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As confidentially submitted to the Securities and Exchange Commission on May 13, 2019 as Amendment No. 2 to the draft registration statement.
This draft registration statement has not been publicly filed with the
Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

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

FORM F-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Genmab A/S

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

The Kingdom of Denmark
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

Not Applicable
(I.R.S. Employer
Identification Number)

**Kalvebod Brygge 43
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(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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**Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this Registration Statement.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging Growth Company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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 7(a)(2)(B) of the Securities Act. o

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price ⁽¹⁾	Amount of registration fee ⁽²⁾
Ordinary shares, DKK 1 nominal value per share ⁽³⁾	\$	\$

- (1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended. Includes the additional ordinary shares represented by American Depositary Shares, or ADSs, that the underwriters have the option to purchase.
- (2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.
- (3) ADSs issuable upon deposit of the ordinary shares registered hereby will be registered pursuant to a separate registration statement on Form F-6. Each ADS represents of one ordinary share.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion
Preliminary Prospectus dated _____, 2019

PROSPECTUS

American Depositary Shares



Genmab A/S

Representing Ordinary Shares

This is the initial public offering of American Depositary Shares, or ADSs, of Genmab A/S. We are selling _____ ADSs, representing _____ of our ordinary shares. Each ADS represents the right to receive _____ of one ordinary share. We intend to apply to list our ADSs on the Nasdaq Global Select Market under the symbol "GMAB."

Currently, our ordinary shares are listed on Nasdaq Copenhagen A/S, or Nasdaq Copenhagen, under the symbol "GEN" and our ADSs are traded on the over-the-counter market in the United States under the symbol "GMXAY." The closing price of our ordinary shares on Nasdaq Copenhagen on _____, 2019 was DKK _____ per ordinary share, which equals a price of \$ _____ per ADS, based on an exchange rate of \$ _____ per DKK as of _____, 2019 and an ADS-to-share ratio of _____ to 1.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company and a Foreign Private Issuer" for additional information.

Investing in the ADSs involves risks that are described in the "Risk Factors" section beginning on page 16 of this prospectus.

	<u>Per ADS</u>	<u>Total</u>
Public offering price	\$ _____	\$ _____
Underwriting commission(1)	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) We refer you to "Underwriting" for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional _____ ADSs from us, at the public offering price, less the underwriting commission, for 30 days after the date of this prospectus.

None of the Securities and Exchange Commission, any state securities commission, the Danish Financial Supervisory Authority, nor any other foreign securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The ADSs will be ready for delivery on or about _____, 2019.

BofA Merrill Lynch

Morgan Stanley

Jefferies

The date of this prospectus is _____, 2019.

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Unless otherwise indicated, information contained in this prospectus concerning our industry, our business and the markets for our products and product candidates, including our general expectations, market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications, research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause our future performance to differ materially from our assumptions and estimates. See "Special Note Regarding Forward-Looking Statements."

This prospectus includes trademarks, tradenames and service marks, certain of which belong to us and others that are the property of other organizations. Solely for convenience, trademarks, tradenames and service marks referred to in this prospectus appear without the ®, ™ and ℠ symbols, but the absence of those symbols is not intended to indicate, in any way, that we will not assert our rights or that the applicable owner will not assert its rights to these trademarks, tradenames and service marks to the fullest extent under applicable law. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

Neither we nor the underwriters have authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. Neither we nor the underwriters take any responsibility for, or provide any assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell ADSs and seeking offers to purchase ADSs only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front of this prospectus, regardless of the time of delivery of this prospectus or any sale of ADSs.

For investors outside the United States: Neither we nor any of the underwriters have taken any action to permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

PRESENTATION OF FINANCIAL INFORMATION

We maintain our books and records in Danish kroner and report under International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. None of the consolidated financial statements in this prospectus were prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. Except with respect to U.S. dollar amounts presented as contractual terms, amounts denominated in U.S. dollars when received or paid, including milestone payments and royalties received from Janssen Biotech, Inc. under our daratumumab collaboration, or as otherwise indicated, all amounts that are presented in U.S. dollars herein have been translated from DKK solely for convenience at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate as of March 31, 2019, as reported by Danmarks Nationalbank. We use the symbol "\$" to refer to the U.S. dollar, "DKK" to refer to the Danish krone and the symbol "€" to refer to the Euro herein. Neither we nor the underwriters represent that any amounts presented herein could be or could have been converted into U.S. dollars or Danish kroner at any particular rate indicated or at any other rate.

PRESENTATION OF SHARE INFORMATION

All references to "shares" in this prospectus refer to ordinary shares of Genmab A/S with a nominal value of DKK 1 per share.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in the ADSs, you should read this entire prospectus carefully, including the sections of this prospectus entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements contained elsewhere in this prospectus. Unless the context otherwise requires, references in this prospectus to the "Company," "Genmab," "we," "us" and "our" refer to Genmab A/S and its subsidiaries.

