other collaborations, all of which have a positive impact on operating cash flow. Our non-cash charges and other adjustments to our net loss during the year ended December 31, 2018 primarily consisted of $87.1 million of share-based compensation expense, $70.0 million of acquired in-process research and development related to upfront payments in our license agreements with Mirati and Zymeworks, $7.8 million of non-cash interest expense and $10.4 million of depreciation expense, offset by $21.9 million related to deferred tax benefits, $8.0 million of amortization of bond discount and $1.9 million of disposal gain on available-for-sale securities and property and equipment.

Investing Activities

Investing activities provided $554.2 million of cash for the year ended December 31, 2019, which was primarily due to cash proceeds from the sale and maturities of investment securities of $1.9 billion, partially offset by purchases of investment securities of $1.2 billion, $69.0 million of in-process research and development related to our license agreements with Ambrx, BioAtla, Seattle Genetics and the termination of our collaboration agreement with Merck KGaA, Darmstadt Germany, and capital expenditures of $89.6 million primarily related to our Guangzhou and Suzhou manufacturing facilities.

Investing activities used $637.6 million of cash for the year ended December 31, 2018, which was primarily due to purchases of investment securities of $2.6 billion, $70.0 million of in-process research and development related to our license agreements with Mirati and Zymeworks, $38.3 million of total costs related to the acquisition of our Changping facility, and capital expenditures of $70.3 million primarily related to our Guangzhou and Suzhou manufacturing facilities. These cash uses were offset by sales and maturities of investment securities of $2.2 billion.

Financing Activities

Financing activities provided $85.7 million of cash for the year ended December 31, 2019, which was primarily due to $67.5 million from bank loans to fund our Guangzhou manufacturing facility and Shanghai working capital and $47.0 million from the exercise of employee share options. These sources of cash were partially offset by $32.8 million for repayments of our Suzhou manufacturing facility and Shanghai working capital bank loans.

Financing activities provided $1.7 billion of cash for the year ended December 31, 2018, which was primarily due to $757.6 million of net proceeds from our follow-on public offering of ADSs in January 2018,

$869.7 million of net proceeds from our follow-on public offering in August 2019 and the initial listing of our ordinary shares on The Hong Kong Stock Exchange Limited in August 2018, $42.3 million from a new long-term bank loan to fund our Guangzhou manufacturing facility, and $29.7 million from the exercise of employee share options. These sources of cash were partially offset by a $8.7 million repayment of a bank loan for our Suzhou manufacturing facility.

Effects of Exchange Rates on Cash

We have substantial operations in the PRC, which generate a significant amount of RMB-denominated cash (from product sales) and require a significant amount of RMB-denominated cash to pay our obligations. Since the reporting currency of the Company is the U.S. dollar, periods of volatility may have a significant impact on our consolidated cash balances.

Operating Capital Requirements

We have exclusive rights to distribute and promote BMS's approved cancer therapies in China, for which we began recognizing revenue in the third quarter of 2017. We received accelerated approval from the FDA for BRUKINSA as a treatment for MCL in adult patients who have received at least one prior therapy on November 14, 2019; and regulatory approval from the NMPA for tislelizumab as a treatment for patients with cHL who have received at least two prior therapies on December 27, 2019. We launched BRUKINSA in the United States in November 2019 and expect to launch tislelizumab in China in 2020. However, we do not expect to generate significant revenue from product sales of our internally-developed drugs and drug candidates unless and until we obtain regulatory approval for additional indications of our currently approved drugs. We anticipate that we will continue to generate losses for the foreseeable future as we continue the development of, and seek regulatory approvals for, our drugs and drug candidates, commercialize our approved products and prepare for commercialization and begin to commercialize any future approved products. As a growing public company, we will continue to incur additional costs associated with our operations. In addition, we expect to incur significant commercialization expenses for product sales, marketing and manufacturing of our in-licensed drug products as well as our internally developed products that are either approved or in late-stage clinical trials. We may need additional funding prior to generating sufficient cash from operations to fund our continuing operations.

Based on our current operating plan, we expect that our existing cash, cash equivalents and short-term investments as of December 31, 2019, will enable us to fund our operating expenses and capital expenditures requirements for at least the next 12 months after the date that the financial statements included in this report are issued. In addition to the cash, cash equivalents and short-term investments as of December 31, 2019, we received $2.8 billion in cash upon Amgen's purchase of a 20.5% equity stake in the Company on January 2, 2020. We expect that our expenses will continue to increase substantially as we fund our ongoing research and clinical development efforts, including our ongoing and planned pivotal trials for zanubrutinib, tislelizumab and pamiparib, both in China and globally, and the shared development costs of Amgen's 20 oncology pipeline products and additional in-licensed drug candidates; our other ongoing and planned clinical trials; regulatory filing and registration of our late-stage drug candidates; expansion of our commercial operations in China and the U.S. and the launch of our in-licensed commercial drug portfolio and late-stage drug candidates globally; business development and manufacturing activities; and working capital and other general corporate purposes. We have based our estimates on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we expect in our current operating plan. Because of the numerous risks and uncertainties associated with the development and commercialization of our drugs and drug candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures necessary to complete the development and commercialization of our drug candidates.

Our future capital requirements will depend on many factors, including:

- our ability to successfully commercialize our internally developed and in-licensed drugs;
- the costs, timing and outcome of regulatory reviews and approvals;
- the ability of our drug candidates to progress through clinical development successfully;
- the initiation, progress, timing, costs and results of nonclinical studies and clinical trials for our other programs and potential drug candidates;

- the number and characteristics of the drugs and drug candidates we pursue;
- the costs of establishing or expanding commercial manufacturing capabilities or securing necessary supplies from third-party manufacturers;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the costs of establishing and expanding our commercial operations and the success of those operations;
- the extent to which we acquire or in-license other products and technologies; and
- our ability to maintain and establish collaboration arrangements on favorable terms, if at all.

Until such time, if ever, as we can generate substantial product revenue, we may be required to finance our cash needs through a combination of equity offerings, debt financings, collaboration agreements, strategic alliances, licensing arrangements, government grants and other available sources. Under SEC rules, we currently qualify as a "well-known seasoned issuer," which allows us to file shelf registration statements to register an unspecified amount of securities that are effective upon filing. On May 26, 2017, we filed such a shelf registration statement with the SEC for the issuance of an unspecified amount of ordinary shares (including in the form of ADSs), preferred shares, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, from time to time at prices and on terms to be determined at the time of any such offering. This registration statement was effective upon filing and will remain in effect for up to three years from filing, at which time we may file another shelf registration statement that will be effective for up to three years from filing. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of ADSs or ordinary shares. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends and may require the issuance of warrants, which could potentially dilute your ownership interest. If we raise additional funds through collaboration agreements, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or research programs or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings, collaborations or other sources when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market products or drug candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our significant contractual obligations as of payment due date by period at December 31, 2019:

	Payments Due by Period				
	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
			(in thousands)		
Contractual obligations					
Operating lease commitments	$ 41,319	13,064	20,519	7,609	127
Purchase commitments	128,532	46,850	43,089	26,793	11,800
Debt obligations	240,695	—	1,436	178,930	60,329
Capital commitments	42,074	42,074	—	—	—
Total	$452,620	$101,988	$65,044	$213,332	$72,256

Operating Lease Commitments

We lease office or manufacturing facilities in Beijing, Shanghai, Suzhou and Guangzhou, PRC and office facilities in the United States in California, Massachusetts and New Jersey and Basel, Switzerland

under non-cancelable operating leases expiring on different dates. Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases. The aggregate future minimum payments under these non-cancelable operating leases are summarized in the table above.

Purchase Commitments

As of December 31, 2019, purchase commitments amounted to $128.5 million, of which $97.2 million related to minimum purchase requirements for supply purchased from contract manufacturing organizations and $31.3 million related to binding purchase order obligations of inventory from BMS. We do not have any minimum purchase requirements for inventory from BMS.

Debt Obligations

Long-Term Bank Loans

On April 4, 2018, BeiGene Guangzhou Biologics Manufacturing Co., Ltd. ("BeiGene Guangzhou Factory") entered into a nine-year loan agreement with China Construction Bank to borrow RMB580.0 million at a floating interest rate benchmarked against prevailing interest rates of certain PRC financial institutions. The loan is secured by BeiGene Guangzhou Factory's land use right. Interest expense is paid quarterly until the loan is fully settled. As of December 31, 2019, we have drawn down the entire $83.3 million (RMB580.0 million) in aggregate principal amount of this loan. Maturity dates range from 2021 to 2027.

Shareholder Loan

On March 7, 2017, BeiGene Biologics entered into a Shareholder Loan Contract with Guangzhou GET Technology Development Co., Ltd. (now Guangzhou High-tech Zone Technology Holding Group Co., Ltd.) ("GET"), pursuant to which, GET provided a shareholder loan to BeiGene Biologics in the principal amount of RMB900.0 million at a fixed 8% annual interest rate. The term of the shareholder loan is 72 months, commencing from the actual drawdown date of April 14, 2017 and ending on April 13, 2023, unless converted earlier. On April 14, 2017, we drew down the entire RMB900.0 million from GET, which remains outstanding as of December 31, 2019.

Capital Commitments

We had capital commitments amounting to $42.1 million for the acquisition of property, plant and equipment as of December 31, 2019, which was primarily for BeiGene Guangzhou Factory's manufacturing facility and expansion of BGC's research and development activities in Guangzhou, China.

Other Business Agreements

We enter into agreements in the ordinary course of business with CROs to provide research and development services. These contracts are generally cancelable at any time by us with prior written notice.

We also enter into collaboration agreements with institutions and companies to license intellectual property. We may be obligated to make future development, regulatory and commercial milestone payments and royalty payments on future sales of specified products associated with its collaboration agreements. Payments under these agreements generally become due and payable upon achievement of such milestones or sales. These commitments are not recorded on our balance sheet because the achievement and timing of these milestones are not fixed and determinable. When the achievement of these milestones or sales have occurred, the corresponding amounts are recognized in our financial statements.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our balance sheets.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenues, costs and expenses. We evaluate our estimates and judgments on an ongoing basis, and our actual results may differ from these estimates. We base our estimates on historical experience, known trends and events, contractual milestones and other various factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources.

Our most critical accounting policies are summarized below. See Note 2 to our consolidated financial statements included in this Annual Report for a description of our other significant accounting policies.

Revenue Recognition

Effective January 1, 2018, we adopted Accounting Standards Codification, Topic 606, Revenue from Contracts with Customers ("ASC 606"). For further information regarding the impact of adoption, see Note 2 Recent Accounting Pronouncements.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price, including variable consideration, if any; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration to which it is entitled in exchange for the goods or services it transfers to the customer.

Once a contract is determined to be within the scope of ASC 606 at contract inception, we review the contract to determine which performance obligations it must deliver and which of these performance obligations are distinct. We recognize as revenue the amount of the transaction price that is allocated to each performance obligation when that performance obligation is satisfied or as it is satisfied.

Product Revenue

Our product revenues are generated from the sale of ABRAXANE, REVLIMID, and VIDAZA to our product distributor in China, our sole customer in China. The first tier distributor subsequently resells the products to second tier distributors, who ultimately sell the products to health care providers and patients. Following FDA approval on November 14, 2019, we began selling our first internally developed drug, BRUKINSA, in the United States to specialty pharmacies and specialty distributors, our U.S. customers. The specialty pharmacies and specialty distributors subsequently resell the product to health care providers and patients. We are the principal under the product sales as we control the products with the ability to direct the use of, and obtain substantially all the remaining benefits from the products before they are sold to the customer. For product sales transactions, we have a single performance obligation which is to sell the products to our customer. We include variable consideration in the transaction price to the extent it is probable that a significant reversal will not occur and estimate variable consideration from rebates, chargebacks, trade discounts and allowances, sales returns allowances and other incentives using the expected value method. Revenues for product sales are recognized at a point in time when the single performance obligation is satisfied upon delivery to the customer. Our payment terms are approximately 60-90 days. Actual amounts of consideration ultimately received may differ from our estimates. We will reassess estimates for variable consideration periodically. If actual results in the future vary from our estimates, we will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known.

In China, rebates, including price compensation credits, are offered to distributors, consistent with pharmaceutical industry practices. We record a provision for rebates at the time of sale based on contracted

rates and historical redemption rates. Assumptions used to establish the provision include the level of distributor inventories, sales volumes and contract pricing and estimated acceptance of government pricing or reimbursement amounts (such as provincial acceptance of the National Reimbursement Drug List pricing in the PRC). We regularly review the information related to these estimates and adjust the provision accordingly.

In the United States, estimates for variable consideration for which reserves are established at the time of sale include government rebates, chargebacks, trade discounts and allowances, sales returns allowances and other incentives that are offered within contracts between the Company and our U.S. customers, health care providers and other indirect customers. Where appropriate, these estimates take into consideration a range of possible outcomes that are probability-weighted for relevant factors such as our historical experience, current contractual and statutory requirements, specific known market events and trends, industry data and forecasted customer buying and payment patterns. U.S. product revenues and related reserves for variable consideration were not significant for the year ended December 31, 2019 as we did not begin generating product revenue in the United States until after BRUKINSA received FDA approval on November 14, 2019.

We base our sales returns allowance on estimated distributor inventories, customer demand as reported by third-party sources, and actual returns history, as well as other factors, as appropriate. For newly launched products where actual returns history is not yet available, the sales returns allowance is initially calculated based on benchmarking data from similar products and industry experience. If the historical or benchmarking data we use to calculate these estimates do not properly reflect future returns, then a change in the allowance would be made in the period in which such a determination is made and revenues in that period could be materially affected. Any changes from the historical trend rates are considered in determining the current sales return allowance. To date, sales returns have not been significant.

Collaboration Revenue

At contract inception, we analyze our collaboration arrangements to assess whether they are within the scope of ASC 808, Collaborative Arrangements ("ASC 808") to determine whether such arrangements involve joint operating activities performed by parties that are both active participants in the activities and exposed to significant risks and rewards dependent on the commercial success of such activities. For collaboration arrangements within the scope of ASC 808 that contain multiple elements, we first determine which elements of the collaboration are deemed to be within the scope of ASC 808 and those that are more reflective of a vendor-customer relationship and therefore within the scope of ASC 606. For elements of collaboration arrangements that are accounted for pursuant to ASC 808, an appropriate recognition method is determined and applied consistently.

In determining the appropriate amount of revenue to be recognized as we fulfill our obligations under each of our agreements, we perform the five-step model under ASC 606 noted above.

Our collaborative arrangements may contain more than one unit of account, or performance obligation, including grants of licenses to intellectual property rights, agreements to provide research and development services and other deliverables. The collaborative arrangements do not include a right of return for any deliverable. As part of the accounting for these arrangements, we must develop assumptions that require judgment to determine the stand-alone selling price for each performance obligation identified in the contract. In developing the stand-alone selling price for a performance obligation, we consider competitor pricing for a similar or identical product, market awareness of and perception of the product, expected product life and current market trends. In general, the consideration allocated to each performance obligation is recognized when the respective obligation is satisfied either by delivering a good or providing a service, limited to the consideration that is not constrained. Non-refundable payments received before all of the relevant criteria for revenue recognition are satisfied are recorded as advances from customers.

Licenses of Intellectual Property: Upfront non-refundable payments for licensing our intellectual property are evaluated to determine if the license is distinct from the other performance obligations identified in the arrangement. For licenses determined to be distinct, we recognize revenues from non-refundable, up-front fees allocated to the license at a point in time, when the license is transferred to the licensee and the licensee is able to use and benefit from the license.

Research and Development Services: The portion of the transaction price allocated to research and development services performance obligations is deferred and recognized as collaboration revenue overtime as delivery or performance of such services occurs. R&D reimbursement revenue for revenue attributable to the clinical trials that BMS opted into is recognized as delivery or performance of such services occurs.

Milestone Payments: At the inception of each arrangement that includes development milestone payments, we evaluate whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestones related to our development-based activities may include initiation of various phases of clinical trials. Due to the uncertainty involved in meeting these development-based targets, they are generally fully constrained at contract inception. We will assess whether the variable consideration is fully constrained each reporting period based on the facts and circumstances surrounding the clinical trials. Upon changes to constraint associated with the developmental milestones, variable consideration will be included in the transaction price when a significant reversal of revenue recognized is not expected to occur and allocated to the separate performance obligations. Regulatory milestones are fully constrained until the period in which those regulatory approvals are achieved due to the inherent uncertainty with the approval process. Regulatory milestones are included in the transaction price in the period regulatory approval is obtained.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Research and Development Expenses

Research and development expenses represent costs associated with the collaborative arrangements, which primarily include (1) payroll and related costs (including share-based compensation) associated with research and development personnel; (2) costs related to clinical trials and preclinical testing of our technologies under development; (3) costs to develop the product candidates, including raw materials and supplies, product testing, depreciation, and facility related expenses; (4) expenses for research services provided by universities and contract laboratories, including sponsored research funding; and (5) other research and development expenses. Research and development expenses are charged to expense as incurred when these expenditures relate to our research and development services and have no alternative future uses.

Clinical trial costs are a significant component of our research and development expenses. We have a history of contracting with third parties that perform various clinical trial activities on behalf of us in the ongoing development of our product candidates. Expenses related to clinical trials are accrued based on our estimates of the actual services performed by the third parties for the respective period. If the contracted amounts are modified (for instance, as a result of changes in the clinical trial protocol or scope of work to be performed), we will modify the related accruals accordingly on a prospective basis. Revisions in the scope of a contract are charged to expense in the period in which the facts that give rise to the revision become reasonably certain.

The process of estimating our research and development expenses involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated costs incurred for the services when we have not yet been invoiced or otherwise notified of the actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advanced payments. We make estimates of our expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting expenses that are too high or too low in any particular period. To date, we have not made any material adjustments to our prior estimates of research and development expenses.

Acquired In-Process Research and Development Expense

We have acquired rights to develop and commercialize drug products and product candidates. Upfront payments that relate to the acquisition of a new drug compound, as well as pre-commercial milestone payments, are immediately expensed as acquired in-process research and development in the period in which they are incurred, provided that the new drug compound did not also include processes or activities that would constitute a "business" as defined under GAAP, the drug has not achieved regulatory approval for marketing and, absent obtaining such approval, has no established alternative future use. Milestone payments made to third parties subsequent to regulatory approval are capitalized as intangible assets and amortized over the estimated remaining useful life of the related product. Royalties owed on sales of the products licensed pursuant to the agreements are expensed in the period the related revenues are recognized**.**

Share-Based Compensation

Awards Granted to Employees

We apply ASC 718, *Compensation — Stock Compensation* ("ASC 718") to account for our employee share-based payments. In accordance with ASC 718, we determine whether an award should be classified and accounted for as a liability award or equity award. All our grants of share-based awards to employees were classified as equity awards and are recognized in the financial statements based on their grant date fair values. We have elected to recognize compensation expense using the straight-line method for all employee equity awards granted with graded vesting based on service conditions provided that the amount of compensation cost recognized at any date is at least equal to the portion of the grant-date value of the options that are vested at that date. We use the accelerated method for all awards granted with graded vesting based on performance conditions. To the extent the required vesting conditions are not met resulting in the forfeiture of the share-based awards, previously recognized compensation expense relating to those awards are reversed. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in the subsequent period if actual forfeitures differ from initial estimates.

Forfeiture rates are estimated based on historical and future expectations of employee turnover rates and are adjusted to reflect future changes in circumstances and facts, if any. Share-based compensation expense is recorded net of estimated forfeitures such that expense is recorded only for those share-based awards that are expected to vest. To the extent we revise these estimates in the future, the share-based payments could be materially impacted in the period of revision, as well as in following periods. We, with the assistance of an independent third-party valuation firm, determined the estimated fair value of the share options granted to employees using a binomial option pricing model.

Awards Granted to Non-Employees

We have accounted for equity instruments issued to non-employees in accordance with the provisions of ASC 718, *Share-based payments*, and ASC 505, *Equity*. All transactions in which goods or services are received in exchange for equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the date on which the counterparty's performance is completed as there is no associated performance commitment. The expense is recognized in the same manner as if we had paid cash for the services provided by the non-employees in accordance with ASC 505-50, *Equity-based payments to non-employees*. We estimate the fair value of share options granted to non-employees using the same method as employees.