Our Company

We are an international biotechnology company specializing in antibody therapeutics for the treatment of cancer and other diseases. Our core purpose is to improve the lives of patients by creating and developing innovative antibody products. Our vision is to transform cancer treatment by launching our own proprietary product by 2025 and advancing our pipeline of differentiated and well-tolerated antibodies. We are building and expanding our late-stage development and commercial capabilities to allow us to bring our proprietary products to market in the future. Today, we have a well-diversified portfolio of products, product candidates and technologies. Our portfolio includes two marketed partnered products, daratumumab, marketed as DARZALEX® for the treatment of certain indications of multiple myeloma, or MM, and ofatumumab, marketed as Arzerra® for the treatment of certain indications of chronic lymphocytic leukemia, or CLL, in addition to a broad pipeline of differentiated product candidates. Our pipeline includes five proprietary product candidates in clinical development and approximately 20 proprietary and partnered pre-clinical programs, including two proprietary product candidates for which we have submitted or intend to submit an application for an investigational new drug, or IND, to the U.S. Food and Drug Administration, or FDA, and/or a clinical trial application, or a CTA, to the European Medicines Agency, or EMA, in 2019. In addition to our proprietary clinical product candidates and our partners' ongoing label expansion studies for daratumumab and ofatumumab, our partners have eight additional product candidates in clinical development through collaboration agreements with us. Our portfolio also includes four proprietary antibody technologies that play a key role in building our product pipeline, enhancing our partnerships and generating revenue. We selectively enter into strategic alliances with other biotechnology and pharmaceutical companies that build our network in the biotechnology space and give us access to complementary novel technologies or products that move us closer to achieving our vision and fulfilling our core purpose.

Our Portfolio

The following chart summarizes the disease indications and most advanced development status of our marketed products, each of the proprietary product candidates in our clinical pipeline and the most advanced product candidates in our pre-clinical pipeline.

Product	Target	Rights	Disease Indications	Most Advanced Development Phase						Anticipated 2019 Milestones
				Pre-Clinical	I	I/II	II	III	Launched	
Marketed Products and Proposed Label Expansion										
Daratumumab (DARZALEX)	CD38	Janssen (Tiered royalties to Genmab on net global sales) ⁽¹⁾	Multiple myeloma: Frontline and relapsed/refractory ⁽²⁾							
			Multiple myeloma: Frontline ⁽²⁾							FDA and EMA feedback on MAIA and CASSIOPEIA submissions; GRIFFIN efficacy data
			Multiple myeloma: Subcutaneous formulation ⁽⁴⁾							Regulatory submissions based on COLUMBA
			Multiple myeloma: Other							Trials ongoing
			Amyloidosis							Trial ongoing
Ofatumumab (Arzerra)	CD20	Novartis (Royalties to Genmab on net global sales) ⁽³⁾	Chronic lymphocytic leukemia ⁽⁶⁾							
			Relapsing multiple sclerosis							ASCLEPIOS I and II study completion
Proprietary Product Candidates										
Tisotumab vedotin	TF	50:50 Genmab / Seattle Genetics	Cervical cancer							Trials ongoing
			Ovarian cancer							Trial ongoing
			Solid tumors							Trials ongoing
Enapotumab vedotin (HuMax-AXL-ADC)	AXL	Genmab	Solid tumors							Efficacy analysis from expansion cohort phase
HexaBody-DR5/DR5 (GEN1029)	DR5	Genmab	Solid tumors							Initial data
DuoBody-CD3xCD20 (GEN3013)	CD3, CD20	Genmab	Hematological malignancies							Initial data for dose escalation cohorts
DuoBody-PD-L1x4-1BB (GEN1046)	PD-L1, 4-1BB	50:50 Genmab / BioNTech	Solid tumors							Recruiting ongoing
DuoBody-CD40x4-1BB (GEN1042)	CD40, 4-1BB	50:50 Genmab / BioNTech	Solid tumors							Initiate Phase I/II trial
DuoHexaBody-CD37	CD37	Genmab	B-cell malignancies							Submit IND and/or CTA

- (1) Pursuant to our development, manufacturing and commercialization agreement with Janssen Biotech, Inc., or Janssen, we receive tiered royalty payments of 12% to 20% based on Janssen's annual net product sales of daratumumab. See "Business—Our Products and Product Candidates—Daratumumab (DARZALEX)—Collaboration with Janssen" for more information about our agreement with Janssen.
- (2) DARZALEX has received marketing approval in combination with certain treatment regimens for frontline and relapsed/refractory, or R/R, MM, and as a monotherapy for heavily pre-treated MM, in a number of countries, including the United States and the European Union. See "Business—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma—Existing Marketing Approvals and Pending Regulatory Applications" for more information about existing marketing approvals for DARZALEX.
- (3) In addition to existing approvals for frontline MM in certain jurisdictions, Janssen is conducting studies of daratumumab for additional frontline MM indications, which differ from existing frontline approvals based on the combination treatment regimen, transplant-eligibility of patients and/or jurisdiction(s) of the study. See "Business—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma—Key Ongoing Trials for Additional MM Indications" for more information about these ongoing trials.

- (4) In addition to certain clinical studies specifically assessing the safety and efficacy of a subcutaneous, or subQ, formulation of daratumumab for the treatment of certain MM indications, a subQ formulation of daratumumab is being used in a number of other studies of daratumumab for the treatment of frontline MM, R/R MM and other disease indications.
- (5) Pursuant to our agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments. See "Business—Our Products and Product Candidates—Ofatumumab—Collaboration with Novartis" for more information about our agreement with Novartis.
- (6) Ofatumumab, marketed as Arzerra, has been approved for certain CLL indications in the United States, the European Union and a number of other countries. Due to low and decreasing global demand for Arzerra primarily related to increased competition in the CLL treatment space, on January 22, 2018, Novartis announced that it intends to transition Arzerra in non-U.S. markets from commercial availability to limited availability through managed access programs or alternative solutions for approved CLL indications where applicable and allowed by local regulators. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan.