Modification of Awards

A change in any of the terms or conditions of the awards is accounted for as a modification of the award. Incremental compensation cost is measured as the excess, if any, of the fair value of the modified award over the fair value of the original award immediately before its terms are modified, measured based on the fair value of the awards and other pertinent factors at the modification date. For vested awards, we recognize incremental compensation cost in the period the modification occurs. For unvested awards, we recognize over the remaining requisite service period, the sum of the incremental compensation cost and the remaining unrecognized compensation cost for the original award on the modification date. If the fair

value of the modified award is lower than the fair value of the original award immediately before modification, the minimum compensation cost we recognize is the cost of the original award.

Significant Factors, Assumptions, and Methodologies Used in Determining Fair Value

The fair value of each share option grant is estimated using the binomial option-pricing model. The model requires the input of highly subjective assumptions including the estimated expected share price volatility and, the share price upon which (i.e. the exercise multiple) the employees are likely to exercise share options. The trading history and observation period of our own share price movement has not been long enough to match the life of the share option. Therefore, we estimate our expected share price volatility based on the historical volatility of a group of similar companies, which are publicly-traded. When selecting these public companies on which we have based our expected share price volatility, we selected companies with characteristics similar to us, including the invested capital's value, business model, development stage, risk profiles, position within the industry, and with historical share price information sufficient to meet the contractual life of our share-based awards. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own share price becomes available. For the exercise multiple, we were not able to develop an exercise pattern as reference, thus the exercise multiple is based on management's estimation, which we believe is representative of the future exercise pattern of the options. The risk-free interest rates for the periods within the contractual life of the option are based on the U.S. Treasury yield curve in effect during the period the options were granted. Expected dividend yield is based on the fact that we have never paid, and do not expect to pay cash dividends in the foreseeable future.

The assumptions adopted to estimate the fair value of share options using the binomial option pricing model were as follows:

	Year Ended December 31,	
	2019	2018
Risk-free interest rate	1.5% ~ 2.8%	2.5% ~ 3.1%
Expected exercise multiple	2.2 ~ 2.8	2.2 ~ 2.8
Expected volatility	58% ~ 60%	60% ~ 64%
Expected dividend yield	0%	0%
Contractual life (years)	10	10

We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record share-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised.

These assumptions represented our best estimates, but the estimates involve inherent uncertainties and the application of our judgment. As a result, if factors change and we use significantly different assumptions or estimates when valuing our share options, our share-based compensation expense could be materially different.

The fair value of restricted shares and restricted share units are based on the closing market price of our ADSs on the NASDAQ Global Select Market on the date of grant.

The following table summarizes total share-based compensation expense recognized for the years ended December 31, 2019 and 2018:

	Year Ended December 31,	
	2019	2018
	(in thousands)	
Research and development	$ 76,293	$54,384
Selling, general and administration	57,861	32,743
Total	$134,154	$87,127

As of December 31, 2019, there was $364.2 million of total unrecognized share-based compensation expense, net of estimated forfeitures, related to unvested share-based awards which are expected to be recognized over a weighted-average period of 2.4 years. As of December 31, 2018, there was $289.9 million of total unrecognized share-based compensation expense, net of estimated forfeitures, related to unvested share-based awards which are expected to be recognized over a weighted-average period of 2.6 years. In future periods, our share-based compensation expense is expected to increase as a result of recognizing our existing unrecognized share-based compensation for awards that will vest and as we issue additional share-based awards to attract and retain our employees.

Income Taxes

We use the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using enacted tax rates that will be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

We evaluate our uncertain tax positions using the provisions of ASC 740, *Income Taxes*, which prescribes a recognition threshold that a tax position is required to meet before being recognized in the financial statements. We recognize in the financial statements the benefit of a tax position which is "more likely than not" to be sustained under examination based solely on the technical merits of the position assuming a review by tax authorities having all relevant information. Tax positions that meet the recognition threshold are measured using a cumulative probability approach, at the largest amount of tax benefit that has a greater than fifty percent likelihood of being realized upon settlement. It is our policy to recognize interest and penalties related to unrecognized tax benefits, if any, as a component of income tax expense.

Recent Accounting Pronouncements

See Note 2 to our consolidated financial statements included in this Annual Report for information regarding recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest and Credit Risk

Financial instruments that are potentially subject to credit risk consist of cash and cash equivalents, restricted cash and short term investments. The carrying amounts of cash, cash equivalents, restricted cash and short term investments represent the maximum amount of loss due to credit risk. We had cash and cash equivalents of $618.0 million, $712.9 million and $239.6 million, restricted cash of $2.8 million, $27.8 million and nil, and short-term investments of $364.7 million, $1.1 billion and $597.9 million at December 31, 2019, 2018 and 2017, respectively. Our cash and cash equivalents are deposited with various major reputable financial institutions located within or without the PRC. The deposits placed with these financial institutions are not protected by statutory or commercial insurance. In the event of bankruptcy of one of these financial institutions, we may be unlikely to claim our deposits back in full. We believe that these financial institutions are of high credit quality, and we continually monitor the credit worthiness of these financial institutions. At December 31, 2019, our short term investments consisted primarily of U.S. treasury securities. We believe that the U.S. treasury securities is of high credit quality and continually monitor the credit worthiness of these institutions.

The primary objectives of our investment activities are to preserve principal, provide liquidity and maximize income without significant increasing risk. Our primary exposure to market risk relates to fluctuations in the interest rates which are affected by changes in the general level of PRC and U.S. interest rates. Given the short-term nature of our cash equivalents, we believe that a sudden change in market interest rates would not be expected to have a material impact on our financial condition and/or results of operation. We estimate that a hypothetical 100-basis point change in market interest rates would impact the fair value of our investment portfolio as of December 31, 2019 by $1.1 million.

We do not believe that our cash, cash equivalents and short-term investments have significant risk of default or illiquidity. While we believe our cash, cash equivalents and short-term investments do not contain excessive risk, we cannot provide absolute assurance that in the future investments will not be subject to adverse changes in market value.

Currency Convertibility Risk

A significant portion of our expenses, assets and liabilities are denominated in RMB. On January 1, 1994, the PRC government abolished the dual rate system and introduced a single rate of exchange as quoted daily by the People's Bank of China (the "PBOC"). However, the unification of exchange rates does not imply that the RMB may be readily convertible into U.S. dollars or other foreign currencies. All foreign exchange transactions continue to take place either through the PBOC or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the PBOC. Approvals of foreign currency payments by the PBOC or other institutions require submitting a payment application form together with suppliers' invoices, shipping documents and signed contracts.

Additionally, the value of the RMB is subject to changes in central government policies and international economic and political developments affecting supply and demand in the PRC foreign exchange trading system market.

Foreign Currency Exchange Rate Risk

We are exposed to foreign exchange risk arising from various currency exposures. Our reporting currency is the U.S. dollar, but a portion of our operating transactions and assets and liabilities are in other currencies, such as RMB, Australian dollar and Euro. We do not believe that we currently have any significant direct foreign exchange risk and have not used any derivative financial instruments to hedge exposure to such risk.

RMB is not freely convertible into foreign currencies for capital account transactions. The value of RMB against the U.S. dollar and other currencies is affected by, among other things, changes in China's political and economic conditions and China's foreign exchange prices. From July 21, 2005, the RMB is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. For the RMB against U.S. dollars, there were depreciation of approximately 1.3%, depreciation of approximately 5.7% and appreciation of approximately 6.5% in the year ended December 31, 2019, 2018 and 2017. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the U.S. dollar in the future.

To the extent that we need to convert U.S. dollars into RMB for capital expenditures and working capital and other business purposes, appreciation of RMB against the U.S. dollar would have an adverse effect on the RMB amount we would receive from the conversion. Conversely, if we decide to convert RMB into U.S. dollars for the purpose of making payments for dividends on our ordinary shares, strategic acquisitions or investments or other business purposes, appreciation of the U.S. dollar against RMB would have a negative effect on the U.S. dollar amount available to us.

In addition, a significant depreciation of the RMB against the U.S. dollar may significantly reduce the U.S. dollar equivalent of our receivables, earnings or losses. Further, volatility in exchange rate fluctuations may have a significant impact on the foreign currency translation adjustments recorded in other comprehensive income (loss).

Effects of Inflation

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation has had a material effect on our results of operations during the year ended December 31, 2019.

Item 8. Financial Statements and Supplementary Data

The financial statements required to be filed pursuant to this item are appended to this Annual Report. An index of those financial statements is in "Part IV — Item 15 — Exhibits, Financial Statement Schedules."

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on their evaluation, required by paragraph (b) of Rules 13a-15 or 15d-15, promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act are effective, at a reasonable assurance level, as of December 31, 2019, to ensure that information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in U.S. Securities and Exchange Commission rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurances of achieving the desired control objectives, and management necessarily was required to apply its judgment in designing and evaluating the controls and procedures.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment and those criteria, management concluded that we maintained effective internal control over financial reporting as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019, has been tested by Ernst & Young Hua Ming LLP, our independent registered public accounting firm, as stated in their report which is included in "Item 8 — Financial Statements and Other Supplementary Data" in this Annual Report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the three months ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2019.

Item 11. Executive Compensation

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2019.

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

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2019.

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

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2019.

Item 14. Principal Accounting Fees and Services

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the U.S. Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2019.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The financial statements listed in the Index to Consolidated Financial Statements beginning on page F-1 are filed as part of this Annual Report.

No financial statement schedules have been filed as part of this Annual Report because they are not applicable, not required or the information required is shown in the financial statements or the notes thereto.

The exhibits filed as part of this Annual Report are set forth on the Exhibit Index immediately following our consolidated financial statements. The Exhibit Index is incorporated herein by reference.

Item 16. Form 10-K Summary

Not applicable.

BEIGENE, LTD.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of BeiGene, Ltd.:

Opinion on the Financial Statements

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 2, 2020 expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for revenue from contracts with customers in the year ended December 31, 2018 and its method for accounting for leases in the year ended December 31, 2019.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Accrual of research and development expenses

Description of the Matter

During the year ended December 31, 2019, the Company recognized $927.3 million in research and development ("R&D") expenses. The balance of accrued external R&D activities related expenses as of December 31, 2019 amounted to approximately $62.8 million. As described in Note 2 to the consolidated financial statements, R&D expenses primarily include costs related to clinical trials and preclinical testing paid to third-party contract research organizations and contract manufacturing organizations (collectively referred as "Outsourced Service Providers").

Auditing the accrual of R&D expenses related to Outsourced Service Providers is complex because billing terms under contracts with Outsourced Service Providers often do not coincide with the timing of when the work is performed, which in turn requires management to make estimates of outstanding obligations as of period end. These estimates are based on a number of factors, including management's knowledge of the R&D programs and activities associated with timelines, invoicing to date, and the provisions in the contracts. Significant management judgments and estimates are required in determining the accrued balances at the end of any reporting period and changes in those estimates can have a material effect on the amount of R&D expenses recognized. This in turn led to significant auditor judgment, subjectivity and effort in performing procedures to evaluate audit evidence for these estimates.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the accrual of the R&D expenses. For example, we tested controls over management's review of the R&D accrual method and the estimates of the actual services performed by the Outsourced Service Providers.

To test the accrual of R&D expenses, our audit procedures included, among others, reading the contracts with Outsourced Service Providers on a sample basis and understanding and testing management's process for developing estimates based on the progress of the R&D activities. Testing management's process for developing the accrual estimates involved evaluating the reasonableness of the assumptions used in the calculation related to the R&D programs and associated timelines, invoicing to date and the provisions in the contracts. We then evaluated the adequacy of the accrual of R&D expenses by comparing it to the subsequent progress billings issued by the Outsourced Service Providers. We also assessed the appropriateness of the accrual method used by the Company in accordance with U.S. generally accepted accounting principles, including the adequacy of related disclosures in the consolidated financial statements.

/s/ Ernst & Young Hua Ming LLP

We have served as the Company's auditor since 2014
Beijing, People's Republic of China
March 2, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of BeiGene, Ltd.:

Opinion on Internal Control over Financial Reporting

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2019, and the related notes and our report dated March 2, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young Hua Ming LLP

Beijing, People's Republic of China
March 2, 2020

BEIGENE, LTD.

CONSOLIDATED BALANCE SHEETS

(Amounts in thousands of U.S. Dollars ("$"), except for number of shares and per share data)

	Note	As of December 31, 2019	As of December 31, 2018
		$	$
Assets			
Current assets:			
Cash and cash equivalents		618,011	712,937
Short-term restricted cash	5	288	14,544
Short-term investments	6	364,728	1,068,509
Accounts receivable		70,878	41,056
Inventories	7	28,553	16,242
Prepaid expenses and other current assets	13	90,238	90,554
Total current assets		1,172,696	1,943,842
Long-term restricted cash	5	2,476	13,232
Property and equipment, net	10	242,402	157,061
Land use right, net	2	—	45,058
Operating lease right-of-use assets	9	82,520	—
Intangible assets, net	11	5,846	7,172
Deferred tax assets	12	37,894	29,542
Other non-current assets	13	68,455	53,777
Total non-current assets		439,593	305,842
Total assets		1,612,289	2,249,684
Liabilities and shareholders' equity			
Current liabilities:			
Accounts payable		122,488	113,283
Accrued expenses and other payables	13	163,556	100,414
Deferred revenue, current portion		—	18,140
Tax payable	12	13,454	5,888
Operating lease liabilities, current portion	9	10,814	—
Long-term bank loans, current portion	14	—	8,727
Total current liabilities		310,312	246,452
Non-current liabilities:			
Long-term bank loans, non-current portion	14	83,311	40,785
Shareholder loan	15	157,384	148,888
Operating lease liabilities, non-current portion	9	25,833	—
Deferred tax liabilities	12	10,532	11,139
Other long-term liabilities	13	46,562	48,773
Total non-current liabilities		323,622	249,585
Total liabilities		633,934	496,037
Commitments and contingencies	23		
Equity:			
Ordinary shares, $0.0001 par value per share; 9,500,000,000 shares authorized; 801,340,698 and 776,263,184 shares issued and outstanding as of December 31, 2019 and 2018, respectively		79	77
Additional paid-in capital		2,925,970	2,744,814
Accumulated other comprehensive (loss) income	19	(8,001)	1,526
Accumulated deficit		(1,955,843)	(1,007,215)
Total BeiGene, Ltd. shareholders' equity		962,205	1,739,202
Noncontrolling interest		16,150	14,445
Total equity		978,355	1,753,647
Total liabilities and equity		1,612,289	2,249,684

The accompanying notes are an integral part of these consolidated financial statements.

BEIGENE, LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS

(Amounts in thousands of U.S. Dollars ("$"), except for number of shares and per share data)

	Note	Year Ended December 31, 2019	2018	2017
		$	$	$
Revenue				
Product revenue, net	16	222,596	130,885	24,428
Collaboration revenue	3	205,616	67,335	213,959
Total revenues		428,212	198,220	238,387
Expenses				
Cost of sales — product		(71,190)	(28,705)	(4,974)
Research and development		(927,338)	(679,005)	(269,018)
Selling, general and administrative		(388,249)	(195,385)	(62,602)
Amortization of intangible assets		(1,326)	(894)	(250)
Total expenses		(1,388,103)	(903,989)	(336,844)
Loss from operations		(959,891)	(705,769)	(98,457)
Interest income (expense), net		9,131	13,947	(4,108)
Other income, net		7,174	1,993	11,501
Loss before income tax expense		(943,586)	(689,829)	(91,064)
Income tax (expense) benefit	12	(6,992)	15,796	(2,235)
Net loss		(950,578)	(674,033)	(93,299)
Less: net loss attributable to noncontrolling interests		(1,950)	(264)	(194)
Net loss attributable to BeiGene, Ltd.		(948,628)	(673,769)	(93,105)
Net loss per share attributable to BeiGene, Ltd., basic and diluted	17	(1.22)	(0.93)	(0.17)
Weighted-average shares outstanding, basic and diluted	17	780,701,283	720,753,819	543,185,460
Net loss per American Depositary Share ("ADS"), basic and diluted		(15.80)	(12.15)	(2.23)
Weighted-average ADSs outstanding, basic and diluted		60,053,945	55,442,601	41,783,497

The accompanying notes are an integral part of these consolidated financial statements.

BEIGENE, LTD.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(Amounts in thousands of U.S. Dollars ("$"), except for number of shares and per share data)

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Net loss	(950,578)	(674,033)	(93,299)
Other comprehensive loss, net of tax of nil:			
Foreign currency translation adjustments	(9,424)	(478)	851
Unrealized holding (loss) gain, net	(448)	2,133	(296)
Comprehensive loss	(960,450)	(672,378)	(92,744)
Less: comprehensive loss attributable to noncontrolling interests	(2,295)	(352)	(105)
Comprehensive loss attributable to BeiGene, Ltd.	(958,155)	(672,026)	(92,639)

The accompanying notes are an integral part of these consolidated financial statements.

BEIGENE, LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in thousands of U.S. Dollars ("$"), except for number of shares and per share data)

	Note	Year Ended December 31, 2019	2018	2017
		$	$	$
Cash flows from operating activities:				
Net loss		(950,578)	(674,033)	(93,299)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization expense		18,617	10,388	4,758
Share-based compensation expense	18	134,154	87,127	42,863
Acquired in-process research and development		69,000	70,000	—
Non-cash interest expense		8,046	7,820	7,035
Deferred income tax benefits		(9,232)	(21,949)	(5,845)
Other items, net		(9,443)	(9,856)	41
Changes in operating assets and liabilities:				
Accounts receivable		(29,822)	(11,628)	(29,428)
Inventories		(12,311)	(5,312)	(10,930)
Prepaid expenses and other current assets		45	(38,607)	(28,880)
Operating lease right-of-use assets		(11,484)	—	—
Other non-current assets		(20,782)	(40,228)	(29,701)
Accounts payable		2,224	23,470	55,298
Accrued expenses and other payables		64,030	50,543	24,978
Tax payable		7,566	(3,355)	7,426
Deferred revenue		(27,982)	(9,059)	37,041
Operating lease liabilities		9,201	—	—
Other long-term liabilities		8,482	16,962	31,395
Net cash (used in) provided by operating activities		(750,269)	(547,717)	12,752
Cash flows from investing activities:				
Purchases of property and equipment		(89,612)	(70,283)	(46,374)
Purchase of intangible assets		—	(553)	—
Payment for asset acquisition, net of cash acquired	4	—	(38,298)	—
Payment for the acquisition of land use right		—	—	(12,354)
Cash acquired in business combination, net of cash paid	4	—	—	19,916
Purchases of investments		(1,169,300)	(2,635,686)	(741,296)
Proceeds from sale or maturity of available-for-sale securities		1,882,075	2,177,207	423,789
Purchase of in-process research and development		(69,000)	(70,000)	—
Net cash provided by (used in) investing activities		554,163	(637,613)	(356,319)
Cash flows from financing activities:				
Proceeds from public offering, net of underwriter discount	20	—	758,001	189,191
Payment of public offering cost	20	—	(414)	(674)
Proceeds from public offering and HK IPO, net of underwriter discount	20	—	875,368	—
Payment of public offering and HK IPO costs	20	—	(5,659)	—
Proceeds from sale of ordinary shares, net of cost	20	—	—	149,928
Proceeds from long-term bank loans	14	67,489	42,315	—
Repayment of long-term bank loans	14	(32,813)	(8,736)	—
Proceeds from short-term loan		—	—	2,470
Repayment of short-term loan		—	—	(2,470)
Capital contribution from noncontrolling interest		4,000	—	14,527
Proceeds from shareholder loan	15	—	—	132,757
Proceeds from option exercises and employee share purchase plan		47,004	29,662	4,627
Net cash provided by financing activities		85,680	1,690,537	490,356
Effect of foreign exchange rate changes, net		(9,512)	(4,096)	5,299
Net (decrease) increase in cash, cash equivalents, and restricted cash		(119,938)	501,111	152,088
Cash, cash equivalents, and restricted cash, beginning of year		740,713	239,602	87,514
Cash, cash equivalents, and restricted cash, end of year		620,775	740,713	239,602
Supplemental cash flow disclosures:				
Cash and cash equivalents		618,011	712,937	239,602
Short-term restricted cash		288	14,544	—
Long-term restricted cash		2,476	13,232	—
Income taxes paid		8,984	12,361	29,286
Interest paid		4,315	2,209	1,260
Non-cash activities:				
Discount provided on sale of ordinary shares for business combination	4	—	—	23,606
Acquisitions of equipment included in accounts payable		29,086	22,105	2,215
Purchase of in-process research and development included in accounts payable		—	19,000	—
Changes in operating assets and liabilities adjusted through accumulated deficit		—	2,291	—

The accompanying notes are an integral part of these consolidated financial statements.