Marketed Products and Proposed Label Expansion

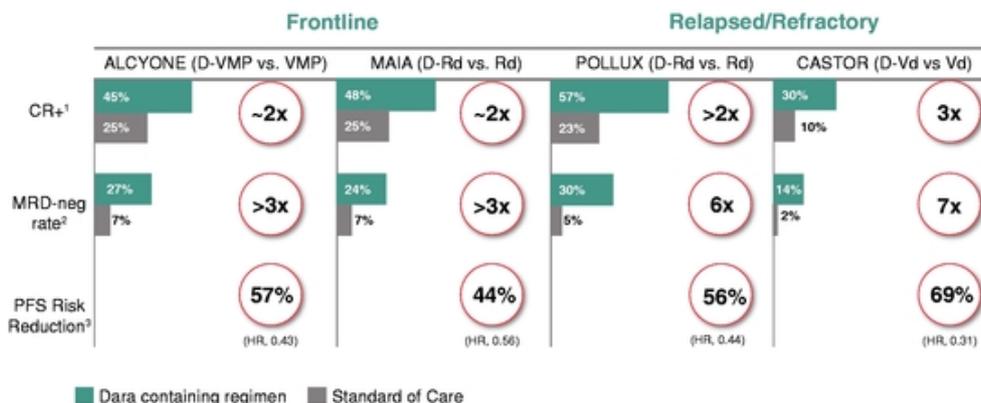
Our lead product, daratumumab, marketed as DARZALEX for the treatment of certain multiple myeloma indications, is a human IgG1k monoclonal antibody, or mAb, that binds with high affinity to the CD38 molecule, which is highly expressed on the surface of MM cells. When first approved by the FDA in 2015, it was the first human CD38-targeting mAb to reach the market and the first mAb to receive FDA approval to treat multiple myeloma. DARZALEX is commercialized by Janssen Biotech, Inc., or Janssen, under an exclusive development, manufacturing and commercialization agreement we entered into in 2012. Pursuant to this agreement, we receive tiered royalty payments of 12% to 20% based on Janssen's annual net product sales and are eligible for certain additional payments in connection with development, regulatory and sales milestones. Janssen is fully responsible for developing and commercializing daratumumab and all costs associated therewith. Janssen has obtained regulatory approvals for DARZALEX for certain multiple myeloma indications in a number of countries, including the United States, the European Union and Japan. In addition, applications for label expansion in the United States, the European Union and Japan and for initial approval in China are currently pending with applicable regulators. Following the U.S. commercial launch of DARZALEX in 2015, DARZALEX achieved blockbuster sales status by reaching \$1.2 billion of annual net sales in 2017, with Janssen's net sales of DARZALEX increasing to \$2.0 billion in 2018. We recorded \$90.0 million in milestone payments for daratumumab and DKK 1,708.1 million (\$262.0 million) in royalties related to DARZALEX sales in 2018.

The chart below illustrates daratumumab's significant impact and versatility as a combination treatment for certain indications of frontline multiple myeloma and relapsed/refractory multiple myeloma in four pivotal Phase III studies. Each study was a head-to-head study comparing daratumumab, or D, in combination with a standard MM treatment regimen versus the standard treatment alone.

- For frontline treatment of transplant-ineligible MM patients, the ALCYONE and MAIA studies compared daratumumab in combination with (i) bortezomib, melphalan and prednisone, or VMP, versus VMP alone in the ALCYONE study and (ii) lenalidomide and dexamethasone, or Rd, versus Rd alone in the MAIA study. The ALCYONE study supported the U.S. and EU regulatory approvals of DARZALEX in combination with VMP for frontline treatment of transplant-ineligible MM patients. In March 2019, Janssen completed a supplemental Biologics License Application, or sBLA, submission to the FDA and submitted a marketing authorization application, or MAA, to the EMA for DARZALEX in combination with Rd for frontline treatment of transplant-ineligible MM patients based on the MAIA study. The FDA plans to review the sBLA under its Real-Time Oncology Review, or RTOR, Pilot Program.
- In the relapsed/refractory setting, the POLLUX and CASTOR studies compared daratumumab in combination with (i) Rd, versus Rd alone in the POLLUX study and (ii) bortezomib and

dexamethasone, or Vd, versus Vd alone in the CASTOR study. The POLLUX and CASTOR studies supported the U.S., EU and Japanese regulatory approvals of DARZALEX in combination with Rd and Vd, respectively, for the treatment of relapsed/refractory MM.

Data for each of these studies was presented at the American Society for Hematology's Annual Meeting, or ASH, in December 2018. Safety data and other details regarding each of these studies is outlined in "Business—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma" below.



- (1) Includes CR + sCR in daratumumab arm versus control arm. CR = complete response, which refers to patients who achieve negative immunofixation on the serum and urine and disappearance of any soft tissue plasmacytomas and achieve less than or equal to 5% plasma cells in the bone marrow; sCR = stringent complete response, which is tested using more sensitive methods to detect monoclonal plasma cells, and is defined as patients who achieve CR and exhibit a normal free light chain ratio in the serum and absence of clonal cells in the bone marrow determined by either immunofluorescence or immunohistochemistry; in each case as defined by the International Myeloma Working Group, or IMWG.
- (2) MRD = minimal residual disease, which refers to the persistence of small numbers of myeloma cells that remain after therapy and contribute to relapse and disease progression; MRD negativity is defined as the absence of aberrant clonal plasma cells on bone marrow aspirate, ruled out by an assay with a minimum sensitivity of one in 10⁵ nucleated cells or higher; MRD-neg rate refers to the proportion of patients with negative MRD test results, tested at 10⁻⁵ sensitivity, or one in 10⁵ cells, from the time of suspected CR or sCR, in the case of the MAIA, POLLUX and CASTOR studies and confirmed CR/sCR in the case of the ALCYONE study, and tested periodically for a certain period after dosing. See study descriptions in "Business—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma."
- (3) Risk reduction in disease progression or death versus control arm. PFS = progression free survival.