BEIGENE, LTD.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Amounts in thousands of U.S. Dollars ("$"), except for number of shares and per share data)

	Attributable to BeiGene, Ltd.							
	Ordinary Shares							
	Shares	Amount	Additional Paid-In Capital	Accumulated OCI	Accumulated Deficit	Total	Non-Controlling Interests	Total
Balance at December 31, 2016	515,833,609	52	591,213	(946)	(237,412)	352,907	—	352,907
Issuance of ordinary shares in secondary follow-on offering, net of transaction costs	36,851,750	4	188,513	—	—	188,517	—	188,517
Proceeds from sale of ordinary shares, net of cost	32,746,416	3	149,925	—	—	149,928	—	149,928
Discount on the sale of ordinary shares	—	—	23,606	—	—	23,606	—	23,606
Contributions from shareholders (Note 8)	—	—	—	—	—	—	14,527	14,527
Share-based compensation	—	—	42,863	—	—	42,863	—	42,863
Issuance of shares reserved for share option exercises	787,571	—	—	—	—	—	—	—
Exercise of options	5,852,984	—	4,627	—	—	4,627	—	4,627
Other comprehensive income	—	—	—	466	—	466	89	555
Net loss	—	—	—	—	(93,105)	(93,105)	(194)	(93,299)
Balance at December 31, 2017	592,072,330	59	1,000,747	(480)	(330,517)	669,809	14,422	684,231
Adjustment to opening balance of equity	—	—	—	263	(2,929)	(2,666)	375	(2,291)
Balance at January 1, 2018	592,072,330	59	1,000,747	(217)	(333,446)	667,143	14,797	681,940
Issuance of ordinary shares in connection with follow-on public offering	102,970,400	10	757,577	—	—	757,587	—	757,587
Issuance of ordinary shares in connection with global offering and HK IPO	65,600,000	7	869,702	—	—	869,709	—	869,709
Issuance of shares reserved for share option exercises	1,299,186	—	—	—	—	—	—	—
Share-based compensation	—	—	87,127	—	—	87,127	—	87,127
Exercise of options and release of RSUs	14,321,268	1	29,661	—	—	29,662	—	29,662
Other comprehensive income	—	—	—	1,743	—	1,743	(88)	1,655
Net loss	—	—	—	—	(673,769)	(673,769)	(264)	(674,033)
Balance at December 31, 2018	776,263,184	77	2,744,814	1,526	(1,007,215)	1,739,202	14,445	1,753,647
Contributions from shareholders	—	—	—	—	—	—	4,000	4,000
Exercise of options, ESPP and release of RSUs	20,571,675	2	47,002	—	—	47,004	—	47,004
Issuance of shares reserved for share option exercises	4,505,839	—	—	—	—	—	—	—
Share-based compensation	—	—	134,154	—	—	134,154	—	134,154
Other comprehensive loss	—	—	—	(9,527)	—	(9,527)	(345)	(9,872)
Net loss	—	—	—	—	(948,628)	(948,628)	(1,950)	(950,578)
Balance at December 31, 2019	801,340,698	79	2,925,970	(8,001)	(1,955,843)	962,205	16,150	978,355

The accompanying notes are an integral part of these consolidated financial statements.

1. Organization

BeiGene, Ltd. (the "Company") is a global commercial-stage biotechnology company focused on developing and commercializing innovative molecularly-targeted and immuno-oncology cancer therapeutics. The Company started as a research and development company in Beijing in 2010. Over the last ten years, it has developed into a fully-integrated global biotechnology company, with significant commercial, manufacturing, and research and development capabilities.

The Company has built substantial commercial capabilities in China and the United States, and is currently marketing two internally-developed drugs and three in-licensed drugs. The Company also anticipates introducing five more in-licensed drugs into the China market in the next one to two years. In the United States, the Company markets BRUKINSA™ (zanubrutinib) for adult patients with mantle cell lymphoma ("MCL") who have received at least one prior therapy and in China, the Company has received marketing approval and are in the process of launching tislelizumab for patients with classical Hodgkin's Lymphoma ("cHL") who have received at least two prior therapies. The Company has filed four additional supplementary new drug applications ("sNDA") for regulatory approvals in China and is planning for launches in these additional indications in 2020. The Company's in-licensed portfolio includes ABRAXANE®, REVLIMID® and VIDAZA®, which it has been marketing in China since 2017 under a license from Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"). The Company plans on launching additional in-licensed products in China from its collaborations, including XGEVA® (denosumab), KYPROLIS® (carfilzomib) and BLINCYTO® (blinatumomab) from Amgen Inc. ("Amgen"), and SYLVANT® (siltuximab) and QARZIBA® ▼ (dinutuximab beta), from EUSA Pharma ("EUSA").

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The consolidated financial statements include the financial statements of the Company and its subsidiaries. All significant intercompany transactions and balances between the Company and its wholly-owned subsidiaries are eliminated upon consolidation.

Noncontrolling interests are recognized to reflect the portion of the equity of subsidiaries which are not attributable, directly or indirectly, to the controlling shareholders. The Company consolidates its interests in its joint ventures, BeiGene Biologics and MapKure, LLC, under the voting model and recognizes the minority shareholders' equity interest as a noncontrolling interest in its consolidated financial statements.

Use of Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Areas where management uses subjective judgment include, but are not limited to, estimating the useful lives of long-lived assets, estimating variable consideration in product sales and collaboration revenue arrangements, identifying separate accounting units and the standalone selling price of each performance obligation in the Company's revenue arrangements, estimating the fair value of net assets acquired in business combinations, assessing the impairment of long-lived assets, share-based compensation expenses, realizability of deferred tax assets, estimating uncertain tax positions, measurement of right-of-use assets and lease liabilities and the fair value of financial instruments. Management bases the estimates on historical experience, known trends and various other

assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from these estimates.

Functional Currency and Foreign Currency Translation

Functional currency

The Company uses the United States dollar ("$" or "U.S. dollar") as its reporting currency. Operations in subsidiaries are recorded in the functional currency of the respective subsidiary. The determination of functional currency is based on the criteria of Accounting Standard Codification ("ASC") 830, Foreign Currency Matters.

Foreign currency translation

For subsidiaries whose functional currencies are not the U.S. dollar, the Company uses the average exchange rate for the year and the exchange rate at the balance sheet date, to translate the operating results and financial position to U.S. dollar, the reporting currency, respectively. Translation differences are recorded in accumulated other comprehensive loss, a component of shareholders' equity. Transactions denominated in currencies other than the functional currency are translated into the functional currency at the exchange rates prevailing on the transaction dates. Foreign currency denominated financial assets and liabilities are remeasured at the exchange rates prevailing at the balance sheet date. Exchange gains and losses are included in the consolidated statements of comprehensive loss.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and bank deposits, which are unrestricted as to withdrawal and use. The Company considers all highly liquid investments with an original maturity date of three months or less at the date of purchase to be cash equivalents. Cash equivalents which consist primarily of money market funds are stated at fair value.

Restricted cash

Restricted cash primarily consists of RMB-denominated cash deposits pledged in designated bank accounts as collateral for bank loans and letters of credit. The Company classifies restricted cash as current or non-current based on the term of the restriction.

Accounts Receivable

Trade accounts receivable are recorded at their invoiced amounts, net of trade discounts and allowances as well as allowances for doubtful accounts. An allowance for doubtful accounts is recorded when the collection of the full amount is no longer probable. In evaluating the collectability of receivable balances, the Company considers specific evidence including aging of the receivable, the customer's payment history, its current creditworthiness and current economic trends. Accounts receivable are written off after all collection efforts have ceased. The Company regularly reviews the adequacy and appropriateness of any allowance for doubtful accounts. No allowance for doubtful accounts was recorded as of December 31, 2019.

Inventory

Prior to the regulatory approval of product candidates, the Company may incur expenses for the manufacture of drug product to support the commercial launch of those products. Until the date at which

regulatory approval has been received or is otherwise considered probable, all such costs are recorded as research and development expenses as incurred.

To date the Company's inventory has consisted entirely of finished goods inventory purchased from Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS"). Inventories are stated at the lower of cost and net realizable value, with cost determined on a weighted-average basis. The Company periodically analyzes its inventory levels, and writes down inventory that has become obsolete, inventory that has a cost basis in excess of its estimated realizable value and inventory in excess of expected sales requirements as cost of product sales. The determination of whether inventory costs will be realizable requires estimates by management. If actual market conditions are less favorable than projected by management, additional write-downs of inventory may be required, which would be recorded in the consolidated statements of operations. There have been no write-downs or reserves against inventory to date.

Short-Term Investments

Investments with original maturities of greater than three months at the date of purchase and less than one year from the date of the balance sheet are classified as short-term. Short-term debt investments held to maturity are carried at amortized cost when the Company has the ability and positive intent to hold these securities until maturity. When the Company does not have the ability or positive intent to hold short-term debt investments until maturity, these securities are classified as available-for-sale. None of the Company's fixed maturity securities met the criteria for held-to-maturity classification at December 31, 2019 and 2018.

Available-for-sale debt securities are stated at fair value, with the unrealized gains and losses, net of tax, reported in other comprehensive loss. The net carrying value of debt securities classified as available-for-sale is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is computed using the effective interest method and included in interest income. Interest and dividends are included in interest income.

When the fair value of a debt security classified as available-for-sale is less than its amortized cost, the Company assesses whether or not: (i) it has the intent to sell the security or (ii) it is more likely than not that the Company will be required to sell the security before its anticipated recovery. If either of these conditions is met, the Company must recognize an other-than-temporary impairment through earnings for the difference between the debt security's amortized cost basis and its fair value. No impairment losses were recorded for any periods presented.

The cost of securities sold is based on the specific identification method.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets as follows:

	Useful Life
Building	20 years
Manufacturing equipment	3 to 10 years
Laboratory Equipment	3 to 5 years
Software, Electronic and Office Equipment	3 to 5 years
Leasehold Improvements	Lesser of useful life or lease term

Leases

Effective January 1, 2019, the Company adopted Accounting Standards Codification, Topic 842, Leases ("ASC 842") using the effective date method. The Company determines if an arrangement is a lease at inception. The Company has lease agreements with lease and non-lease components, which are accounted for as a single lease component based on the Company's policy election to combine lease and non-lease components for its leases. Leases are classified as operating or finance leases in accordance with the recognition criteria in ASC 842-20-25. The Company's lease portfolio consists entirely of operating leases as of December 31, 2019. The Company's leases do not contain any material residual value guarantees or material restrictive covenants.

At the commencement date of a lease, the Company determines the classification of the lease based on the relevant factors present and records a right-of-use ("ROU") asset and lease liability. ROU assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. ROU assets and lease liabilities are calculated as the present value of the lease payments not yet paid. Variable lease payments not dependent on an index or rate are excluded from the ROU asset and lease liability calculations and are recognized in expense in the period which the obligation for those payments is incurred. As the rate implicit in the Company's leases is not typically readily available, the Company uses an incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. This incremental borrowing rate reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. ROU assets include any lease prepayments and are reduced by lease incentives. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term. Lease terms are based on the non-cancelable term of the lease and may contain options to extend the lease when it is reasonably certain that the Company will exercise that option.

Operating leases are included in operating lease right-of-use assets and lease liabilities on the consolidated balance sheet. Lease liabilities that become due within one year of the balance sheet date are classified as current liabilities.

Leases with an initial lease term of 12 months or less are not recorded on the consolidated balance sheet. Lease expense for these leases is recognized on a straight-line basis over the lease term.

Land Use Right, Net

All land in the PRC is owned by the PRC government. The PRC government may sell land use rights for a specified period of time. Land use rights represent operating leases in accordance with ASC 842. The purchase price of land use rights represents lease prepayments to the PRC government and is recorded as an operating lease ROU asset on the balance sheet. The ROU asset is amortized over the remaining lease term.

In 2017, the Company acquired a land use right from the local Bureau of Land and Resources in Guangzhou for the purpose of constructing and operating the biologics manufacturing facility in Guangzhou. In 2019, the Company acquired a second Guangzhou land use right from the local Bureau of Land and Resources in Guangzhou. Both Guangzhou land use rights are being amortized over the respective terms of the land use rights, which are each 50 years.

In 2018, the Company acquired a land use right in conjunction with the Innerway asset acquisition (see Note 4). The land use right is being amortized over the term of the land use right, which is 36 years.

Business Combinations

The Company accounts for its business combinations using the acquisition method of accounting in accordance with ASC topic 805 ("ASC 805"): Business Combinations. The acquisition method of accounting requires all of the following steps: (i) identifying the acquirer, (ii) determining the acquisition date, (iii) recognizing and measuring the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree, and (iv) recognizing and measuring goodwill or a gain from a bargain purchase. The consideration transferred in a business combination is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued as well as the contingent considerations and all contractual contingencies as of the acquisition date.

The costs directly attributable to the acquisition are expensed as incurred. Identifiable assets, liabilities and contingent liabilities acquired or assumed are measured separately at their fair value as of the acquisition date, irrespective of the extent of any noncontrolling interests. The excess of (i) acquisition consideration, fair value of the noncontrolling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree, is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the consolidated statements of operations as a gain.

The Company allocates the fair value of purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets may include, but are not limited to, future expected cash flows from acquired assets, timing and probability of success of clinical events and regulatory approvals, and assumptions on useful lives and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. Additional information, such as that related to income tax and other contingencies, existing as of the acquisition date but unknown to us may become known during the remainder of the measurement period, not to exceed one year from the acquisition date, which may result in changes to the amounts and allocations recorded.

Acquisitions that do not meet the accounting definition of a business combination are accounted for as asset acquisitions. For transactions determined to be asset acquisitions, the Company allocates the total cost of the acquisition, including transaction costs, to the net assets acquired based on their relative fair values.

Goodwill and Other Intangible Assets

Goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. The Company allocates the cost of an acquired entity to the assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. The excess of the purchase price for acquisitions over the fair value of the net assets acquired, including other intangible assets, is recorded as goodwill. Goodwill is not amortized, but is tested for impairment at least annually or more frequently if events or changes in circumstances would indicate a potential impairment.

The Company has elected to first assess qualitative factors to determine whether it is more likely than not that the fair value of the Company's reporting unit is less than its carrying amount, including goodwill. The qualitative assessment includes the Company's evaluation of relevant events and circumstances affecting the Company's single reporting unit, including macroeconomic, industry, and market conditions, the Company's overall financial performance, and trends in the market price of the Company's ADSs. If

qualitative factors indicate that it is more likely than not that the Company's reporting unit's fair value is less than its carrying amount, then the Company will perform the quantitative impairment test by comparing the reporting unit's carrying amount, including goodwill, to its fair value. If the carrying amount of the reporting unit exceeds its fair value, an impairment loss will be recognized in an amount equal to that excess. For the years ended December 31, 2019, 2018 and 2017 the Company determined that there were no indicators of impairment of goodwill.

Intangible assets acquired through business combinations are recognized as assets separate from goodwill and are measured at fair value upon acquisition. Intangible assets acquired in transactions that are not business combinations are recorded at the allocated portion of total consideration transferred based on their relative fair value in relation to net assets acquired. Acquired identifiable intangible assets consist of distribution rights for approved cancer therapies licensed from BMS, ABRAXANE®, REVLIMID®, and VIDAZA®, and are amortized on a straight-line basis over the estimated useful lives of the assets, which is 10 years, and the trading license which represents the Guangzhou drug distribution license acquired on September 21, 2018 (see Note 4). The Company is amortizing the trading license over the remainder of the license term through February 2020.

Intangible assets with finite useful lives are tested for impairment when events or circumstances occur that could indicate that the carrying amount of an asset may not be recoverable. When these events occur, the Company evaluates the recoverability of the intangible assets by comparing the carrying amount of the assets to the future undiscounted cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flows is less than the carrying amount of the assets, the Company recognizes an impairment loss based on the excess of the carrying amount of the assets over their fair value. Fair value is generally determined by discounting the cash flows expected to be generated by the assets, when the market prices are not readily available. For the years ended December 31, 2019, 2018 and 2017, the Company determined that there were no indicators of impairment of its other intangible assets.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment in accordance with authoritative guidance for impairment or disposal of long-lived assets. Long-lived assets are reviewed for events or changes in circumstances, which indicate that their carrying value may not be recoverable. Long-lived assets are reported at the lower of carrying amount or fair value less cost to sell. For the years ended December 31, 2019, 2018 and 2017, there was no impairment of the value of the Company's long-lived assets.

Fair Value Measurements

Fair value of financial instruments

Financial instruments of the Company primarily include cash and cash equivalents, restricted cash, short-term investments, accounts receivable, long-term bank loans, Shareholder Loan (as defined in Note 15) and accounts payable. As of December 31, 2019 and 2018, the carrying values of cash and cash equivalents, restricted cash, accounts receivable and accounts payable approximated their fair values due to the short-term maturity of these instruments. The short-term investments represented the available-for-sale debt securities. The available-for-sale debt securities are recorded at fair value based on quoted prices in active markets with unrealized gain or loss recorded in other comprehensive loss. The long-term bank loans and Shareholder Loan approximate their fair value due to the fact that the related interest rates approximate the rates currently offered by financial institutions for similar debt instrument of comparable maturities.

The Company applies ASC topic 820 ("ASC 820"), *Fair Value Measurements and Disclosures,* in measuring fair value. ASC 820 defines fair value, establishes a framework for measuring fair value and

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

requires disclosures to be provided on fair value measurement. ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 — Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 — Include other inputs that are directly or indirectly observable in the marketplace.

Level 3 — Unobservable inputs which are supported by little or no market activity.

ASC 820 describes three main approaches to measuring the fair value of assets and liabilities: (1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

Financial instruments measured at fair value on a recurring basis

The following tables set forth assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018:

As of December 31, 2019	Quoted Price in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	$	$	$
Short-term investment (Note 6):			
U.S. treasury securities	364,728	—	—
Cash equivalents			
U.S. treasury securities	16,442		
Money market funds	50,461	—	—
Total	431,631	—	—

As of December 31, 2018	Quoted Price in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	$	$	$
Short-term investment (Note 6):			
U.S. treasury securities	1,068,509	—	—
Cash equivalents			
Money market funds	159,810	—	—
Total	1,228,319	—	—

Revenue Recognition

Effective January 1, 2018, the Company adopted Accounting Standards Codification, Topic 606, Revenue from Contracts with Customers ("ASC 606") using the modified retrospective method.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price, including variable consideration, if any; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration to which it is entitled in exchange for the goods or services it transfers to the customer.

Once a contract is determined to be within the scope of ASC 606 at contract inception, the Company reviews the contract to determine which performance obligations it must deliver and which of these performance obligations are distinct. The Company recognizes as revenue the amount of the transaction price that is allocated to each performance obligation when that performance obligation is satisfied or as it is satisfied.

Product revenue

The Company's product revenues are generated from the sale of ABRAXANE, REVLIMID, and VIDAZA to its product distributor in China, the Company's sole customer in China. The first tier distributor subsequently resells the products to second tier distributors who ultimately sell the products to health care providers and patients. Following FDA approval on November 14, 2019, the Company began selling its first internally developed drug, BRUKINSA, in the United States to specialty pharmacies and specialty distributors, the Company's U.S. customers. The specialty pharmacies and specialty distributors subsequently resell the product to health care providers and patients. The Company is the principal under the product sales as the Company controls the products with the ability to direct the use of, and obtain substantially all the remaining benefits from the products before they are sold to the customer. For product sales transactions, the Company has a single performance obligation which is to sell the products to its customer. The Company includes variable consideration in the transaction price to the extent it is probable that a significant reversal will not occur and estimates variable consideration from rebates, chargebacks, trade discounts and allowances, sales returns allowances and other incentives using the expected value method. Revenues for product sales are recognized at a point in time when the single performance obligation is satisfied upon delivery to the customer. The Company's payment terms are approximately 60-90 days. Actual amounts of consideration ultimately received may differ from the Company's estimates. The Company will reassess estimates for variable consideration periodically. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known.

In China, rebates, including price compensation credits, are offered to distributors, consistent with pharmaceutical industry practices. The Company records a provision for rebates at the time of sale based on contracted rates and historical redemption rates. Assumptions used to establish the provision include the level of distributor inventories, sales volumes and contract pricing and estimated acceptance of government pricing or reimbursement amounts (such as provincial acceptance of the National Reimbursement Drug List pricing in the PRC). The Company regularly reviews the information related to these estimates and adjusts the provision accordingly.

In the United States, estimates for variable consideration for which reserves are established at the time of sale include government rebates, chargebacks, trade discounts and allowances, sales returns allowances and other incentives that are offered within contracts between the Company and its US customers, health care providers and other indirect customers. Where appropriate, these estimates take into consideration a range of possible outcomes that are probability-weighted for relevant factors such as our historical experience,

current contractual and statutory requirements, specific known market events and trends, industry data and forecasted customer buying and payment patterns. U.S. product revenues and related reserves for variable consideration were not significant for the year ended December 31, 2019 as the Company did not begin generating product revenue in the United States until after BRUKINSA received FDA approval on November 14, 2019.

The Company bases its sales returns allowance on estimated distributor inventories, customer demand as reported by third-party sources, and actual returns history, as well as other factors, as appropriate. For newly launched products where actual returns history is not yet available, the sales returns allowance is initially calculated based on benchmarking data from similar products and industry experience. If the historical or benchmarking data the Company uses to calculate these estimates do not properly reflect future returns, then a change in the allowance would be made in the period in which such a determination is made and revenues in that period could be materially affected. Any changes from the historical trend rates are considered in determining the current sales return allowance. To date, sales returns have not been significant.

Collaboration revenue

At contract inception, the Company analyzes its collaboration arrangements to assess whether they are within the scope of ASC 808, Collaborative Arrangements ("ASC 808") to determine whether such arrangements involve joint operating activities performed by parties that are both active participants in the activities and exposed to significant risks and rewards dependent on the commercial success of such activities. For collaboration arrangements within the scope of ASC 808 that contain multiple elements, the Company first determines which elements of the collaboration are deemed to be within the scope of ASC 808 and those that are more reflective of a vendor-customer relationship and therefore within the scope of ASC 606. For elements of collaboration arrangements that are accounted for pursuant to ASC 808, an appropriate recognition method is determined and applied consistently.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its agreements, the Company performs the five-step model under ASC 606 noted above.

The Company's collaborative arrangements may contain more than one unit of account, or performance obligation, including grants of licenses to intellectual property rights, agreement to provide research and development services and other deliverables. The collaborative arrangements do not include a right of return for any deliverable. As part of the accounting for these arrangements, the Company must develop assumptions that require judgment to determine the stand-alone selling price for each performance obligation identified in the contract. In developing the stand-alone selling price for a performance obligation, the Company considers competitor pricing for a similar or identical product, market awareness of and perception of the product, expected product life and current market trends. In general, the consideration allocated to each performance obligation is recognized when the respective obligation is satisfied either by delivering a good or providing a service, limited to the consideration that is not constrained. Non-refundable payments received before all of the relevant criteria for revenue recognition are satisfied are recorded as advances from customers.

Licenses of Intellectual Property: Upfront non-refundable payments for licensing the Company's intellectual property are evaluated to determine if the license is distinct from the other performance obligations identified in the arrangement. For licenses determined to be distinct, the Company recognizes revenues from non-refundable, up-front fees allocated to the license at a point in time, when the license is transferred to the licensee and the licensee is able to use and benefit from the license.

Research and Development Services: The portion of the transaction price allocated to research and development services performance obligations is deferred and recognized as collaboration revenue over time

as delivery or performance of such services occurs. R&D reimbursement revenue for revenue attributable to the clinical trials that BMS had opted into is recognized as delivery or performance of such services occurs.

Milestone Payments: At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestones related to the Company's development-based activities may include initiation of various phases of clinical trials. Due to the uncertainty involved in meeting these development-based targets, they are generally fully constrained at contract inception. The Company will assess whether the variable consideration is fully constrained each reporting period based on the facts and circumstances surrounding the clinical trials. Upon changes to constraint associated with the developmental milestones, variable consideration will be included in the transaction price when a significant reversal of revenue recognized is not expected to occur and allocated to the separate performance obligations. Regulatory milestones are fully constrained until the period in which those regulatory approvals are achieved due to the inherent uncertainty with the approval process. Regulatory milestones are included in the transaction price in the period regulatory approval is obtained.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Research and Development Expenses

Research and development expenses represent costs associated with the collaborative arrangements, which primarily include (i) payroll and related costs (including share-based compensation) associated with research and development personnel, (ii) costs related to clinical trials and preclinical testing of the Company's technologies under development, (iii) costs to develop the product candidates, including raw materials and supplies, product testing, depreciation, and facility related expenses, (iv) expenses for research services provided by universities and contract laboratories, including sponsored research funding, and (v) other research and development expenses. Research and development expenses are charged to expense as incurred when these expenditures relate to the Company's research and development services and have no alternative future uses.

Clinical trial costs are a significant component of the Company's research and development expenses. The Company has a history of contracting with third parties that perform various clinical trial activities on behalf of the Company in the ongoing development of the Company's product candidates. Expenses related to clinical trials are accrued based on the Company's estimates of the actual services performed by the third parties for the respective period. If the contracted amounts are modified (for instance, as a result of changes in the clinical trial protocol or scope of work to be performed), the Company will modify the related accruals accordingly on a prospective basis. Revisions in the scope of a contract are charged to expense in the period in which the facts that give rise to the revision become reasonably certain. There were no material adjustments for a change in estimate to research and development expenses in the accompanying consolidated financial statements for the years ended December 31, 2019, 2018 and 2017.

Acquired In-Process Research and Development Expense

The Company has acquired rights to develop and commercialize product candidates. Upfront payments that relate to the acquisition of a new drug compound, as well as pre-commercial milestone payments, are

immediately expensed as acquired in-process research and development in the period in which they are incurred, provided that the new drug compound did not also include processes or activities that would constitute a "business" as defined under GAAP, the drug has not achieved regulatory approval for marketing and, absent obtaining such approval, has no established alternative future use. Milestone payments made to third parties subsequent to regulatory approval are capitalized as intangible assets and amortized over the estimated remaining useful life of the related product. Royalties owed on sales of the products licensed pursuant to the agreements are expensed in the period the related revenues are recognized.

Government Grants

Government financial incentives that involve no conditions or continuing performance obligations of the Company are recognized as other non-operating income upon receipt. In the event government grants or incentives involve continuing performance obligations, the Company will capitalize the payment as a liability and recognize the same financial statement caption as the performance obligation relates over the performance period.

Comprehensive Loss

Comprehensive loss is defined as the changes in equity of the Company during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. Among other disclosures, ASC 220, Comprehensive Income, requires that all items that are required to be recognized under current accounting standards as components of comprehensive loss be reported in a financial statement that is displayed with the same prominence as other financial statements. For each of the periods presented, the Company's comprehensive loss includes net loss, foreign currency translation adjustments and unrealized holding gains/losses associated with the available-for-sale debt securities, and is presented in the consolidated statements of comprehensive loss.

Share-Based Compensation

Awards granted to employees

The Company applies ASC 718, Compensation — Stock Compensation ("ASC 718"), to account for its employee share-based payments. In accordance with ASC 718, the Company determines whether an award should be classified and accounted for as a liability award or equity award. All the Company's grants of share-based awards to employees were classified as equity awards and are recognized in the financial statements based on their grant date fair values. Specifically, the grant date fair value of share options is calculated using an option pricing model. The fair value of restricted shares and restricted share units are based on the closing market price of our ADSs on the NASDAQ Global Select Market on the date of grant. The Company has elected to recognize compensation expense using the straight-line method for all employee equity awards granted with graded vesting based on service conditions provided that the amount of compensation cost recognized at any date is at least equal to the portion of the grant-date value of the options that are vested at that date. The Company uses the accelerated method for all awards granted with graded vesting based on performance conditions. To the extent the required vesting conditions are not met resulting in the forfeiture of the share-based awards, previously recognized compensation expense relating to those awards are reversed. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in the subsequent period if actual forfeitures differ from initial estimates.

Forfeiture rates are estimated based on historical and future expectations of employee turnover rates and are adjusted to reflect future changes in circumstances and facts, if any. Share-based compensation expense is recorded net of estimated forfeitures such that expense is recorded only for those share-based

awards that are expected to vest. To the extent the Company revises these estimates in the future, the share-based payments could be materially impacted in the period of revision, as well as in following periods. The Company, with the assistance of an independent third-party valuation firm, determined the estimated fair value of the stock options granted to employees using the binomial option pricing model.

Awards granted to non-employees

The Company has accounted for equity instruments issued to non-employees in accordance with the provisions of ASC 718 and ASC 505, Equity. All transactions in which goods or services are received in exchange for equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the date on which the counterparty's performance is completed as there is no associated performance commitment. The expense is recognized in the same manner as if the Company had paid cash for the services provided by the non-employees in accordance with ASC 505-50, Equity-based payments to non-employees. The Company estimated the fair value of share options granted to non-employees using the same method as employees.

Modification of awards

A change in any of the terms or conditions of the awards is accounted for as a modification of the award. Incremental compensation cost is measured as the excess, if any, of the fair value of the modified award over the fair value of the original award immediately before its terms are modified, measured based on the fair value of the awards and other pertinent factors at the modification date. For vested awards, the Company recognizes incremental compensation cost in the period the modification occurs. For unvested awards, the Company recognizes over the remaining requisite service period, the sum of the incremental compensation cost and the remaining unrecognized compensation cost for the original award on the modification date. If the fair value of the modified award is lower than the fair value of the original award immediately before modification, the minimum compensation cost the Company recognizes is the cost of the original award.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using enacted tax rates that will be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company evaluates its uncertain tax positions using the provisions of ASC 740, *Income Taxes,* which prescribes a recognition threshold that a tax position is required to meet before being recognized in the financial statements. The Company recognizes in the financial statements the benefit of a tax position which is "more likely than not" to be sustained under examination based solely on the technical merits of the position assuming a review by tax authorities having all relevant information. Tax positions that meet the recognition threshold are measured using a cumulative probability approach, at the largest amount of tax benefit that has a greater than fifty percent likelihood of being realized upon settlement. It is the Company's policy to recognize interest and penalties related to unrecognized tax benefits, if any, as a component of income tax expense.

Loss Per Share

Loss per share is calculated in accordance with ASC 260, *Earnings per Share*. Basic loss per ordinary share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number

of ordinary shares outstanding during the period using the two-class method. Under the two-class method, net income is allocated between ordinary shares and participating securities based on dividends declared (or accumulated) and participating rights in undistributed earnings as if all the earnings for the reporting period had been distributed. The Company's restricted shares are participating securities because they have contractual rights to share in the profits of the Company.

However, the restricted shares do not have contractual rights and obligations to share in the losses of the Company. For the periods presented herein, the computation of basic loss per share using the two-class method is not applicable as the Company is in a net loss position.

Diluted loss per share is calculated by dividing net loss attributable to ordinary shareholders as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary equivalent shares outstanding during the period. Ordinary equivalent shares consist of the ordinary shares issuable upon the conversion of the Company's convertible preferred shares using the if-converted method, and ordinary shares issuable upon the conversion of the share options and unvested restricted shares, using the treasury stock method.

Ordinary share equivalents are excluded from the computation of diluted loss per share if their effects would be anti-dilutive. Basic and diluted loss per ordinary share is presented in the Company's consolidated statements of operations.

Segment Information

In accordance with ASC 280, Segment Reporting, the Company's chief operating decision maker, the Chief Executive Officer, reviews the consolidated results when making decisions about allocating resources and assessing performance of the Company as a whole and hence, the Company has only one reportable segment: pharmaceutical products.

Concentration of Risks

Concentration of credit risk

Financial instruments that are potentially subject to credit risk consist of cash and cash equivalents and short-term investments. The carrying amounts of cash and cash equivalents and short-term investments represent the maximum amount of loss due to credit risk. As of December 31, 2019 and 2018, $618,011 and $712,937 were deposited with various major reputable financial institutions located in the PRC and international financial institutions outside of the PRC. The deposits placed with financial institutions are not protected by statutory or commercial insurance. In the event of bankruptcy of one of these financial institutions, the Company may be unlikely to claim its deposits back in full. Management believes that these financial institutions are of high credit quality and continually monitors the credit worthiness of these financial institutions. As of December 31, 2019 and 2018, the Company had short-term investments amounting to $364,728 and $1,068,509, respectively.

At December 31, 2019, the Company's short-term investments were comprised of U.S. treasury securities. The Company believes that U.S. treasury securities are of high credit quality and continually monitor the credit worthiness of these institutions.

Customer concentration risk

For the years ended December 31, 2019, 2018 and 2017, substantially all of the Company's revenue was from BMS and our product distributor, China Resources, in China.

Business, customer, political, social and economic risks

The Company participates in a dynamic biopharmaceutical industry and believes that changes in any of the following areas could have a material adverse effect on the Company's future financial position, results of operations or cash flows: changes in the overall demand for services and products; competitive pressures due to new entrants; advances and new trends in new drugs and industry standards; changes in clinical research organizations, contract manufacturers and other key vendors; changes in certain strategic relationships or customer relationships; regulatory considerations; intellectual property considerations; and risks associated with the Company's ability to attract and retain employees necessary to support its growth. The Company's operations could be also adversely affected by significant political, economic and social uncertainties in the PRC.

Currency convertibility risk

A significant portion of the Company's expenses, assets and liabilities are denominated in RMB. On January 1, 1994, the PRC government abolished the dual rate system and introduced a single rate of exchange as quoted daily by the People's Bank of China (the "PBOC"). However, the unification of the exchange rates does not imply that the RMB may be readily convertible into U.S. dollar or other foreign currencies. All foreign exchange transactions continue to take place either through the PBOC or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the PBOC. Approvals of foreign currency payments by the PBOC or other institutions require submitting a payment application form together with suppliers' invoices, shipping documents and signed contracts.

Additionally, the value of the RMB is subject to changes in central government policies and international economic and political developments affecting supply and demand in the PRC foreign exchange trading system market.

Foreign currency exchange rate risk

From July 21, 2005, the RMB is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. For RMB against U.S. dollar, there was depreciation of approximately 1.3%, depreciation of approximately 5.7% and appreciation of approximately 6.5%, in the years ended December 31, 2019, 2018 and 2017. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the U.S. dollar in the future.

To the extent that the Company needs to convert U.S. dollar into RMB for capital expenditures and working capital and other business purposes, appreciation of RMB against U.S. dollar would have an adverse effect on the RMB amount the Company would receive from the conversion. Conversely, if the Company decides to convert RMB into U.S. dollar for the purpose of making payments for dividends on ordinary shares, strategic acquisitions or investments or other business purposes, appreciation of U.S. dollar against RMB would have a negative effect on the U.S. dollar amount available to the Company. In addition, a significant depreciation of the RMB against the U.S. dollar may significantly reduce the U.S. dollar equivalent of the Company's earnings or losses.

Recent Accounting Pronouncements

New accounting standards which have been adopted

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-2, *Leases*. Subsequently, the FASB issued ASU 2018-1, *Land Easement Practical Expedient*, which provides an optional transition practical expedient for land easements, ASU 2018-10, *Codification Improvements to Topic 842, Leases*, which clarifies certain aspects of the guidance issued in ASU 2016-2; ASU 2018-11,

Leases (Topic 842): Targeted Improvements, which provides an additional transition method and a practical expedient for separating components of a contract for lessors, ASU 2018-20, *Leases (Topic 842)- Narrow-Scope Improvements for Lessors*, which allows certain accounting policy elections for lessors; and ASU 2019-1, *Leases (Topic 842): Codification Improvements*, which clarifies certain aspects of the guidance (collectively, the "Lease ASUs"). The Lease ASUs require lessees to recognize assets and liabilities related to lease arrangements longer than 12 months on the balance sheet. This standard also requires additional disclosures by lessees and contains targeted changes to accounting by lessors. The updated guidance was effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. Leases will be classified as finance or operating, with the classification affecting the pattern and classification of expense recognition. The recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee have not significantly changed from previous GAAP. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial adoption. The guidance permits entities to choose to use either its effective date or the beginning of the earliest period presented in the financial statements as its date of initial application.

The Company adopted the new standard effective January 1, 2019 using the effective date method and did not restate comparative periods. The Company elected the package of practical expedients permitted under the transition guidance within the new standard, which permits the Company not to reassess under the new standard its prior conclusions about lease identification, lease classification and initial direct costs. Upon adoption, the Company recognized a lease liability of $27,446, with corresponding ROU assets of $25,978 based on the present value of the remaining minimum rental payments under existing operating leases. The difference between the lease liability and right-of-use asset relates to the reversal of existing deferred rent and prepaid rent balances of $1,739 and $271, respectively. Additionally, the Company reclassified its land use rights of $45,058 to ROU assets upon adoption. The adoption of the standard did not impact the Company's consolidated statements of operations or cash flows.

In February 2018, the FASB issued ASU 2018-02, *Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This update provides companies the option to reclassify to retained earnings the income tax accounting effects related to items originating in accumulated other comprehensive income ("AOCI") as a result of the U.S. Tax Cuts and Jobs Act ("TCJA") enacted on December 22, 2017. This update was effective in fiscal years, including interim periods, beginning after December 15, 2018, with early adoption permitted. None of the income tax accounting effects of the TCJA related to items that originated in AOCI and thus adopting of this standard did not have any impact on the Company's consolidated financial statements. Other tax effects of items that originate in AOCI will be removed when the underlying circumstance which gives rise to the tax impact no longer exists, based on an aggregate portfolio approach.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

Impact of adopted accounting standards

The cumulative effect of changes made to the Company's consolidated January 1, 2019 balance sheet for the adoption of the Lease ASUs were as follows:

	Balance at December 31, 2018	Adjustments Due to Lease ASUs	Balance at January 1, 2019
	$	$	$
Assets:			
Prepaid expenses and other current assets	90,554	(271)	90,283
Land use right, net	45,058	(45,058)	—
Operating lease right-of-use assets	—	71,036	71,036
Liabilities:			
Accrued expenses and other payables	100,414	(888)	99,526
Current portion of operating lease liabilities	—	8,684	8,684
Operating lease liabilities	—	18,762	18,762
Other long-term liabilities	48,773	(851)	47,922

New accounting standards which have not yet been adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments — Credit Losses* ("ASU 2016-13"). Subsequently, the FASB issued ASU 2019-05, *Financial Instruments — Credit Losses (Topic 326): Targeted Transition Relief* and *ASU 2019-11 Codification Improvements to Topic 326, Financial Instruments — Credit Losses*. The amendments in ASU 2016-13 update guidance on reporting credit losses for financial assets. These amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. For public business entities that are U.S. SEC filers, ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company does not currently anticipate the adoption of this ASU to have a material impact to its financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement*. The update eliminates, modifies, and adds certain disclosure requirements for fair value measurements. This update is effective in fiscal years, including interim periods, beginning after December 15, 2019, and early adoption is permitted. The added disclosure requirements and the modified disclosure on the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented. All other changes to disclosure requirements in this update should be applied retrospectively to all periods presented upon their effective date. The Company does not expect the impact of this guidance to have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles — Goodwill and Other — Internal — Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This update requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in ASC 350-40 to determine which implementation costs to defer and recognize as an asset. This update is effective in fiscal years, including interim periods, beginning after December 15, 2019, and early adoption is permitted. This guidance should be applied either retrospectively or prospectively to all implementation costs incurred after the date of

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

adoption. The Company does not expect the impact of this guidance to have a material impact on the Company's consolidated financial statements.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. This update clarifies that certain transactions between participants in a collaborative arrangement should be accounted for under ASC 606 when the counterparty is a customer and precludes an entity from presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. The update is effective in fiscal years beginning after December 15, 2019, and interim periods therein, and early adoption is permitted for entities that have adopted ASC 606. This guidance should be applied retrospectively to the date of initial application of Topic 606. The Company does not expect the impact of this guidance to have a material impact on the Company's consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. This update simplifies the accounting for income taxes as part of the FASB's overall initiative to reduce complexity in accounting standards. The amendments include removal of certain exceptions to the general principles of ASC 740, *Income taxes*, and simplification in several other areas such as accounting for a franchise tax (or similar tax) that is partially based on income. The update is effective in fiscal years beginning after December 15, 2020, and interim periods therein, and early adoption is permitted. Certain amendments in this update should be applied retrospectively or modified retrospectively, all other amendments should be applied prospectively. The Company is currently evaluating the impact on its financial statements of adopting this guidance.