Beyond the current labeled indications, Janssen is conducting a comprehensive clinical development program for daratumumab. This program includes multiple Phase III studies for the treatment of smoldering MM, or SMM, frontline MM, and relapsed/refractory, or R/R, MM, as well as key clinical studies for a subcutaneous, or subQ, formulation. In October 2018, we reported that Janssen's pivotal Phase III MAIA study of daratumumab in combination with Rd for frontline treatment of transplant-ineligible MM patients reached its primary endpoint of improving progression free survival, or PFS, at a pre-specified interim analysis, with a 44% reduction in the risk of progression or death in patients treated with daratumumab in combination with Rd compared to treatment with Rd alone and with a safety profile consistent with known safety profiles for daratumumab and Rd. In October 2018, we also reported topline results that the first part of Janssen's pivotal Phase III CASSIOPEIA study of daratumumab in combination with bortezomib, thalidomide and dexamethasone, or VTd, for frontline treatment of transplant-eligible MM patients met the primary endpoint of number of patients that achieved sCR. Topline results for the first part of the CASSIOPEIA study showed that 28.9% of patients treated with daratumumab in combination with VTd achieved sCR, compared to 20.3% of patients who received VTd alone, with an odds ratio of 1.60 and with a safety profile consistent with known safety profiles for daratumumab and VTd. In March 2019, Janssen submitted an

sBLA to the FDA and an MAA to the EMA based on the CASSIOPEIA study. In addition, in February 2019, we reported that Janssen's Phase III COLUMBA study comparing the subQ formulation of daratumumab to the IV formulation in patients with R/R MM met both co-primary endpoints of overall response rate, or ORR, and maximum trough concentration, or Ctough, of daratumumab on day 1 of the third treatment cycle. Topline results showed ORR of 41.1% and Ctough of 499 mg/mL for patients treated with subQ daratumumab compared with 37.1% and 463 mg/mL, respectively, in patients treated with IV daratumumab, in each case with a confidence interval of 95% and with no new safety signals compared with known daratumumab safety profiles. We expect Janssen to submit regulatory applications based on the COLUMBA study in 2019 and to release efficacy data for the Phase II GRIFFIN study for daratumumab in combination with bortezomib, lenalidomide and dexamethasone, or VRd, for frontline treatment of transplant-eligible MM patients. In addition to the ongoing studies of daratumumab for the treatment of MM, Janssen is conducting a number of studies to assess the use of daratumumab in the treatment of other malignant and pre-malignant diseases in which CD38 is expressed, including amyloidosis, acute lymphocytic leukemia and NKT-cell lymphoma.

Ofatumumab is a human IgG1k mAb that targets an epitope on the CD20 molecule, which is found on the surface of B-cells, the type of cell which is believed to trigger the inflammatory process that leads to multiple sclerosis, or MS. Novartis Pharma AG, or Novartis, is currently investigating a subQ formulation of ofatumumab for the treatment of relapsing MS, or RMS, in the Phase III ASCLEPIOS I and II clinical studies with over 1,800 patients in total, and has reported that it expects to complete these studies during 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to current B-cell therapies. In particular, if its efficacy and safety can be demonstrated in clinical trials, the low-dose subQ administration of ofatumumab currently in clinical testing could allow for more convenient and less disruptive dosing options for MS patients compared to IV-administered therapies. In addition, the Phase II MIRROR study assessing dose-response effects of ofatumumab on efficacy and safety outcomes in patients with RMS, published in May 2018, showed that treatment with ofatumumab resulted in rapid dose-dependent B-cell depletion, which correlated with efficacy outcomes observed in the study, with no new or unexpected safety findings. Ofatumumab has already been approved for the treatment of certain CLL indications in the United States and certain other countries and is currently commercialized by Novartis for such CLL indications under the name Arzerra. Due to low and decreasing global demand for Arzerra primarily related to increased competition from new entrants to the CLL treatment space over the past few years, Novartis announced in January 2018 that it intends to transition Arzerra from commercial availability to limited availability in non-U.S. markets through managed access programs or alternative solutions for approved CLL indications where applicable and allowed by local regulations. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan. Pursuant to our agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab.

Our Proprietary Product Candidates

We also have a strong pipeline of novel antibody-based product candidates for the treatment of solid tumors and hematological cancers, which are designed to address unmet medical needs and improve treatment outcomes for cancer patients. Our goal in building our pipeline is to retain at least 50% of product rights in selected programs for indications and in geographic areas where we believe

we will be able to maximize their value; we consider such products to be "our own" proprietary products. We currently have five proprietary product candidates in clinical development:

- *Tisotumab vedotin*: an antibody-drug conjugate, or ADC, created to target tissue factor, or TF, a protein involved in tumor signaling and angiogenesis. Tisotumab vedotin is in clinical development for the treatment of cervical cancer and certain other solid tumors. In March 2019, we presented data from a 55-patient expansion cohort of the innovaTV 201 Phase I/II trial at the Society for Gynecologic Oncology, or SGO, Annual Meeting, which indicated that treatment with tisotumab vedotin resulted in encouraging activity in patients with relapsed, recurrent and/or metastatic cervical cancer. Data assessed by an independent review committee showed a confirmed ORR of 22%, with 35% of patients having a confirmed or unconfirmed complete or partial response, or PR. Median duration of response, or DoR, was 6.0 months and median PFS was 4.1 months. We are also evaluating tisotumab vedotin in four additional clinical studies, including the potentially registrational innovaTV 204 Phase II trial for the treatment of patients with recurrent or metastatic cervical cancer, Phase II trials for the treatment of patients with ovarian cancer and solid tumors and a Phase I/II combination trial for the treatment of patients with cervical cancer. Patient enrollment for the innovaTV 204 study was completed in March 2019. We are developing tisotumab vedotin in collaboration with Seattle Genetics under an agreement in which the companies share all future costs and profits for the product on a 50:50 basis.
- *Enapotamab vedotin (HuMax®-AXL-ADC)*: an ADC created to target AXL, a unique tyrosine kinase receptor that is implicated in tumor cell proliferation, migration and invasion. Over-expression has been described in solid cancers, including lung, esophageal, ovarian, breast, cervical, thyroid, endometrial and pancreatic cancers. AXL is emerging as a marker in tumors with resistance to therapy (e.g., tyrosine kinase inhibitors, chemotherapy). In addition, over-expression of AXL is observed in advanced tumors with epithelial-mesenchymal transition, or EMT-like features. In May 2018, we launched a Phase I/II clinical trial of enapotamab vedotin for the treatment of multiple types of solid tumors, with several expansion cohorts currently ongoing. We expect to report initial efficacy analysis from the expansion cohort phase of this study in 2019. We have full development and commercialization rights for enapotamab vedotin.
- *HexaBody-DR5/DR5*: an antibody therapeutic candidate created with our proprietary HexaBody® technology that is composed of two non-competing HexaBody antibody molecules that are designed to target two distinct epitopes on death receptor 5, or DR5, a cell surface receptor that mediates a process called programmed cell death. In May 2018, we dosed the first patient in our Phase I/II clinical trial of HexaBody-DR5/DR5 for the treatment of solid tumors. We expect to report initial clinical data from this study in 2019. We have full development and commercialization rights for HexaBody-DR5/DR5.
- *DuoBody-CD3xCD20*: a bispecific antibody created using our proprietary DuoBody® technology that is designed to target CD3, which is expressed on all T-cell subtypes and CD20, a well-validated therapeutic target expressed in a majority of B-cell malignancies. In July 2018, we dosed the first patient in our Phase I/II clinical trial of a subQ formulation of DuoBody-CD3xCD20 for the treatment of B-cell malignancies. We expect to report initial clinical data from this study in 2019. We have full development and commercialization rights for DuoBody-CD3xCD20.
- *DuoBody-PD-L1x4-1BB*: a bispecific antibody created using our proprietary DuoBody technology that is designed to target PD-L1 and 4-1BB to block the inhibitory PD-1/PD-L1 axis and simultaneously activate essential co-stimulatory activity via 4-1BB using an inert DuoBody antibody format. PD-L1 is a validated target that is expressed on tumor cells. 4-1BB is a

trans-membrane receptor belonging to the TNF super-family, and is expressed predominantly on activated T-cells. We submitted a CTA to regulatory authorities in Spain in January 2019 to test DuoBody-PD-L1x4-1BB in a Phase I/II clinical study and are currently recruiting patients for this study. We are developing DuoBody-PD-L1x4-1BB in collaboration with BioNTech SE, or BioNTech, under an agreement in which the companies share all future costs and profits for the product on a 50:50 basis.

Our Partnered Product Candidates

In addition to our proprietary product candidates and our two partnered marketed products in ongoing label expansion studies, our partners have eight additional product candidates in clinical development through collaboration agreements with us. These include several antibodies being developed by Janssen using our proprietary DuoBody technology, which are being tested to treat NSCLC, R/R acute myeloid leukemia and certain MM indications. Additional products are being developed in partnership with Hoffman-La Roche Inc. and F. Hoffman-La Roche, or jointly Roche, through a sublicense with Horizon Pharma plc, or Horizon Pharma, Bristol-Myers Squibb, or BMS, ADC Therapeutics Sarl, or ADC Therapeutics, H. Lundbeck A/S, or Lundbeck, and Amgen Inc., or Amgen. Other than daratumumab and ofatumumab, our most advanced partnered clinical product candidate is teprotumumab, which is currently in Phase III clinical development by Horizon Pharma for the treatment of Graves' orbitopathy. In February 2019, Horizon Pharma reported positive topline results in this study and announced that it expects to submit a BLA for teprotumumab to the FDA in 2019.

Our Proprietary Technology Platforms

In addition to our proprietary and partnered products and product candidates, our portfolio includes four proprietary antibody technology platforms, which include (i) our DuoBody platform, which can be used for the creation and development of bispecific antibodies; (ii) our HexaBody platform, which can be used to increase the potential potency of antibodies through hexamerization; (iii) our DuoHexaBody® platform, which enhances the potential potency of bispecific antibodies through hexamerization; and (iv) our HexElect® platform, which combines two HexaBody molecules to maximize potential potency while minimizing potential toxicity by more selective binding to desired target cells. Antibody products created with these technologies may be used in a wide variety of indications including cancer and autoimmune, central nervous system and infectious diseases. We believe these technologies may be the next step towards the development of effective treatments in the already successful field of antibody therapeutics. We currently have four commercial partners for the DuoBody technology, Janssen, BioNTech, Novo Nordisk A/S, or Novo Nordisk, and Gilead Sciences, Inc., or Gilead Sciences, and we actively seek partners interested in developing potential antibody therapeutics using our technologies.

Our Core Purpose and Vision

Our core purpose is to improve the lives of patients by creating and developing innovative antibody products. Our vision is to transform cancer treatment by launching our own proprietary product by 2025 and advancing our pipeline of differentiated and well-tolerated antibodies.