3. Collaborative and Licensing Arrangements

The Company enters into collaborative arrangements for the research and development, manufacture and/or commercialization of drug products and drug candidates. To date, these collaborative arrangements have included out-licenses of internally developed drug candidates to other parties, in-licenses of drug products and drug candidates from other parties, and cost sharing arrangements. These arrangements may include non-refundable, upfront payments, contingent obligations for potential development, regulatory and commercial performance milestone payments, cost sharing and reimbursement arrangements, royalty payments, and profit sharing.

Out-Licensing Arrangements

To date, the Company's collaboration revenue related to its out-licensing collaborative agreements has consisted of (1) upfront license fees, research and development reimbursement revenue, and research and development services revenue from its collaboration agreement with BMS for tislelizumab, and (2) upfront license fees and milestone payments from its collaboration agreement with Merck KGaA, Darmstadt Germany for pamiparib and lifirafenib.

The following table summarizes total collaboration revenue recognized for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,		
	2019	2018	2017
Revenues from Collaboration Partners	$	$	$
License revenue	—	—	211,391
Reimbursement of research and development costs	27,634	56,776	—
Research and development service revenue	27,982	10,559	2,568
Other	150,000	—	—
Total	205,616	67,335	213,959

Celgene Corporation, a Bristol-Myers Squibb company ("BMS")

On July 5, 2017, the Company entered into a license agreement with Celgene Corporation, now BMS, pursuant to which the Company granted to the BMS parties an exclusive right to develop and commercialize the Company's investigational PD-1 inhibitor, tislelizumab, in all fields of treatment, other than hematology, in the United States, Europe, Japan and the rest of world other than Asia (the "PD-1 License Agreement"). In connection with the closing of the transactions on August 31, 2017, the Company, and BMS amended and restated the PD-1 License Agreement (the "A&R PD-1 License Agreement") to, among other things, clarify the parties' responsibilities relating to the conducting and funding of certain global registration clinical trials and clarify the scope of the regulatory materials transferred by BeiGene to BMS. The Company entered into a mutual agreement with BMS to terminate the A&R PD-1 License Agreement effective June 14, 2019 in advance of the acquisition of Celgene by BMS.

Under the terms of the A&R PD-1 License Agreement, BMS paid the Company $263,000 in upfront non-refundable fees, of which $92,050 was paid in the third quarter of 2017 and the remaining $170,950 was paid in December 2017. The Company allocated $13,000 of upfront fees to the fair value of assets related to the Company's acquisition of Celgene Shanghai, a wholly-owned subsidiary of Celgene Holdings East Corporation established under the laws of China, which was completed contemporaneously with the A&R PD-1 License Agreement. The Company was also eligible to receive product development and commercial milestone payments based on the successful achievement of development and regulatory and commercialization goals, respectively, and potential royalty payments.

In addition to the exclusive right to develop and commercialize tislelizumab, the terms of the A&R PD-1 License Agreement provided BMS with the right to collaborate with the Company on the development of tislelizumab for specified indications, including required participation on a joint development committee and a joint steering committee as well as a joint commercialization committee upon achievement of commercialization. BMS reimbursed the Company for certain research and development costs at a cost plus agreed upon markup for the development of tislelizumab related to the clinical trials that BMS opted into, as outlined in the development plan.

Under ASC 606, the Company identified the following deliverables of the collaboration agreement as distinct performance obligations: (a) the license provided to BMS for the exclusive right to develop and commercialize tislelizumab, in all fields of treatment, other than hematology, in the United States, Europe, Japan and the rest of world other than Asia ("the license"); and (b) the research and development services provided to BMS to develop tislelizumab within specified indications ("R&D services"). For each deliverable, the Company determined the stand-alone selling price and allocated the non-constrained consideration of $250,000 to the units of accounting using the relative selling price method. The consideration allocated to the license was recognized upon transfer of the license to BMS at contract inception and the consideration allocated to the R&D services was deferred and recognized over the term of the respective clinical studies for the specified indications. The payments associated with the defined developmental, regulatory, and commercialization goals were considered variable consideration and were fully constrained at contract inception through the date of termination.

In connection with the termination in June 2019, the Company regained full global rights to tislelizumab and received a $150,000 payment from BMS. The payment was recognized as other collaboration revenue upon termination as the Company had no further performance obligations under the collaboration. Upon termination, the Company also recognized the remainder of the deferred revenue balance related to the upfront consideration allocated to research and development services at the time of the original collaboration. The Company's license from BMS to distribute the approved cancer therapies ABRAXANE, REVLIMID , and VIDAZA in China was not affected by the termination of the tislelizumab collaboration.

For the year ended December 31, 2019, the Company recognized collaboration revenue of $205,616 related to the BMS collaboration, which consisted of $27,634 of research and development reimbursement revenue for the trials that BMS had opted into through the termination of the collaboration agreement; $27,982 of research and development services revenue, which reflects the recognition of the remaining upfront consideration that was allocated to research and development services at the time of the collaboration and was recognized over the term of the respective clinical studies for the specified indications; and $150,000 of other collaboration revenue related to the payment received from BMS in connection with the termination of the collaboration agreement.

For the year ended December 31, 2018, the Company recognized collaboration revenue of $65,835 related to the BMS collaboration, which consisted of $56,776 of research and development reimbursement revenue for the trials that BMS had opted into and research and development services revenue of $9,059 from deferred revenue.

For the year ended December 31, 2017, the Company recognized $211,391 as license revenue within collaboration revenue in the Company's consolidated statements of operations, and research and development revenue of $1,568 allocated from deferred revenue related to the BMS collaboration.

Merck KGaA, Darmstadt Germany

In 2013, the Company entered into a license agreement with Merck KGaA, Darmstadt Germany for lifirafenib, which was amended and restated in 2013 and 2015, in which it granted to Merck KGaA, Darmstadt Germany an exclusive license to develop, manufacture, and, in certain circumstances, commercialize lifirafenib outside of the PRC, and Merck KGaA Darmstadt Germany granted the Company an exclusive license to develop, manufacture and commercialize lifirafenib in the PRC (the "PRC Territory"). In March 2017, the Company regained the worldwide rights to lifirafenib after Merck KGaA, Darmstadt Germany informed the Company that it would not exercise a continuation option, and thus, the ex-PRC portion of the agreements terminated in their entirety, except for certain provisions that survived the termination. In December 2018, the Company received notice from Merck KGaA, Darmstadt Germany that Merck KGaA, Darmstadt Germany was terminating the PRC portion of the agreement. As a result of the termination, Merck KGaA, Darmstadt Germany's exclusive right of first negotiation to acquire exclusive commercialization rights under the lifirafenib RAF dimer program in the PRC was terminated and the Company is no longer required to pay Merck KGaA, Darmstadt Germany royalties on sales of lifirafenib in the PRC or entitled to receive future milestone payments from Merck KGaA, Darmstadt Germany for lifirafenib.

In 2013, the Company also entered into a license agreement with Merck KGaA, Darmstadt Germany for pamiparib, in which it granted to Merck KGaA, Darmstadt Germany an exclusive license to develop, manufacture, and, in certain circumstances, commercialize pamiparib outside of the PRC, and Merck KGaA, Darmstadt Germany granted the Company an exclusive license to develop, manufacture and commercialize pamiparib in the PRC Territory. On October 1, 2015, the Company entered into a purchase of rights agreement with Merck KGaA, Darmstadt Germany, pursuant to which the Company purchased from Merck KGaA, Darmstadt Germany all of its exclusive rights to pamiparib in the ex-PRC territories for consideration of $10,000, and reduced the future milestone payments the Company was eligible to receive under the PRC license agreement.

In December 2017, the Company achieved the milestone for dosing a patient in the first Phase 2 clinical trial of pamiparib in the PRC Territory, and the related $1,000 milestone payment received in January 2018, was recognized as research and development services revenue in year ended December 31, 2017.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

In May 2018, the Company achieved the milestone for dosing patients in the first Phase 3 clinical trial of pamiparib in the PRC Territory, and the related $1,500 milestone payment was recognized as research and development services revenue for the year ended December 31, 2018. No other milestones were achieved prior to the termination of the agreement.

On December 17, 2018, the Company entered into a letter agreement for the Company to buy back the PRC commercialization option for pamiparib that it had granted to Merck KGaA, Darmstadt Germany under the license agreement for initial consideration of $19,000, which was paid in January 2019. The payment was charged to research and development expense for the year ended December 31, 2018, as the PRC commercialization option has no alternative future use. Merck KGaA, Darmstadt Germany was relieved of any future milestone obligations as a result of the termination.

As a result of the foregoing termination agreements and notices, the Company's license agreements with Merck KGaA, Darmstadt Germany for lifirafenib and pamiparib were terminated in their entirety as of December 31, 2018.

In-Licensing Arrangements — Commercial

Celgene Logistics Sàrl, a Bristol-Myers Squibb company ("BMS")

On July 5, 2017, BeiGene and Celgene, now BMS, entered into a license and supply agreement pursuant to which BeiGene was granted the right to exclusively distribute and promote BMS's approved cancer therapies, ABRAXANE, REVLIMID, and VIDAZA in China, excluding Hong Kong, Macau and Taiwan (the "China License Agreement"). The China License Agreement became effective on August 31, 2017, contemporaneously with the closing of the acquisition of Celgene Shanghai and the A&R PD-1 License Agreement (see Note 4). The Company began distributing these in-licensed products in China in September 2017. The Company subsequently assigned the agreement to its wholly-owned subsidiary, BeiGene Switzerland.

In-Licensing Arrangements — Development

The Company has in-licensed the rights to develop, manufacture and, if approved, commercialize multiple development stage drug candidates globally or in specific territories. These arrangements typically include non-refundable, upfront payments, contingent obligations for potential development, regulatory and commercial performance milestone payments, cost sharing arrangements, royalty payments, and profit sharing.

Upfront and development milestones paid under these arrangements for the years ended December 31, 2019, 2018 and 2017 are set forth below. All upfront and development milestones were expensed to research and development expense. There have been no regulatory or commercial milestones paid under these arrangements to date.

	Year Ended December 31,		
	2019	2018	2017
Research and development payments to Collaboration Partners	$	$	$
Upfront payments	50,000	89,000	—
Milestone payments	—	3,000	—
Total	50,000	92,000	—

Our significant license agreements are described below:

Seattle Genetics

On November 5, 2019, the Company entered into a license agreement with Seattle Genetics, Inc. for an advanced pre-clinical product candidate for treating cancer. The agent utilizes a proprietary Seattle Genetics antibody-based technology. Under the terms of the agreement, Seattle Genetics retained rights to the product candidate in the Americas (United States, Canada and Latin American countries), Europe and Japan. The Company was granted exclusive rights to develop and commercialize the product candidate in Asia (except Japan) and the rest of the world. Seattle Genetics will lead global development and BeiGene will fund and operationalize the portion of global clinical trials attributable to its territories. BeiGene will also be responsible for all clinical development and regulatory submissions specific to its territories. Seattle Genetics received an upfront payment of $20,000 and is eligible to receive progress-dependent milestones and tiered royalties on any product sales. Seattle Genetics is a related party due to a common shareholder, and that shareholder has different representatives serving on each companies' respective board of directors. The upfront payment was expensed to research and development expense during the year ended December 31, 2019 in accordance with the Company's acquired in-process research and development expense policy.

BioAtla, LLC

On April 9, 2019, the Company entered into a global co-development and collaboration agreement with BioAtla LLC ("BioAtla") for the development, manufacturing and commercialization of BioAtla's investigational CAB-CTLA-4 antibody (BA3071), whereby BioAtla has agreed to co-develop the CAB-CTLA-4 antibody to defined early clinical objectives and the Company has agreed to then lead the parties' joint efforts to develop the product candidate and be responsible for global regulatory filings and commercialization. Subject to the terms of the agreement, the Company will hold a co-exclusive license with BioAtla to develop and manufacture the product candidate globally and an exclusive license to commercialize the product candidate globally. The Company has agreed to be responsible for all costs of development, manufacturing and commercialization in Asia (excluding Japan), Australia and New Zealand (the "Company Territory"), and the parties have agreed to share development and manufacturing costs and commercial profits and losses upon specified terms in the rest of the world. The Company paid BioAtla an upfront payment of $20,000 and BioAtla is eligible to receive a milestone payment upon reaching the defined early clinical objectives. BioAtla is also eligible to receive additional payments in subsequent development and regulatory milestones globally and commercial milestones in the Company Territory, together with tiered royalties on sales in the Company Territory. The upfront payment was expensed to research and development expense during the year ended December 31, 2019 in accordance with the Company's acquired in-process research and development expense policy.

Zymeworks, Inc.

On November 26, 2018, the Company and Zymeworks entered into collaboration and license agreements whereby the Company acquired licenses to develop and commercialize Zymeworks' clinical-stage bispecific antibody candidate ZW25 and its preclinical-stage bispecific antibody drug conjugate ("ADC") ZW49 in Asia (excluding Japan), Australia, and New Zealand. In addition, Zymeworks granted BeiGene a license to Zymeworks' proprietary Azymetric and EFECT platforms to develop and commercialize globally up to three other bispecific antibodies using the platforms.

Under the collaboration agreements, BeiGene will be responsible for all clinical development and regulatory submissions in the licensed territories. BeiGene and Zymeworks have also agreed to collaborate on global development of ZW25 and ZW49 in HER2-expressing solid tumors, including gastric and breast cancer, with BeiGene enrolling patients and contributing clinical trial data from the licensed territories.

Zymeworks retains full rights to both ZW25 and ZW49 outside of the specified countries and will continue to lead global development of these drug candidates.

Under the terms of the license and collaboration agreements for ZW49 and ZW25, Zymeworks received total upfront payments of $40,000 and is eligible to receive additional payments upon the achievement of development and commercial milestones for both product candidates. In addition, Zymeworks will be eligible to receive tiered royalties on future sales of ZW25 and ZW49 in the licensed territory.

Under the terms of the research and license agreement for the Azymetric and EFECT platforms, Zymeworks received an upfront payment of $20,000 and is eligible to receive additional payments upon the achievement of development and commercial milestones for up to three bispecific product candidates developed under the agreement. In addition, Zymeworks will be eligible to receive tiered royalties on future global sales of bispecific products developed by BeiGene under the agreement.

The upfront payments were expensed to research and development expense during the year ended December 31, 2018 in accordance with the Company's acquired in-process research and development expense policy. No milestone payments were accrued as of December 31, 2019.

Other

In addition to the collaborations discussed above, the Company has entered into additional collaborative arrangements during the years ending December 31, 2019 and 2018. The Company may be required to pay additional amounts upon the achievement of various development and commercial milestones under these agreements. The Company may also incur significant research and development costs if the related product candidate were to advance to late-stage clinical trials. In addition, if any products related to these collaborations are approved for sale, the Company may be required to pay significant royalties on future sales. The payment of these amounts, however, is contingent upon the occurrence of various future events, which have a high degree of uncertainty of occurrence.

4. Business Combinations and Asset Acquisitions

Celgene Shanghai

On August 31, 2017, BeiGene HK acquired 100% of the equity interests of Celgene Shanghai, a wholly-owned subsidiary of Celgene Holdings East Corporation established under the laws of the PRC. Celgene Shanghai was in the business of, among other things, providing marketing and promotional services in connection with certain pharmaceutical products manufactured by BMS. The name of Celgene Shanghai has been changed to BeiGene Pharmaceutical (Shanghai).

On July 5, 2017, BeiGene and a wholly-owned subsidiary of BMS entered into a license agreement pursuant to which BeiGene was granted the right to exclusively distribute and promote BMS's approved cancer therapies, ABRAXANE, REVLIMID, and VIDAZA (the "Distribution Rights"), in China excluding Hong Kong, Macau and Taiwan (the "China License Agreement"). The China License Agreement became effective on August 31, 2017, contemporaneously with the closing of the acquisition of Celgene Shanghai and the A&R PD-1 License Agreement. The Company subsequently assigned the China License Agreement to its wholly-owned subsidiary, BeiGene Switzerland.

The Company evaluated the acquisition of the Celgene Shanghai equity and the distribution rights acquired under ASU No. 2017-1, *Business Combinations: Clarifying the Definition of a Business*. Because substantially all of the value of the acquisition did not relate to a similar group of assets and the business contained both inputs and processes necessary to manage products and provide economic benefits directly to

its owners, it was determined that the acquisition represents a business combination. Therefore, the transaction has been accounted for using the acquisition method of accounting. This method requires that assets acquired and liabilities assumed in a business combination be recognized at their fair values as of the acquisition date.

Share subscription agreement

On August 31, 2017, the Company issued 32,746,416 of its ordinary shares to BMS for an aggregate purchase price of $150,000, or $4.58 per ordinary share, or $59.55 per ADS, pursuant to a subscription agreement dated July 5, 2017 by and between the Company and BMS (the "Share Subscription Agreement"). See Note 20 for further discussion of the Share Subscription Agreement.

Determination of purchase price

The purchase price of Celgene Shanghai was calculated as $28,138, and was comprised of cash consideration of $4,532 and non-cash consideration of $23,606, related to the discount on ordinary shares issued to BMS in connection with the Share Subscription Agreement. The discount was a result of the increase in fair value of the Company's shares between the fixed price of $59.55 per ADS in the Share Subscription Agreement and the fair value per ADS as of the date of issuance, August 31, 2017. The following summarizes the purchase price in the business combination (in thousands).

	Purchase Price
Cash paid to acquire Celgene Shanghai	$ 4,532
Discount on Share Subscription Agreement	23,606
Total purchase price	$28,138

Purchase price allocation

The following table summarizes the fair values of assets acquired and liabilities assumed (in thousands):

	Amount
Cash and cash equivalents	$24,448
Other current assets	518
Property and equipment, net	204
Intangible assets	7,500
Deferred tax asset	1,069
Total identifiable assets	33,739
Current liabilities	(5,710)
Total liabilities assumed	(5,710)
Goodwill	109
Total fair value of consideration transferred	$28,138

The goodwill resulting from the business combination is primarily attributable to the assembled workforce of the acquired business. The goodwill attributable to the business combination is not deductible for tax purposes.

The following summarizes the business combination as presented on the statement of cash flows (in thousands):

Investing activities	
Cash acquired	$ 24,448
Cash paid to acquire Celgene Shanghai	(4,532)
Cash acquired in business combination, net of cash paid	$ 19,916
Non-cash activities	
Discount provided on sale of ordinary shares for business combination	$(23,606)

BeiGene Pharmaceuticals (Guangzhou) Co., Ltd.

On September 21, 2018, BeiGene (Guangzhou) Co., Ltd. ("BeiGene Guangzhou") acquired 100% of the equity interests of Baiji Shenzhou (Guangzhou) Pharmaceuticals Co., Ltd. (formerly known as Huajian Pharmaceuticals Co., Ltd.), which subsequently changed its name to BeiGene Pharmaceuticals (Guangzhou) Co., Ltd., a pharmaceutical distribution company, for total cash consideration of $612, including transaction costs of $59. The acquisition was concentrated in a single identifiable asset, a drug distribution license, and thus the Company has concluded that the transaction is an asset acquisition as it does not meet the accounting definition of a business combination. The total cost was allocated to the drug distribution license and corresponding deferred tax liability, resulting in a $816 intangible asset for the license and a deferred tax liability of $204.

Beijing Innerway Bio-tech Co., Ltd.

On October 4, 2018, BeiGene HK completed the acquisition of 100% of the equity interests of Beijing Innerway Bio-tech Co., Ltd., the owner of the Company's research, development and office facility in Changping, Beijing, China, for total cash consideration of $38,654. The acquisition was concentrated in a single identifiable asset or group of assets, the building and associated land use right, and thus the Company has concluded that the transaction is an asset acquisition as it does not meet the accounting definition of a business combination. The total cost of the transaction of $38,865, which includes transaction costs of $211, was allocated based on the relative fair values of the net assets acquired, as follows:

	Amount
Land use right	$ 33,783
Building	15,874
Deferred tax liability	(11,221)
Other	429
Total cost	38,865

5. Restricted Cash

The Company's restricted cash balance of $2,764 as of December 31, 2019 primarily consists of RMB-denominated cash deposits held in designated bank accounts for collateral for letters of credit. The Company classifies restricted cash as current or non-current based on term of restriction.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

6. Short-Term Investments

Short-term investments as of December 31, 2019 consisted of the following available-for-sale debt securities:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value (Net Carrying Amount)
	$	$	$	$
U.S. treasury securities	363,440	1,288	—	364,728
Total	363,440	1,288	—	364,728

Short-term investments as of December 31, 2018 consisted of the following available-for-sale debt securities:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value (Net Carrying Amount)
	$	$	$	$
U.S. treasury securities	1,066,770	1,802	63	1,068,509
Total	1,066,770	1,802	63	1,068,509

The Company does not consider the investments in U.S. treasury securities to be other-than-temporarily impaired at December 31, 2019.

7. Inventories

The Company's inventory balance of $28,553 and $16,242 as of December 31, 2019 and 2018, respectively, consisted entirely of finished goods drug product purchased from BMS for distribution in the PRC. The manufacturing costs related to BRUKINSA inventory on hand as of December 31, 2019 were incurred prior to obtaining FDA approval on November 14, 2019, and expensed to research and development expense as incurred in accordance with the Company's pre-launch inventory policy.

8. Manufacturing Facility in Guangzhou, China

Manufacturing legal entity structure

BeiGene Shanghai, originally established as a wholly-owned subsidiary of BeiGene HK, and currently a wholly-owned subsidiary of BeiGene Biologics, as described below, provides clinical development services for BeiGene affiliates and is the clinical trial authorization ("CTA") holder and marketing authorization application ("MAA") holder for tislelizumab in China.

On March 7, 2017, BeiGene HK, a wholly owned subsidiary of the Company, and Guangzhou GET Technology Development Co., Ltd. (now Guangzhou High-tech Zone Technology Holding Group Co., Ltd.) ("GET"), entered into a definitive agreement to establish a commercial scale biologics manufacturing facility in Guangzhou, Guangdong Province, PRC.

On March 7, 2017, BeiGene HK and GET entered into an Equity Joint Venture Contract (the "JV Agreement"). Under the terms of the JV Agreement, BeiGene HK made an initial cash capital contribution of RMB200,000 and a subsequent contribution of one or more biologics assets in exchange for a 95% equity interest in BeiGene Biologics. GET made a cash capital contribution of RMB100,000 to BeiGene

Biologics, representing a 5% equity interest in BeiGene Biologics. In addition, on March 7, 2017, BeiGene Biologics entered into a contract with GET, under which GET agreed to provide a RMB900,000 loan (the "Shareholder Loan") to BeiGene Biologics (see Note 15). In September 2019, BeiGene Biologics completed the first phase of construction of a biologics manufacturing facility in Guangzhou, through a wholly owned subsidiary, the BeiGene Guangzhou Biologics Manufacturing Co., Ltd. ("BeiGene Guangzhou Factory"), to manufacture biologics for the Company and its subsidiaries.

On April 11, 2017, BeiGene HK, GET and BeiGene Biologics amended the JV Agreement and the capital contribution agreement, among other things, to adjust the capital contribution schedules and adjust the initial term of the governing bodies and a certain management position. On April 13, 2017 and May 4, 2017, BeiGene HK made cash capital contributions of RMB137,830 and RMB2,415, respectively, into BeiGene Biologics. The remainder of the cash capital contribution from BeiGene HK to BeiGene Biologics was paid on June 27, 2019. On April 14, 2017, GET made cash capital contributions of RMB100,000 into BeiGene Biologics. On April 14, 2017, BeiGene Biologics drew down the Shareholder Loan of RMB900,000 from GET (as further described in Note 15).

In the fourth quarter of 2017, BeiGene HK and BeiGene Biologics entered into an Equity Transfer Agreement to transfer 100% of the equity interest of BeiGene Shanghai to BeiGene Biologics, as required by the JV agreement, such that the CTA holder and MAA holder for tislelizumab in China was controlled by BeiGene Biologics. The transfer consideration for the purchased interests under this Equity Transfer Agreement is the fair value of the 100% equity of BeiGene Shanghai appraised by a qualified Chinese valuation firm under the laws of the PRC. Upon the transfer of equity in BeiGene Shanghai, BeiGene HK's equity interest in BeiGene Shanghai became 95%. As of December 31, 2019, the Company and GET held 95% and 5% equity interests in BeiGene Biologics, respectively.

As of December 31, 2019, the Company had $123,706 of cash and cash equivalents and $1,995 of restricted cash held by BeiGene Biologics, to be used to build the commercial scale biologics facility and to fund research and development of the Company's biologics drug candidates in China.

Commercial distribution legal entity structure

BeiGene (Guangzhou) Co., Ltd. ("BGC"), a wholly-owned subsidiary of BeiGene HK, was organized on July 11, 2017. On September 21, 2018, BGC acquired 100% of the equity interests of Baiji Shenzhou (Guangzhou) Pharmaceuticals Co., Ltd. (formerly known as Huajian Pharmaceuticals Co., Ltd.), which subsequently changed its name to BeiGene Pharmaceuticals (Guangzhou) Co., Ltd. ("BPG"). BPG owns drug distribution licenses necessary to distribute pharmaceutical products in China. The Company acquired these drug distribution licenses through the acquisition of BPG, which was accounted for as an asset acquisition (see Note 4), as it is difficult to obtain a newly issued domestic drug distribution license in China.

Commercial supply agreement and facility expansion

In January 2018, the Company entered into a commercial supply agreement with Boehringer Ingelheim Biopharmaceuticals (China) Ltd. ("Boehringer Ingelheim") for tislelizumab, which is being manufactured at Boehringer Ingelheim's facility in Shanghai, China as part of a Marketing Authorization Holder ("MAH") trial project pioneered by the Company and Boehringer Ingelheim. Under the terms of the commercial supply agreement, Boehringer Ingelheim has agreed to manufacture tislelizumab in China under an exclusive multi-year arrangement, with contract extension possible. In addition, the Company obtained certain preferred rights for future capacity expansion by Boehringer Ingelheim in China.

In October 2018, the Company entered into a binding letter of intent ("LOI") with Boehringer Ingelheim to increase the amount of tislelizumab supplied under the agreement through the expansion of Boehringer Ingelheim's facility to add a second bioreactor production line. Under the terms of the binding

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

LOI, the Company provided initial funding for the facility expansion and may make additional payments for contingency costs. This initial funding payment and any subsequent contingency payments will be credited against future purchases of tislelizumab over the term of the supply agreement.

The payment was recorded as a noncurrent asset since it is considered a long-term prepayment for future product costs that will provide future benefit to the Company through credits on purchases of tislelizumab from Boehringer Ingelheim over the life of the supply agreement.

9. Leases

The Company has operating leases for office and manufacturing facilities in the United States, Switzerland, and China. The leases have remaining lease terms of up to five years, some of which include options to extend the leases that have not been included in the calculation of the Company's lease liabilities and ROU assets. The Company has land use rights which represent land acquired for the biologics manufacturing facility in Guangzhou, and the land acquired for the Company's research, development and office facility in Changping, Beijing. A second Guangzhou land use right was acquired in May 2019 for potential expansion of the Company's research and development activities. The land use rights represent lease prepayments and are expensed over the remaining term of the rights, which is 48 years for the initial Guangzhou land use right, 50 years for the second Guangzhou land use right and 35 years for the Changping land use right. The Company also has certain leases with terms of 12 months or less for certain equipment, office and lab space, which are not recorded on the balance sheet.

The components of lease expense were as follows:

	Year Ended December 31, 2019
	$
Operating lease cost	13,980
Variable lease cost	1,784
Short-term lease cost	1,001
Total lease cost	16,765

Total expenses under operating leases were $8,930 and $3,810 for the years ended December 31, 2018 and 2017, respectively.

Supplemental balance sheet information related to leases was as follows:

	As of December 31, 2019
	$
Operating lease right-of-use assets	35,555
Land use rights, net	46,965
Total operating lease right-of-use assets	82,520
Current portion of operating lease liabilities	10,814
Operating lease liabilities	25,833
Total lease liabilities	36,647

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

Maturities of operating lease liabilities are as follows[(1)]:

	$
Year ending December 31, 2020	13,065
Year ending December 31, 2021	11,988
Year ending December 31, 2022	8,531
Year ending December 31, 2023	4,799
Year ending December 31, 2024	2,810
Thereafter	126
Total lease payments	41,319
Less imputed interest	(4,672)
Present value of lease liabilities	36,647

(1) As of December 31, 2019, the Company has additional operating leases for office facilities that have not yet commenced of $13,218. These operating leases will commence during fiscal year 2020 with lease terms of up to five years.

Other supplemental information related to leases is summarized below:

	Year ended December 31, 2019
	$
Operating cash flows used in operating leases	12,405
ROU assets obtained in exchange for new operating lease liabilities	20,108

	As of December 31, 2019
	$
Weighted-average remaining lease term (years)	3
Weighted-average discount rate	7.07%

The undiscounted future minimum payments under non-cancelable operating leases as of December 31, 2018, prior to the adoption of the Lease ASUs was as follows:

	$
Year ending December 31:	
2019	10,752
2020	9,972
2021	7,805
2022	3,923
2023 and thereafter	1,357
Total	33,809

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

10. Property and Equipment

Property and equipment are recorded at cost and consisted of the following:

	As of December 31,	
	2019	2018
	$	$
Laboratory equipment	47,154	22,636
Leasehold improvements	24,008	18,048
Building	109,514	15,857
Manufacturing equipment	62,775	16,048
Software, electronics and office equipment	14,705	4,707
Property and equipment, at cost	258,156	77,296
Less: Accumulated depreciation	(36,709)	(19,722)
Construction in progress	20,955	99,487
Property and equipment, net	242,402	157,061

Construction in progress ("CIP") as of December 31, 2019 and 2018 of $20,955 and $99,487, respectively, primarily related to the buildout of the Guangzhou manufacturing facility.

Transfers out of CIP for the year ended December 31, 2019 primarily relate to assets placed into service upon completion of the initial phase of the Guangzhou manufacturing facility, which occurred in September 2019. Transfers out of CIP during the year ended December 31, 2019 and amounts remaining in CIP as of December 31, 2019 by fixed asset class are as follows:

	Year ended December 31, 2019	As of December 31, 2019
	Transfers out of CIP	CIP
	$	$
Building	94,374	6,014
Manufacturing equipment	47,279	8,046
Laboratory equipment	26,109	4,496
Other	16,930	2,399
Total	184,692	20,955

Subsequent phases of the Guangzhou factory buildout will continue to be recorded as CIP until they are placed into service.

Depreciation expense for the years ended December 31, 2019, 2018 and 2017 were $17,291, $9,000 and $4,340, respectively.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

11. Intangible Assets

Intangible assets as of December 31, 2019 and December 31, 2018 are summarized as follows:

	December 31, 2019			December 31, 2018		
	Gross carrying amount	Accumulated amortization	Intangible assets, net	Gross carrying amount	Accumulated amortization	Intangible assets, net
Finite-lived intangible assets:						
Product distribution rights	7,500	(1,750)	5,750	7,500	(1,000)	6,500
Trading license	816	(720)	96	816	(144)	672
Total finite-lived intangible assets	8,316	(2,470)	5,846	8,316	(1,144)	7,172

Product distribution rights consist of distribution rights for the approved cancer therapies licensed from BMS, ABRAXANE, REVLIMID, and VIDAZA acquired as part of the BMS collaboration. The Company is amortizing the product distribution rights over a period of 10 years. The trading license represents the Guangzhou drug distribution license acquired on September 21, 2018. The Company is amortizing the drug distribution trading license over the remainder of the license term through February 2020.

Amortization expense of intangible assets for the years ended December 31, 2019, 2018 and 2017 was $1,326, $894 and $250, respectively. As of December 31, 2019, expected amortization expense for the unamortized finite-lived intangible assets is approximately $846 in 2020, $750 in 2021, $750 in 2022, $750 in 2023, $750 in 2024, and $2,000 in 2025 and thereafter.

12. Income Taxes

The components of income (loss) before income taxes are as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
PRC	(231,997)	(130,552)	(59,590)
U.S.	24,478	15,036	6,928
Other	(736,067)	(574,313)	(38,402)
Total	(943,586)	(689,829)	(91,064)

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The current and deferred components of the income tax expense (benefit) from continuing operations are as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	
Current Tax Expense (Benefit):			
PRC	16,368	6,890	2,477
U.S.	65	(377)	5,695
Other	12	—	—
Total	16,445	6,513	8,172
Deferred Tax Expense (Benefit):			
PRC	(4,738)	(2,682)	115
U.S.	(4,715)	(19,627)	(6,052)
Other	—	—	—
Total	(9,453)	(22,309)	(5,937)
Income Tax Expense (Benefit)	6,992	(15,796)	2,235

The reconciliation of the statutory tax rate to our effective income tax rate is as follow:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Loss before tax	(943,586)	(689,829)	(91,064)
China statutory tax rate	25%	25%	25%
Expected taxation at China statutory tax rate	(235,897)	(172,457)	(22,766)
Foreign and preferential tax rate differential	191,820	134,673	23,275
Non-deductible expenses	(273)	3,166	966
Stock compensation expenses	(5,698)	(5,371)	1,989
Effect of tax rate change	(63,395)	1,538	2,642
Deductible intellectual property from intercompany transfer	—	—	(29,438)
Change in valuation allowance	146,118	34,009	30,356
Research tax credits and incentives	(25,683)	(11,354)	(4,789)
Taxation for the year	6,992	(15,796)	2,235
Effective tax rate	-0.7%	2.3%	-2.5%

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

Significant components of deferred tax assets (liabilities) are as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Deferred Tax Assets:			
Accruals and reserves	27,304	19,193	7,756
Net operating losses carryforward	155,499	61,266	29,801
Stock-based compensation	12,651	8,642	4,639
Research tax credits	33,979	13,608	2,449
Depreciable and amortizable assets	575,128	158,639	—
Lease liability obligation	7,864	—	—
Gross deferred tax assets	812,425	261,348	44,645
Less valuation allowance	(777,583)	(242,945)	(36,600)
Total deferred tax assets	34,842	18,403	8,045
Deferred tax liabilities:			
Depreciable and amortizable assets	—	—	(370)
Right of use lease asset	(7,480)	—	—
Total deferred tax liabilities	(7,480)	—	(370)
Net deferred tax asset	27,362	18,403	7,675

Valuation allowances have been provided on deferred tax assets where, based on all available evidence, it was considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. After consideration of all positive and negative evidence, the Company believes that as of December 31, 2019 it is more likely than not that certain deferred tax assets will not be realized for our subsidiaries in Australia, Switzerland, the United States, and for certain subsidiaries in China. For the years ended December 31, 2019 and 2018, there were increases in the valuation allowance of $146,118 and $34,009, respectively. Adjustments could be required in the future if the Company estimates that the amount of deferred tax assets to be realized is more or less than the net amount recorded.

As of December 31, 2019 and 2018, the Company had net operating losses of approximately $810,505 and $300,769, respectively, of which net operating losses as of December 31, 2019 included $12,606 from an entity in Australia that has indefinite carryforward, $356,884 derived from entities in the PRC which expire in years 2020 through 2024, $383,914 derived from an entity in Switzerland that expires in 2026, and $57,101 derived from an entity in the United States that has indefinite carryforward. The Company has approximately $37,011 of U.S. research tax credits which will expire between in 2036 and 2039 if not utilized.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The gross unrecognized tax benefits for the years ended December 31, 2019, 2018 and 2017 were as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Beginning balance, as of January 1	2,295	918	110
Additions based on tax positions related to prior tax years	46	11	234
Reductions based on tax positions related to prior tax years	(17)	(44)	(91)
Additions based on tax positions related to the current tax year	2,435	1,410	665
Reductions based on lapse of statute of limitations	(126)	—	—
Ending balance, as of December 31	4,633	2,295	918

Current and prior year additions include assessment of U.S. federal and state tax credits and incentives. None of the unrecognized tax benefits as of December 31, 2019 would impact the consolidated income tax rate if ultimately recognized due to valuation allowances. The Company does not anticipate that the amount of existing unrecognized tax benefits will significantly change within the next 12 months.

The Company has elected to record interest and penalties related to income taxes as a component of income tax expense. For the years ended December 31, 2019, 2018 and 2017, the Company's accrued interest and penalties, where applicable, related to uncertain tax positions were not material.

The Company conducts business in a number of tax jurisdictions and, as such, is required to file income tax returns in multiple jurisdictions globally. As of December 31, 2019, Australia tax matters are open to examination for the years 2013 through 2019, China tax matters are open to examination for the years 2014 through 2019, and U.S. federal tax matters are open to examination for years 2016 through 2019. Various U.S. states and other non-US tax jurisdictions in which the Company files tax returns remain open to examination for 2010 through 2019.

The company qualifies for the Technology Advanced Service Enterprises ("TASE") and High and New Technology Enterprise ("HNTE") status for certain subsidiaries in China, which expire at the end of 2021. The income tax benefits attributable to this status for the year ended December 31, 2019 is approximately $2,600 or less than $0.01 per share outstanding.

During the year ended December 31, 2019, the Company completed intra-group transfers of certain intangible assets in anticipation of potential commercialization which resulted in the establishment of deferred tax assets that were fully offset by valuation allowances.

As of December 31, 2019, the Company continues to assert indefinite reinvestment on the excess of the financial reporting bases over tax bases in the Company's investments in foreign subsidiaries. A deferred tax liability has not been established for the approximately $9,620 of cumulative undistributed foreign earnings. Determination of the unrecognized deferred tax liability is not practicable due to uncertainty regarding the remittance structure and overall complexity of the hypothetical calculation.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

13. Supplemental Balance Sheet Information

Prepaid expenses and other current assets consist of the following:

	As of December 31,	
	2019	2018
	$	$
Prepaid research and development costs	69,715	58,673
Prepaid taxes	9,498	10,479
Unbilled receivable	—	8,612
Interest receivable	1,932	3,096
Other	9,093	9,694
Total	90,238	90,554

Other non-current assets consist of the following:

	As of December 31,	
	2019	2018
	$	$
Goodwill	109	109
Prepayment of property and equipment	10,289	11,981
Payment of facility capacity expansion activities[(1)]	24,881	25,193
Prepaid VAT	29,967	14,671
Rental deposits and other	3,209	1,823
Total	68,455	53,777

(1) Represents a payment for a facility expansion under a commercial supply agreement. The payment will provide future benefit to the Company through credits on future supply purchases as further described in Note 8.