Our Strengths

We believe that our strengths that will enable us to achieve our vision and fulfill our core purpose include:

- ***DARZALEX, a blockbuster antibody in multiple myeloma, with opportunity for significant upside through potential label expansion.*** DARZALEX is a proven commercial success in its approved

MM indications, achieving blockbuster status by reaching \$1.2 billion of net sales in 2017, with net sales by Janssen increasing to \$2.0 billion in 2018, resulting in royalties to us of DKK 1,708.1 million (\$262.0 million) in 2018. In addition to daratumumab's approved indications, Janssen is currently investigating daratumumab for additional indications in MM and beyond, including key studies in frontline MM and a subQ formulation of daratumumab. If successful, these proposed label expansions could result in milestone payments and additional royalties to us.

- **Royalty potential from ongoing pivotal Phase III trials of ofatumumab in MS.** Ofatumumab, previously approved for certain CLL indications, is in pivotal Phase III testing by Novartis for the treatment of RMS, with the Phase III ASCLEPIOS I and II studies expected to be completed in 2019. Subject to successful completion of these studies and Novartis' ability to obtain approval for and successfully commercialize ofatumumab for the treatment of RMS, we may receive a meaningful royalty stream. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to other B-cell therapies, including more convenient and less disruptive dosing options through a low-dose subQ formulation.
- **Broad and differentiated proprietary pipeline.** We believe that our clinical and pre-clinical pipeline of proprietary product candidates positions us well to achieve our vision. Our five product candidates at various stages of clinical development offer multiple opportunities to transform cancer treatment by launching our own proprietary product by 2025. In addition, we have multiple differentiated antibody product candidates in pre-clinical development that we believe may have the potential to transform cancer treatment, including two product candidates for which we have submitted or expect to submit INDs and/or CTAs in 2019.
- **Strong product generation capabilities.** Our research and development team has a proven track record of creating and developing product candidates and progressing them through clinical development. We created daratumumab and ofatumumab and conducted early clinical studies before partnering with Janssen and GlaxoSmithKline, or GSK, respectively, to continue late-stage development and commercialization. In addition, since 1999, we or our partners have submitted 33 INDs or CTAs for product candidates created by us or using our proprietary technologies, 19 of which are currently in development by us or our partners.
- **Novel proprietary, next-generation antibody technologies.** Our proprietary antibody technology platforms provide the foundation for our research, a resource for the development of new product candidates, an income stream from technology licensing and an opportunity to contribute to the development of new antibody therapies through our licensing partners.
- **Strategic alliances.** We have an active portfolio of strategic collaborations with a large number of pharmaceutical and biotechnology companies, including clinical and pre-clinical product candidates currently being developed by our partners, as well as a number of technology collaborations. In the past, these collaborations have provided us with a capital-efficient model to finance development costs and advance our product candidates through clinical development while also funding the further growth of our pipeline through milestone payments and royalties. Today, we focus on strategic alliances that build our network in the biotechnology space and give us access to complementary novel technologies or products that move us closer to achieving our vision and fulfilling our core purpose.
- **World-class team.** We have a world-class team of highly skilled and educated scientific, development and other industry professionals with extensive experience in the pharmaceutical and biotechnology fields. Our employees are our most important asset and we strive to attract and retain the most qualified people to fulfill our core purpose. We are currently recruiting a team of seasoned professionals to build and expand our commercialization capabilities.

Our Business Strategy

Key elements of our strategy to achieve our vision and fulfill our core purpose include:

- *Collaborate with Janssen to advance daratumumab.*
- *Collaborate with Novartis to advance ofatumumab.*
- *Actively advance and expand our proprietary product pipeline.*
- *Strengthen our product portfolio with strategic collaborations.*
- *Leverage our proprietary technology platforms.*
- *Build our translational research capabilities.*
- *Build our commercial capabilities to market select products.*

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include the following:

- Our financial results and near-term prospects are substantially dependent on DARZALEX. If our partner Janssen is unable to effectively maintain and grow sales of DARZALEX for its approved indications and to continue to expand its indications, our prospects for increased revenues and profitability will be adversely affected.
- Our future prospects for ofatumumab are dependent on our partner Novartis' ability to successfully expand ofatumumab's indications and to effectively commercialize it for its current indications and any new indications that may be approved, as well as on other external factors that could impact ofatumumab's future success.
- Biopharmaceutical product development involves a substantial degree of uncertainty. Our current product candidates are in various stages of development, and it is possible that none of our product candidates will become viable commercial products, on a timely basis or at all.
- We have no history of commercializing our marketed products. Building our commercialization capabilities will require significant investment of time and money. There can be no assurance that we will successfully set up our commercialization capabilities in any of the proposed jurisdictions or at all, or that we will successfully commercialize any of our product candidates in the future.
- Tisotumab vedotin may not obtain regulatory approval, on our expected timeline or at all, and, if it is approved, we may be unable to effectively commercialize it. We do not have sole control over the development and commercialization of tisotumab vedotin.
- Partnerships are an important part of our strategy and we may not be able to continue our current partnerships or establish additional partnerships.
- We rely on our partners' willingness and ability to devote resources to the development and commercialization of our products and product candidates and to otherwise support our business as contemplated in our partnership agreements, which may be terminated.
- Our product candidates will need to undergo clinical trials that are time consuming and expensive, the outcomes of which are unpredictable, and for which there is a high risk of failure. If clinical trials of our product candidates fail to satisfactorily demonstrate safety and efficacy to the FDA, the EMA and any other comparable regulatory authority, we may incur additional

costs or experience delays in completing, or ultimately be unable to complete, the development of these product candidates.

- We are subject to extensive and costly government regulation, and are required to obtain and maintain governmental approvals to commercialize our products.
- Reports of adverse or undesirable events or safety concerns involving daratumumab, ofatumumab or our proprietary or partnered product candidates could delay or prevent us or our partners from obtaining or maintaining regulatory approvals, or could negatively impact sales and prospects of our products and product candidates.
- We face intense competition and rapid technological change, which may result in others discovering, developing or commercializing competing products before or more successfully than we do, or earlier than we anticipate.
- We expect to incur higher research and development costs and general and administrative expenses in future periods as we advance our proprietary product candidates through clinical development and expand our commercial capabilities.
- Our ability to compete may decline if we or our partners are unable to or do not adequately protect intellectual property rights or if our intellectual property rights are inadequate for our products, product candidates or future products or product candidates.

Implications of Being an Emerging Growth Company and a Foreign Private Issuer

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to include only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure; and
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act.

We may choose to take advantage of some but not all of these reduced burdens, and therefore the information that we provide holders of shares and ADSs may be different than the information you might receive from other public companies in which you hold equity. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards applicable to public companies. We currently prepare our consolidated financial statements in accordance with IFRS as issued by the IASB, so we are unable to make use of the extended transition period. However, in the event that we convert to accounting principles generally accepted in the United States (which we do not currently intend to do) while we remain an emerging growth company, we have irrevocably elected to opt out of such extended transition period.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We will cease to be an emerging growth company upon the earliest of the following:

- the last day of the first fiscal year in which our annual revenues were at least \$1.07 billion;
- the last day of the fiscal year following the fifth anniversary of this offering;

- the date on which we have issued more than \$1 billion of non-convertible debt securities over a three-year period; and
- the last day of the fiscal year during which we meet the following conditions: (i) the worldwide market value of our common equity securities held by non-affiliates as of our most recently completed second fiscal quarter is at least \$700 million, (ii) we have been subject to U.S. public company reporting requirements for at least 12 months and (iii) we have filed at least one annual report as a U.S. public company.

Upon the effectiveness of the registration statement of which this prospectus forms a part, we will report under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as a non-U.S. company with foreign private issuer status. Even after we no longer qualify as an emerging growth company, as long as we continue to qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the rules under the Exchange Act requiring the filing with the Securities and Exchange Commission, or SEC, of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events.

In addition, we will not be required to file annual reports and financial statements with the SEC as promptly as U.S. domestic companies whose securities are registered under the Exchange Act, and are not required to comply with Regulation FD, which restricts the selective disclosure of material information.

Both foreign private issuers and emerging growth companies are also exempt from certain more stringent executive compensation disclosure rules for U.S. public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Even if we no longer qualify as an emerging growth company, so long as we remain a foreign private issuer, we will continue to be exempt from such compensation disclosures.

Corporate Information

We were incorporated on June 11, 1998 as a private limited liability company (*Anpartsselskab*, or *ApS*) under Danish law as a shelf company and are registered with the Danish Business Authority (*Erhvervsstyrelsen*) in Copenhagen, Denmark under registration number (CVR) no. 21023884. Our name was changed to Genmab ApS on November 17, 1998 and we commenced operations in February 1999. On May 31, 1999, we were converted into a public limited liability company (*Aktieselskab*, or *A/S*) and changed our name to Genmab A/S. Our shares have been listed for trading on Nasdaq Copenhagen since October 2000.

Our headquarters and registered office is located at Kalvebod Brygge 43, 1560 Copenhagen V, Denmark and our telephone number is +45 70 20 27 28. Our research laboratories and pre-clinical development facilities are located in Utrecht, The Netherlands and we conduct certain operations out of our U.S. office in Princeton, New Jersey. Our website address is www.genmab.com. The information on, or information that can be accessed through, our website is not part of and is not incorporated by reference into this prospectus. We have included our website address as an inactive textual reference only.

The Offering

American Depositary Shares (ADSs) offered by us	ADSs, representing	shares
ADSs to be outstanding immediately after this offering	ADSs, representing	shares
Shares to be outstanding immediately after this offering	shares	
Option to purchase additional ADSs	In addition, we have granted the underwriters an option, exercisable within 30 days from the date of this prospectus, to purchase up to additional ADSs by subscription for shares.	
American Depositary Shares	Each ADS represents of one share and as such, any sale of ADSs will be reflected in the amount of the new shares which we will issue and for which the underwriters will subscribe. As an ADS holder, you will not be treated as one of our shareholders, you will not have shareholder rights and you may not be able to exercise your right to vote the shares underlying your ADSs. You will have the contractual rights of an ADS holder, as provided in the deposit agreement among us, the depositary and holders and beneficial owners of ADSs from time to time. ADS holders may only exercise voting rights with respect to the shares underlying the ADSs in accordance with the provisions of the deposit agreement, which provides that ADS holders may vote the shares underlying their ADSs either by withdrawing the shares or by instructing the depositary to vote the shares or other deposited securities underlying such ADSs. To better understand the terms of the ADSs, see the sections of this prospectus entitled "Description of American Depositary Shares" and "Risk Factors—Risks Related to this Offering." We also encourage you to read the deposit agreement, which is incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part.	
Depositary	Deutsche Bank Trust Company Americas	
Use of proceeds	We estimate that the net proceeds from this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise their option to purchase additional ADSs in full, after deducting the underwriting commission and estimated offering expenses payable by us, based on an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the U.S. dollar/DKK exchange rate of \$ per DKK as of , 2019, multiplied by the ADS-to-share ratio of to 1.	