Accrued expenses and other payables consisted of the following:

	As of December 31,	
	2019	2018
	$	$
Compensation related	54,156	35,887
External research and development activities related	62,794	34,588
Commercial activities	25,645	10,433
Individual income tax and other taxes	9,648	8,030
Sales rebates and returns related	3,198	4,749
Other	8,115	6,727
Total accrued expenses and other payables	163,556	100,414

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

Other long-term liabilities consist of the following:

	As of December 31,	
	2019	2018
	$	$
Deferred revenue, non-current portion	—	9,842
Deferred government grant income	46,391	37,851
Other	171	1,080
Total other long-term liabilities	46,562	48,773

14. Long-Term Bank Loan

On September 2, 2015, BeiGene Suzhou entered into a loan agreement with Suzhou Industrial Park Biotech Development Co., Ltd. and China Construction Bank to borrow RMB120,000 at a 7% fixed annual interest rate. The loan was secured by BeiGene Suzhou's equipment and the Company's rights to a PRC patent on a drug candidate. In September 2018, the Company repaid the first tranche of $8,736 (RMB60,000). In September 2019, the Company repaid the remaining principal outstanding of $8,394 (RMB60,000).

On April 4, 2018, BeiGene Guangzhou Factory entered into a nine-year loan agreement with China Construction Bank to borrow an RMB denominated loan of RMB580,000 at a floating interest rate benchmarking RMB loan interest rates of financial institutions in the PRC. The loan is secured by BeiGene Guangzhou Factory's land use right. Interest expense will be paid quarterly until the loan is fully settled. As of December 31, 2019, the Company has fully drawn down $83,311 (RMB580,000) of this loan. The loan interest rate was 4.9% for the year ended December 31, 2019, and the maturity dates range from 2021 to 2027.

On September 3, 2019, BeiGene Shanghai entered into a three-year working capital loan facility with Industrial Bank Co., Ltd. ("Industrial Bank") to borrow up to RMB348,000 at a floating interest rate benchmarked against prevailing interest rates of certain PRC financial institutions. The loan facility was secured with RMB deposited at Industrial Bank and the loan interest rate was 4.85%. Interest expense was payable quarterly until the loan was fully settled. In December 2019, the Company repaid the outstanding principal of $24,419 (RMB170,000).

Interest expense recognized for the years ended December 31, 2019, 2018 and 2017 amounted to $4,732, $2,253 and $1,260, respectively, among which, $2,412, $575 and nil was capitalized, respectively.

15. Shareholder Loan

On March 7, 2017, BeiGene Biologics entered into the Shareholder Loan Contract with GET, pursuant to which GET agreed to provide the Shareholder Loan of RMB900,000 to BeiGene Biologics. The Shareholder Loan has a conversion feature, settled in a variable number of shares of common stock upon conversion (the "debt-to-equity conversion"). On April 14, 2017, BeiGene Biologics drew down the entire Shareholder Loan of RMB900,000 from GET.

Key features of the Shareholder Loan

The Shareholder Loan bears simple interest at a fixed rate of 8% per annum. No interest payment is due or payable prior to the repayment of the principal or the debt-to-equity conversion. The term of the Shareholder Loan is 72 months, commencing from the actual drawdown date of April 14, 2017 and ending on April 13, 2023, unless converted earlier.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The Shareholder Loan may be repaid or converted, either partially or in full, into an additional mid-single digit percentage equity interest in BeiGene Biologics prior to its maturity date, pursuant to the terms of the JV Agreement. BeiGene Biologics has the right to make early repayment at any time; provided, however, that if repayment is to occur before the debt-to-equity conversion it would require written approval of both BeiGene Biologics and GET. Upon conversion of the shareholder loan, GET will receive an additional equity interest in BeiGene Biologics, which will be based on the formula outlined in the JV Agreement.

The Shareholder Loan can only be used for BeiGene Biologics, including the construction and operation of the biologics manufacturing facility and research and development and clinical trials to be carried out by BeiGene Biologics. If BeiGene Biologics does not use the Shareholder Loan proceeds for the specified purposes, GET may be entitled to certain liquidated damages. In the event of an early termination of the JV Agreement, the Shareholder Loan will become due and payable at the time of termination of the JV Agreement.

Accounting for the Shareholder Loan

The Shareholder Loan is classified as a long-term liability and initially measured at the principal of RMB 900,000. Interest will be accrued based on the interest rate of 8% per annum. As the Shareholder Loan may be share-settled by a number of shares with a fair value equal to a fixed settlement amount, the settlement is not viewed as a conversion feature, but as a redemption feature because the settlement amount does not vary with the share price. This in-substance redemption feature does not require bifurcation because it is clearly and closely related to the debt host that does not involves a substantial premium or discount. Since there is no conversion feature embedded in the Shareholder Loan, no beneficial conversion feature was recorded. There are no other embedded derivatives that are required to be bifurcated. The portion of interest accrued on the Shareholder Loan related to borrowings used to construct the BeiGene factory in Guangzhou is being capitalized in accordance with ASC 835-20, Interest — Capitalization of Interest.

For the years ended December 31, 2019, 2018 and 2017, total interest expense generated from the Shareholder Loan was $10,423, $10,894 and $7,649, respectively, among which, $2,445, $3,112 and $614 was capitalized, respectively.

16. Product Revenue

The Company's product sales are derived from the sale of ABRAXANE, REVLIMID, and VIDAZA in China under a distribution license from BMS. Following FDA approval on November 14, 2019, the Company launched its first internally developed drug, BRUKINSA, and began generating product revenues in the United States.

The table below presents the Company's net product sales for the years ended December 31, 2019, 2018 and 2017.

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Product revenue – gross	228,760	138,046	28,428
Less: Rebates and sales returns	(6,164)	(7,161)	(4,000)
Product revenue – net	222,596	130,885	24,428

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The following table presents the rollforward of accrued sales rebates and returns for the years ended December 31, 2019 and December 31, 2018.

	Sales Rebates and Returns
	$
Balance as of December 31, 2017	3,997
Accrual	7,161
Payment	(6,409)
Balance as of December 31, 2018	4,749
Accrual	6,164
Payment	(7,715)
Balance as of December 31, 2019	3,198

17. Loss Per Share

Loss per share was calculated as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Numerator:			
Net loss attributable to BeiGene, Ltd.	(948,628)	(673,769)	(93,105)
Denominator:			
Weighted average shares outstanding for computing basic and diluted loss per share	780,701,283	720,753,819	543,185,460
Net loss per share attributable to BeiGene, Ltd., basic and diluted	(1.22)	(0.93)	(0.17)

For the years ended December 31, 2019, 2018 and 2017, the computation of basic loss per share using the two-class method was not applicable, as the Company was in a net loss position.

The effects of all share options and restricted share units were excluded from the calculation of diluted loss per share as their effect would have been anti-dilutive during the years ended December 31, 2019, 2018 and 2017.

18. Share-Based Compensation Expense

2016 Share Option and Incentive Plan

On January 14, 2016, in connection with its U.S. IPO, the board of directors and shareholders of the Company approved the 2016 Share Option and Incentive Plan (the "2016 Plan"), which became effective on February 2, 2016. The Company initially reserved 65,029,595 ordinary shares for the issuance of awards under the 2016 Plan, plus any shares available under the 2011 Option Plan (the "2011 Plan"), and not subject to any outstanding options as of the effective date of the 2016 Plan, along with underlying share awards under the 2011 Plan that are cancelled or forfeited without issuance of ordinary shares. As of December 31, 2019, ordinary shares cancelled or forfeited under the 2011 Plan that were carried over to the 2016 Plan

totaled 5,152,236. The 2016 Plan provided for an annual increase in the shares available for issuance, to be added on the first day of each fiscal year, beginning on January 1, 2017, equal to the lesser of (i) five percent (5)% of the outstanding shares of the Company's ordinary shares on the last day of the immediately preceding fiscal year or (ii) such number of shares determined by the Company's board of directors or the compensation committee. On January 1, 2018, 29,603,616 ordinary shares were added to the 2016 Plan under this provision. In August 2018, in connection with the Hong Kong IPO, the board of directors of the Company approved an amended and restated 2016 Plan to remove this "evergreen" provision and implement other changes required by the Hong Kong Stock Exchange ("HKEx") rules. In December 2018, the board of directors approved a second amended and restated 2016 Plan to increase the number of shares authorized for issuance by 38,553,159 ordinary shares, as well as amend the cap on annual compensation to independent directors and make other changes. The number of shares available for issuance under the 2016 Plan is subject to adjustment in the event of a share split, share dividend or other change in the Company's capitalization.

As of December 31, 2019, share-based awards to acquire 32,221,058 ordinary shares were available for future grant under the 2016 Plan.

2018 Inducement Equity Plan

On June 6, 2018, the board of directors of the Company approved the 2018 Inducement Equity Plan (the "2018 Plan") and reserved 12,000,000 ordinary shares to be used exclusively for grants of awards to individuals that were not previously employees of the Company or its subsidiaries, as a material inducement to the individual's entry into employment with the Company or its subsidiaries within the meaning of Rule 5635(c)(4) of the NASDAQ Listing Rules. The 2018 Plan was approved by the board of directors upon recommendation of the compensation committee, without shareholder approval pursuant to Rule 5635(c)(4) of the NASDAQ Listing Rules. The terms and conditions of the 2018 Plan, and the forms of award agreements to be used thereunder, are substantially similar to the 2016 Plan and the forms of award agreements thereunder. In August 2018, in connection with the listing of the Company's ordinary shares on the HKEx, the board of directors of the Company approved an amended and restated 2018 Plan to implement changes required by the HKEx rules.

As of December 31, 2019, share-based awards to acquire 8,770,046 ordinary shares were available for future grant under the 2018 Plan.

2018 Employee Share Purchase Plan

On June 6, 2018, the shareholders of the Company approved the 2018 Employee Share Purchase Plan (the "ESPP"). Initially, 3,500,000 ordinary shares of the Company were reserved for issuance under the ESPP. In August 2018, in connection with the Hong Kong IPO, the board of directors of the Company approved an amended and restated ESPP to remove an "evergreen" share replenishment provision originally included in the plan and implement other changes required by the HKEx rules. In December 2018, the board of directors approved a second amended and restated ESPP to increase the number of shares authorized for issuance by 3,855,315 ordinary shares to 7,355,315 ordinary shares. The ESPP allows eligible employees to purchase the Company's ordinary shares (including in the form of ADSs) at the end of each offering period, which will generally be six months, at a 15% discount to the market price of the Company's ADSs at the beginning or the end of each offering period, whichever is lower, using funds deducted from their payroll during the offering period. Eligible employees are able to authorize payroll deductions of up to 10% of their eligible earnings, subject to applicable limitations.

On February 28, 2019, the Company issued 154,505 ordinary shares to employees for aggregate proceeds of $1,385 under the ESPP. The purchase price of the shares was $116.49 per ADS, or $8.96 per

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

ordinary share, which was discounted in accordance with the terms of the ESPP from the closing price on NASDAQ on February 28, 2019 of $137.05 per ADS, or $10.54 per ordinary share.

On August 30, 2019, the Company issued 233,194 ordinary shares to employees for aggregate proceeds of $2,192 under the ESPP. The purchase price of the shares was $122.19 per ADS, or $9.40 per ordinary share, which was discounted in accordance with the terms of the ESPP from the closing price on NASDAQ on August 30, 2019 of $143.75 per ADS, or $11.06 per ordinary share.

As of December 31, 2019, 6,966,550 ordinary shares were available for future issuance under the ESPP.

Share options

Generally, options have a contractual term of 10 years and vest over a three- to five-year period, with the first tranche vesting one calendar year after the grant date or the service relationship start date and the remainder of the awards vesting on a monthly basis thereafter. Restricted shares and restricted share units vest over a four-year period, with the first tranche vesting one calendar year after the grant date or the service relationship start date and the remainder of the awards vesting on a yearly basis thereafter.

The following table summarizes the Company's share option activities under the 2011, 2016 and 2018 Plans:

	Number of Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
		$	$	Years	$
Outstanding at December 31, 2016	77,079,743	1.31			
Granted	62,085,462	3.73	2.65		
Exercised	(5,887,193)	0.82			24,723
Forfeited	(6,275,115)	2.52			
Outstanding at December 31, 2017	127,002,897	2.45			
Granted	9,387,885	12.32	7.08		
Exercised	(13,841,036)	2.23			132,687
Forfeited	(6,467,099)	3.59			
Outstanding at December 31, 2018	116,082,647	3.21			
Granted	12,641,590	9.38	5.06		
Exercised	(16,730,441)	2.60			171,429
Forfeited	(3,576,542)	5.09			
Outstanding at December 31, 2019	108,417,254	3.96		6.94	953,925
Exercisable as of December 31, 2019	64,465,095	2.48		6.24	662,541
Vested and expected to vest at December 31, 2019	104,022,039	3.87		6.90	924,787

As of December 31, 2019, the unrecognized compensation cost related to 39,556,944 unvested share options expected to vest was $137,022. This unrecognized compensation will be recognized over an estimated weighted-average amortization period of 2.0 years.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The total fair value of employee share option awards vested during the years ended December 31, 2019, 2018 and 2017 was $58,670, $55,642 and $20,440, respectively.

Fair value of options

The Company uses the binomial option-pricing model in determining the estimated fair value of the options granted. The model requires the input of highly subjective assumptions including the estimated expected stock price volatility and, the exercise multiple for which employees are likely to exercise share options. For expected volatilities, the trading history and observation period of the Company's own share price movement has not been long enough to match the life of the share option. Therefore, the Company has made reference to the historical price volatilities of ordinary shares of several comparable companies in the same industry as the Company. For the exercise multiple, the Company was not able to develop an exercise pattern as reference, thus the exercise multiple is based on management's estimation, which the Company believes is representative of the future exercise pattern of the options. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury Bills yield curve in effect at the time of grant.

The following table presents the assumptions used to estimate the fair values of the share options granted in the years presented:

	Year Ended December 31,		
	2019	2018	2017
Fair value of ordinary share	$4.64 ~ $8.28	$4.30 ~ $8.85	$2.39 ~ $8.71
Risk-free interest rate	1.5% ~ 2.8%	2.5% ~ 3.1%	2.2% ~ 2.6%
Expected exercise multiple	2.2 ~ 2.8	2.2 ~ 2.8	2.2 ~ 2.8
Expected volatility	58% ~ 60%	60% ~ 64%	99% ~ 100%
Expected dividend yield	0%	0%	0%
Contractual life	10 years	10 years	10 years

Restricted shares

The following table summarizes the Company's restricted share activities under the 2016 Plan:

	Numbers of Shares	Weighted-Average Grant Date Fair Value
		$
Outstanding at December 31, 2016	1,075,000	2.16
Granted	300,000	2.95
Vested	(268,750)	2.04
Forfeited	(300,000)	2.95
Outstanding at December 31, 2017	806,250	2.16
Granted	—	—
Vested	(387,500)	2.12
Forfeited	(118,750)	2.04
Outstanding at December 31, 2018	300,000	2.25
Granted	—	—
Vested	(75,000)	2.27
Forfeited	(150,000)	2.24
Outstanding at December 31, 2019	75,000	2.27
Expected to vest at December 31, 2019	67,500	2.27

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

The Company had no non-employee restricted share activities during the year ended December 31, 2019.

As of December 31, 2019, the unrecognized compensation cost related to unvested restricted shares expected to vest was $153. This unrecognized compensation will be recognized over an estimated weighted-average amortization period of 0.7 years.

Restricted share units

The following table summarizes the Company's restricted share unit activities under the 2016 and 2018 Plans:

	Numbers of Shares	Weighted-Average Grant Date Fair Value
		$
Outstanding at December 31, 2016	—	—
Granted	1,469,442	7.55
Vested	—	—
Forfeited	—	—
Outstanding at December 31, 2017	1,469,442	7.55
Granted	14,079,598	12.07
Vested	(689,130)	8.33
Forfeited	(757,458)	10.89
Outstanding at December 31, 2018	14,102,452	11.85
Granted	18,637,333	10.10
Vested	(3,474,068)	11.75
Forfeited	(2,413,450)	11.07
Outstanding at December 31, 2019	26,852,267	10.72
Expected to vest at December 31, 2019	24,167,040	10.72

As of December 31, 2019, the unrecognized compensation cost related to unvested restricted share units expected to vest was $226,985. This unrecognized compensation will be recognized over an estimated weighted-average amortization period of 3.2 years.

The following table summarizes total share-based compensation cost recognized for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
Research and development	76,293	54,384	30,610
Selling, general and administrative	57,861	32,743	12,253
Total	134,154	87,127	42,863

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

19. Accumulated Other Comprehensive (Loss) Income

The movement of accumulated other comprehensive (loss) income is as follows:

	Foreign Currency Translation Adjustments	Unrealized Gains/Losses on Available-for-Sale Securities	Total
	$	$	$
December 31, 2017	(85)	(395)	(480)
Adjustment for the opening balance of accumulated other comprehensive loss	263	—	263
January 1, 2018	178	(395)	(217)
Other comprehensive (loss) income before reclassifications	(390)	4,081	3,691
Amounts reclassified from accumulated other comprehensive loss	—	(1,948)	(1,948)
Net-current period other comprehensive (loss) income	(390)	2,133	1,743
December 31, 2018	(212)	1,738	1,526
Other comprehensive (loss) income before reclassifications	(9,079)	5,596	(3,483)
Amounts reclassified from accumulated other comprehensive loss	—	(6,044)	(6,044)
Net-current period other comprehensive loss	(9,079)	(448)	(9,527)
December 31, 2019	(9,291)	1,290	(8,001)

20. Shareholders' Equity

Follow-on public offerings

During the years ended December 31, 2019, 2018 and 2017, the Company completed the following follow-on public offerings:

On August 16, 2017, the Company completed a follow-on public offering at a price of $71.00 per ADS, or $5.46 per ordinary share. In this offering, the Company sold 2,465,000 ADSs representing 32,045,000 ordinary shares. Additionally, the underwriters exercised their option to purchase an additional 369,750 ADSs representing 4,806,750 ordinary shares from the Company. Net proceeds from this offering, including the underwriter option, after deducting the underwriting discounts and offering expenses, were $188,517.

On January 22, 2018, the Company completed a follow-on public offering under the Company's effective registration statement on Form S-3 at a price of $101.00 per ADS, or $7.77 per ordinary share. In this offering, the Company sold 7,425,750 ADSs representing 96,534,750 ordinary shares. Additionally, the underwriters exercised their option to purchase an additional 495,050 ADSs representing 6,435,650 ordinary shares from the Company. Net proceeds from this offering, including the underwriter option, after deducting the underwriting discounts and offering expenses, were $757,587.

On August 8, 2018, the Company completed an initial public offering of its ordinary shares on The Hong Kong Stock Exchange Limited and a follow-on public offering of its ADS on the NASDAQ Global Select Market under the Company's effective registration statement on Form S-3 at a price of $13.76 per ordinary share, or $178.90 per ADS. In this offering, the Company sold 65,600,000 ordinary shares. Net proceeds after deducting underwriting discounts and commissions and offering expenses were $869,709.

Share Subscription Agreement

On August 31, 2017, the Company sold 32,746,416 of its ordinary shares to BMS for an aggregate cash price of $150,000, or $4.58 per ordinary share, or $59.55 per ADS, pursuant to a Share Subscription Agreement in connection with the entry into the A&R PD-1 License Agreement. Proceeds from the issuance are recorded net of $72 of fees related to the share issuance. The offer and sale of the shares issued pursuant to the Share Subscription Agreement was made in a private placement in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act, for transactions by an issuer not involving a public offering, and/or Regulation D under the Securities Act.

21. Restricted Net Assets

The Company's ability to pay dividends may depend on the Company receiving distributions of funds from its PRC subsidiaries. Relevant PRC statutory laws and regulations permit payments of dividends by the Company's PRC subsidiaries only out of its retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. The results of operations reflected in the consolidated financial statements prepared in accordance with GAAP differ from those reflected in the statutory financial statements of the Company's PRC subsidiaries.

In accordance with the company law of the PRC, a domestic enterprise is required to provide statutory reserves of at least 10% of its annual after-tax profit until such reserve has reached 50% of its respective registered capital based on the enterprise's PRC statutory accounts. A domestic enterprise is also required to provide discretionary surplus reserve, at the discretion of the Board of Directors, from the profits determined in accordance with the enterprise's PRC statutory accounts. The aforementioned reserves can only be used for specific purposes and are not distributable as cash dividends. The Company's PRC subsidiaries were established as domestic invested enterprises and therefore were subject to the above-mentioned restrictions on distributable profits.

During the years ended December 31, 2019, 2018 and 2017, no appropriation to statutory reserves was made because the PRC subsidiaries had substantial losses during such periods.

As a result of these PRC laws and regulations including the requirement to make annual appropriations of at least 10% of after-tax income and set aside as general reserve fund prior to payment of dividends, the Company's PRC subsidiaries are restricted in their ability to transfer a portion of their net assets to the Company.

Foreign exchange and other regulation in the PRC may further restrict the Company's PRC subsidiaries from transferring funds to the Company in the form of dividends, loans and advances. As of December 31, 2019 and 2018, amounts restricted are the net assets of the Company's PRC subsidiaries, which amounted to $109,633 and $93,281, respectively.

22. Employee Defined Contribution Plans

Full-time employees of the Company in the PRC participate in a government mandated defined contribution plan, pursuant to which certain pension benefits, medical care, employee housing fund and other welfare benefits are provided to employees. Chinese labor regulations require that the Company's PRC subsidiaries make contributions to the government for these benefits based on certain percentages of the employees' salaries. The Company has no legal obligation for the benefits beyond the contributions made. The total amounts for such employee benefits, which were expensed as incurred, were $23,282, $12,713 and $4,103 for the years ended December 31, 2019, 2018 and 2017, respectively.

During the year ended December 31, 2016, the Company implemented a defined contribution 401(k) savings plan (the "401(k) Plan") for U.S. employees. The 401(k) Plan covers all U.S. employees, and allows

participants to defer a portion of their annual compensation on a pretax basis. In addition, the Company implemented a matching contribution to the 401(k) Plan, matching 50% of an employee's contribution up to a maximum of 3% of the participant's compensation. Company contributions to the 401(k) plan totaled $2,389, $1,275 and $455 in the years ended December 31, 2019, 2018 and 2017, respectively.

The Company maintains a government mandated program to cover employees of its wholly owned subsidiary in Switzerland for pension, death or disability. The pension arm of the program is considered a defined contribution plan. Employer and employee contributions are made based on various percentages of salaries and wages that vary based on employee age and other factors. Company contributions into the program amounted to $528, $55, and nil in the years ended December 31, 2019, 2018 and 2017, respectively. Employee benefits for the remaining subsidiaries were immaterial.

23. Commitments and Contingencies

Purchase Commitments

As of December 31, 2019, the Company had purchase commitments amounting to $128,532, of which $97,203 related to minimum purchase requirements for supply purchased from contract manufacturing organizations and $31,329 related to binding purchase order obligations of inventory from BMS. The Company does not have any minimum purchase requirements for inventory from BMS.

Capital commitments

The Company had capital commitments amounting to $42,074 for the acquisition of property, plant and equipment as of December 31, 2019, which were mainly for BeiGene Guangzhou Factory's manufacturing facility and expansion of BGC's research and development activities in Guangzhou, China.

Other Business Agreements

The Company enters into agreements in the ordinary course of business with contract research organizations ("CROs") to provide research and development services. These contracts are generally cancelable at any time by the Company with prior written notice.

The Company also enters into collaboration agreements with institutions and companies to license intellectual property. The Company may be obligated to make future development, regulatory and commercial milestone payments and royalty payments on future sales of specified products associated with its collaboration agreements. Payments under these agreements generally become due and payable upon achievement of such milestones or sales. These commitments are not recorded on the consolidated balance sheet because the achievement and timing of these milestones are not fixed and determinable. When the achievement of these milestones or sales have occurred, the corresponding amounts are recognized in the consolidated financial statements.

24. Selected Quarterly Financial Data (Unaudited)

The following table summarizes the unaudited statements of operations for each quarter of 2019 and 2018 (in thousands except share and per share amounts). The unaudited quarterly information has been prepared on a basis consistent with the audited financial statements and includes all adjustments that the Company considers necessary for a fair presentation of the information shown. The operating results for any fiscal quarter are not necessarily indicative of the operating results for a full fiscal year or for any future period and there can be no assurances that any trend reflected in such results will continue in the future.

(Amounts in thousands of U.S. Dollar ("$") and Renminbi ("RMB"),
except for number of shares and per share data)

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2019	$	$	$	$
Revenue	77,833	243,346	50,141	56,892
Loss from operations	(173,755)	(85,833)	(312,266)	(388,037)
Net loss	(168,069)	(85,954)	(308,660)	(387,895)
Net loss attributable to ordinary shareholders	(167,640)	(85,570)	(307,357)	(388,061)
Basic and diluted net loss per share[(1)]	(0.22)	(0.11)	(0.39)	(0.49)

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2018	$	$	$	$
Revenue	32,544	52,804	54,202	58,670
Loss from operations	(110,809)	(163,050)	(151,102)	(280,808)
Net loss	(105,116)	(157,715)	(144,492)	(266,710)
Net loss attributable to ordinary shareholders	(104,596)	(156,887)	(144,031)	(268,255)
Basic and diluted net loss per share[(1)]	(0.16)	(0.22)	(0.19)	(0.35)

(1) Per common share amounts for the quarters and full years have been calculated separately. Accordingly, the sum of quarterly amounts may not equal the annual amount because of differences in the weighted average common shares outstanding during each period, principally due to the effect of share issuances by the Company during the year.

25. Segment and Geographic Information

The Company operates in one segment: pharmaceutical products. Its chief operating decision maker is the Chief Executive Officer, who makes operating decisions, assesses performance and allocates resources on a consolidated basis.

The Company's long-lived assets are substantially located in the PRC.

Net product revenues by geographic area are based upon the location of the customer, and net collaboration revenue is recorded in the jurisdiction in which the related income is expected to be sourced from. Total net revenues by geographic area are presented as follows:

	Year Ended December 31,		
	2019	2018	2017
	$	$	$
PRC	221,557	132,385	24,428
U.S.	134,689	42,793	138,423
Other	71,966	23,042	75,536
Total	428,212	198,220	238,387

26. Subsequent Events

On January 2, 2020, following approval by the Company's shareholders and satisfaction of other closing conditions, the Company announced the closing of its global strategic oncology collaboration with Amgen for the commercialization and development in China of Amgen's XGEVA, KYPROLIS, and BLINCYTO, and the joint global development of 20 oncology assets in Amgen's pipeline, with BeiGene responsible for development and commercialization in China. In connection with the collaboration, Amgen purchased a 20.5% stake in BeiGene for approximately $2.8 billion in cash at $174.85 per ADS.

On January 13, 2020, the Company entered into an exclusive development and commercialization agreement for the orphan biologic products SYLVANT® (siltuximab) and QARZIBA® (dinutuximab beta) in Greater China with EUSA Pharma ("EUSA"). Under the terms of the agreement, EUSA granted the Company exclusive rights to SYLVANT in Greater China and to QARZIBA in mainland China. Under the agreement, the Company has agreed to fund and undertake all clinical development and regulatory submissions in the territories, and plans to launch and commercialize both products once approved. EUSA received a $40 million upfront payment and will be eligible to receive payments upon the achievement of regulatory and commercial milestones up to a total of $160 million. EUSA will also be eligible to receive tiered royalties on future product sales.

Coronavirus Disease 2019 (COVID-19)

Beginning in January 2020, the novel coronavirus (COVID-19) outbreak originating in Wuhan, China has impacted the Company's operations in China, including commercial sales, regulatory interactions and inspections, and clinical trial recruitment and participation. Given the uncertainty of the situation, the duration of the business disruption and related financial impact cannot be reasonably estimated at this time.

Exhibit Index

Exhibit No.		Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
3.1		Fifth Amended and Restated Memorandum and Articles of Association of the Registrant, as currently in effect		8-K (Exhibit 3.1)	12/12/2018	001-37686
4.1	.1	Deposit Agreement dated February 5, 2016 by and among the Company, the Depositary and holders of the American Depositary Receipts		8-K (Exhibit 4.1)	2/11/2016	001-37686
	.2	Amendment No. 1 to Deposit Agreement, dated April 11, 2016, by and among the Registrant, Citibank, N.A. and holders of the American Depositary Receipts		8-K (Exhibit 4.1)	4/11/2016	001-37686
	.3	Letter Agreement, dated as of July 11, 2016, between the Registrant and Citibank, N.A.		10-Q (Exhibit 4.7)	8/10/2016	001-37686
	.4	Form of Letter Agreement between the Registrant and Citibank, N.A.		10-Q (Exhibit 4.9)	5/10/2017	001-37686
4.2		Form of American Depositary Receipt (included in Exhibit 4.1.1)				
4.3		Specimen Certificate for Ordinary Shares		S-1 (Exhibit 4.3)	12/9/2015	333-207459
4.4	.1	Second Amended and Restated Investors' Rights Agreement, dated as of April 21, 2015, by and among the Registrant and certain shareholders named therein		S-1 (Exhibit 4.4)	10/16/2015	333-207459
	.2	Amendment No. 1 to Second Amended and Restated Investors' Rights Agreement, dated January 26, 2016, by and among the Registrant and certain shareholders named therein		S-1 (Exhibit10.21)	1/27/2016	333-207459
4.5		Registration Rights Agreement, dated as of November 16, 2016, by and among BeiGene, Ltd. and the investors named therein		8-K (Exhibit 4.1)	11/17/2016	001-37686
4.6		Description of BeiGene, Ltd.'s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	X			

Exhibit No.	Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
Lease Agreements					
10.1	Lease dated February 1, 2011 by and between BeiGene (Beijing) Co., Ltd. and Beijing Xintaike Medical Device Co., Ltd. (English translation)		S-1 (Exhibit 10.4)	10/16/2015	333-207459
10.2	Lease Agreement, dated as of April 10, 2016, between BeiGene (Suzhou) Co., Ltd. and Suzhou Industrial Park Biotech Development Co., Ltd. (English Translation)		10-Q (Exhibit 10.5)	5/12/2016	001-37686
Collaboration, License and Commercial Agreements					
10.3#	Amended Equity Joint Venture Contract regarding BeiGene Biologics Co., Ltd., dated April 11, 2017 between BeiGene (Hong Kong) Co., Limited and Guangzhou GET Technology Development Co., Ltd.		10-Q (Exhibit 10.1)	5/10/2017	001-37686
10.4#	Amended Capital Increase Agreement with respect to BeiGene Biologics Co., Ltd., dated April 11, 2017, among BeiGene (Hong Kong) Co., Limited; Guangzhou GET Technology Development Co., Ltd.; and BeiGene Biologics Co., Ltd.		10-Q (Exhibit 10.2)	5/10/2017	001-37686
10.5#	Shareholder Loan Contract with respect to BeiGene Biologics Co., Ltd, dated March 7, 2017, between Guangzhou GET Technology Development Co., Ltd. and BeiGene Biologics Co., Ltd.		10-Q (Exhibit 10.3)	5/10/2017	001-37686
10.6#	License and Supply Agreement, dated July 5, 2017, by and between the Registrant and Celgene Logistics Sàrl		10-Q (Exhibit 10.3)	11/13/2017	001-37686
.1	Assignment and Assumption Agreement, dated December 29, 2017, by and between the Registrant and BeiGene Switzerland GmbH	X			
10.7	Share Subscription Agreement, dated July 5, 2017, by and between Celgene Switzerland LLC and the Registrant		8-K (Exhibit 10.1)	7/6/2017	001-37686

Exhibit No.		Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.8##		Letter Agreement, dated June 14, 2019, by and among the Registrant, BeiGene Switzerland GmbH, Celgene Corporation and Celgene Switzerland LLC, to terminate the Amended and Restated Exclusive License and Collaboration Agreement, dated August 31, 2017		10-Q (Exhibit 10.1)	8/8/2019	001-37686
10.9##		Share Purchase Agreement, dated October 31, 2019, by and between Amgen Inc. and the Registrant	X			
10.10		Amendment No. 1 to Share Purchase Agreement, dated December 6, 2019, by and between Amgen Inc. and the Registrant	X			
10.11##		Collaboration Agreement, dated October 31, 2019, by and among the Registrant, BeiGene Switzerland GmbH and Amgen Inc.	X			
10.12		Guarantee, dated October 31, 2019, made by and between Amgen Inc. and the Registrant	X			
Equity and Other Compensation Plans						
10.13†		2011 Option Plan, as amended and form of option agreements thereunder	S-1 (Exhibit 10.1)	10/16/2015	333-207459	
10.14	.1†	Second Amended and Restated 2016 Share Option and Incentive Plan		8-K (Exhibit 10.1)	12/12/2018	001-37686
	.2†	Forms of Restricted Share Unit Award Agreement for Non-Employee Directors under the 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.7)	8/9/2018	001-37686
	.3†	Form of Global Restricted Share Unit Award Agreement for Employees under the Second Amended and Restated 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.2)	8/8/2019	001-37686
	.4†	Form of Global Restricted Share Unit Award Agreement for Consultants under the Second Amended and Restated 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.3)	8/8/2019	001-37686

Exhibit No.		Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
	.5†	Form of Global Non-Qualified Share Option Agreement for Employees under the Second Amended and Restated 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.4)	8/8/2019	001-37686
	.6†	Form of Global Non-Qualified Share Option Agreement for Non-Employee Directors under the Second Amended and Restated 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.5)	8/8/2019	001-37686
	.7†	Form of Global Non-Qualified Share Option Agreement for Non-Employee Consultants under the Second Amended and Restated 2016 Share Option and Incentive Plan		10-Q (Exhibit 10.6)	8/8/2019	001-37686
10.15	.1†	Amended and Restated 2018 Inducement Equity Plan		8-K (Exhibit 10.1)	8/13/2018	001-37686
	.2†	Form of Non-Qualified Share Option Agreement under the 2018 Inducement Equity Plan		8-K (Exhibit 10.3)	6/8/2018	001-37686
	.3†	Form of Restricted Share Unit Award Agreement under the 2018 Inducement Equity Plan		10-Q (Exhibit 10.5)	8/9/2018	001-37686
10.16†	.1†	Second Amended and Restated 2018 Employee Share Purchase Plan		8-K (Exhibit 10.2)	12/12/2018	001-37686
	.2†	Amendment No. 1 to the Second Amended and Restated 2018 Employee Share Purchase Plan		8-K (Exhibit 10.2)	6/5/2019	001-37686
10.17†		Senior Executive Cash Incentive Bonus Plan		S-1 (Exhibit10.19)	1/19/2016	333-207459
10.18†		Independent Director Compensation Policy, as amended		8-K (Exhibit 10.1)	6/5/2019	001-37686
Agreements with Executive Officers and Directors						
10.19†		Form of Indemnification Agreement, entered into between the Registrant and its directors and officers		S-1 (Exhibit 10.3)	1/19/2016	333-207459
10.20†		Employment Agreement, dated April 25, 2017, by and between the Registrant and John V. Oyler		8-K (Exhibit 10.1)	4/26/2017	001-37686

Exhibit No.	Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.21†	Executive Employment Agreement, dated April 28, 2018, by and between BeiGene (Beijing) Co., Ltd. and Xiaobin Wu		10-Q (Exhibit 10.1)	8/9/2018	001-37686
10.22†	Employment Agreement, dated July 13, 2015, by and between BeiGene USA, Inc. and Howard Liang		S-1 (Exhibit 10.9)	10/16/2015	333-207459
10.23†	Employment Agreement, dated as of August 19, 2016, by and between BeiGene USA, Inc. and Jane Huang		10-Q (Exhibit 10.2)	11/10/2016	001-37686
10.24†	Consulting Agreement, dated July 24, 2018, by and between the Registrant and Xiaodong Wang		10-Q (Exhibit 10.8)	8/9/2018	001-37686
21.1	List of Subsidiaries of the Registrant	X			
23.1	Consent of Ernst & Young Hua Ming LLP	X			
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Principle Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1*	Certification of Principal Executive Officer and Principle Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			

Exhibit No.	Exhibit Description	Filed/ Furnished Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
101.INS	Inline XBRL Instance Document — the instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document				
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X			
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.*)	X			

† Indicates a management contract or any compensatory plan, contract or arrangement.

Confidential treatment has been granted by the U.S. Securities and Exchange Commission as to certain portions of this exhibit omitted and filed separately.

Certain portions of the exhibit have been omitted by means of redacting a portion of the text and replacing it with "[…***…]". BeiGene, Ltd. (the Registrant) has determined that the omitted information (i) is not material and (ii) would be competitively harmful if publicly disclosed.

* Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

BEIGENE, LTD.

Date: March 2, 2020

By: /s/ JOHN V. OYLER

John V. Oyler
Chief Executive Officer and Chairman
(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints John V. Oyler, Howard Liang and Scott A. Samuels, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons in the capacities indicated below and on the dates indicated:

Signature	Title	Date
/s/ JOHN V. OYLER John V. Oyler	Chief Executive Officer and Chairman *(Principal Executive Officer)*	March 2, 2020
/s/ HOWARD LIANG Howard Liang	Chief Financial Officer and Chief Strategy Officer *(Principal Financial and Accounting Officer)*	March 2, 2020
/s/ TIMOTHY CHEN Timothy Chen	Director	March 2, 2020
/s/ DONALD W. GLAZER Donald W. Glazer	Director	March 2, 2020
/s/ MICHAEL GOLLER Michael Goller	Director	March 2, 2020
/s/ ANTHONY C. HOOPER Anthony C. Hooper	Director	March 2, 2020
/s/ RANJEEV KRISHANA Ranjeev Krishana	Director	March 2, 2020
/s/ THOMAS MALLEY Thomas Malley	Director	March 2, 2020
/s/ XIAODONG WANG Xiaodong Wang	Director	March 2, 2020
/s/ JING-SHYH (SAM) SU Jing-Shyh (Sam) Su	Director	March 2, 2020
/s/ QINGQING YI Qingqing Yi	Director	March 2, 2020

CORPORATE OFFICERS

John V. Oyler
Chairman, Co-Founder & CEO

Xiaobin Wu
General Manager of China & President of BeiGene, Ltd.

Howard Liang
Chief Financial Officer & Chief Strategy Officer

Jane Huang
Chief Medical Officer, Hematology

Scott A. Samuels
Senior Vice President, General Counsel

BOARD OF DIRECTORS

John V. Oyler
Chairman, Co-Founder & CEO

Timothy Chen
Foxconn Industrial Internet Company

Donald W. Glazer
Chairman of the Board of GMO Trust

Michael Goller
Baker Brothers Investments

Anthony C. Hooper
Consultant of Amgen Inc.

Ranjeev Krishana
Baker Brothers Investments

Thomas Malley
Mossrock Capital, LLC

Jing-Shyh (Sam) Su
Formerly of Yum! Brands, Inc.

Xiaodong Wang
Chairman of Scientific Advisory Board & Co-Founder

Michael Qingqing Yi
Hillhouse Capital

SHAREHOLDER MEETING

June 17, 2020
8:00 a.m. local time
The Offices of Mourant Governance Services (Cayman) Limited
94 Solaris Avenue
Camana Bay
Grand Cayman KY1-1108
Cayman Islands

EMPLOYEES

3,300 (as of December 31, 2019)

STOCK CODES

NASDAQ: BGNE
HKEX: 06160

INVESTOR RELATIONS

Craig West
+1 857-302-5189

Gabrielle Zhou
+86 10-5895-8058

ir@beigene.com

AUDITORS

Ernst & Young Hua Ming LLP,
as to United States financial reporting

Ernst & Young,
as to Hong Kong financial reporting

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Mourant Governance Services (Cayman) Limited
94 Solaris Avenue
Camana Bay
Grand Cayman KY1-1108
Cayman Islands

HONG KONG SHARE REGISTRAR

Computershare Hong Kong Investor Services Limited
Shops 1712-1716
17th Floor
Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong

BeiGene