	<p>We intend to use the net proceeds of this offering to continue the development of our proprietary product candidates, to continue our pre-commercial activities, to continue building our commercial capabilities and to advance our earlier stage product candidates.</p> <p>See "Use of Proceeds" for a more complete description of the intended use of proceeds from this offering.</p>
Dividend policy	<p>We do not currently pay out cash dividends on our shares and have not paid out any dividends within the last three financial years. See "Dividend Policy."</p>
Risk factors	<p>See "Risk Factors" and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to invest in the ADSs.</p>
Listing	<p>We intend to apply to have the ADSs listed on the Nasdaq Global Select Market under the symbol "GMAB."</p>

The number of shares to be outstanding after this offering is based on 61,523,868 shares outstanding as of March 31, 2019 and excludes up to 1,419,895 shares that may be issued upon the exercise of warrants outstanding as of March 31, 2019 at a weighted average exercise price of DKK 523.74 per share. In addition, our board of directors is authorized to issue (i) up to 500,000 warrants under our warrant program through March 28, 2022, of which 153,663 warrants remain available for issue and a total of 3,879 warrants remain available for reissue as of March 31, 2019, and (iii) up to 500,000 warrants under our warrant program through March 28, 2024, of which 491,965 warrants remain available for issue and none are available for reissue as of March 31, 2019. Unless otherwise indicated, the number of shares described assumes no exercise of the underwriters' option to purchase up to additional ADSs, assumes no exercise of the outstanding warrants referred to above and does not account for shares available for issuance under our outstanding equity incentive programs. Exercise of restricted share units, or RSUs, issued under these programs will not affect our share capital as we will deliver any shares under this program through the delivery of already issued shares.

Summary Consolidated Financial Data

The following tables present summary consolidated financial data for our business. We derived the summary consolidated income statement data for the years ended December 31, 2018 and 2017 from our audited consolidated financial statements included elsewhere in this prospectus. We derived the summary consolidated income statement data for the three months ended March 31, 2019 and 2018 and the summary consolidated balance sheet data as of March 31, 2019 from our unaudited interim consolidated financial statements included elsewhere in this prospectus. The as adjusted data included in the summary consolidated balance sheet data is unaudited. We maintain our books and records and report our financial results in DKK and prepare our audited consolidated financial statements in accordance with IFRS as issued by the IASB. You should read this data together with our consolidated financial statements and related notes included elsewhere in this prospectus and the information under the captions "Capitalization," "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our historical results are not necessarily indicative of our future results, and our results for any interim period are not necessarily indicative of the results to be expected for a full year.

Consolidated Income Statement Data

	Year Ended December 31,			Three Months Ended March 31,		
	2018	2018	2017	2019	2019	2018
	\$ ⁽¹⁾	DKK	DKK	\$ ⁽¹⁾	DKK	DKK
Revenue	455,278	3,025,137	2,365,436	88,946	591,009	681,012
Operating expenses						
Research and development expenses	(215,387)	(1,431,159)	(874,278)	(82,184)	(546,080)	(312,551)
General and administrative expenses	(32,161)	(213,695)	(146,987)	(10,664)	(70,853)	(44,416)
Total operating expenses	(247,548)	(1,644,854)	(1,021,265)	(92,848)	(616,933)	(356,967)
Operating result	207,730	1,380,283	1,344,171	(3,902)	(25,924)	324,045
Financial income	36,567	242,975	71,699	18,351	121,936	14,695
Financial expenses	(1,698)	(11,287)	(352,150)	(299)	(1,990)	(83,175)
Net result before tax	242,599	1,611,971	1,063,720	14,150	94,022	255,565
Corporate tax	(21,045)	(139,830)	39,831	(3,283)	(21,813)	(56,991)
Net result	221,554	1,472,141	1,103,551	10,867	72,209	198,574
Basic net result per share ⁽²⁾	3.62	24.03	18.14	0.18	1.18	3.25
Diluted net result per share ⁽²⁾	3.57	23.73	17.77	0.18	1.17	3.20

- (1) Translated solely for convenience into U.S. dollars at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate of such currencies as of March 31, 2019 as reported by Danmarks Nationalbank.
- (2) See note 2.5 to our audited consolidated financial statements included elsewhere in this prospectus for further details regarding the calculation of basic and diluted net result per share.

The following table presents summary unaudited consolidated balance sheet data as of March 31, 2019 on an actual basis, and on an as adjusted basis to give effect to the issuance and sale of ADSs, representing shares, in this offering at an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the U.S. dollar/DKK exchange rate of as of , 2019, multiplied by the ADS-to-share ratio of to 1, after deducting the underwriting commission and estimated offering expenses payable by us.

Consolidated Balance Sheet Data

	As of March 31, 2019			
	Actual		As Adjusted	
	\$ ⁽¹⁾	DKK	\$ ⁽¹⁾	DKK
Total assets	1,314,559	8,734,717		
Accumulated deficit	(14,149)	(94,013)		
Total shareholders' equity	1,223,123	8,127,162		
Total liabilities	91,436	607,555		

- (1) Translated solely for convenience into U.S. dollars at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate of such currencies as of March 31, 2019 as reported by Danmarks Nationalbank.

RISK FACTORS

Investing in the ADSs involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in the ADSs. 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 the ADSs could decline, and you may lose all or part of your investment.

Risks Related to Our Business

Our financial results and near-term prospects are substantially dependent on DARZALEX. If our partner Janssen is unable to effectively maintain and grow sales of DARZALEX for its approved indications and to continue to expand its indications, our prospects for increased revenues and profitability will be adversely affected.

In 2018, royalties and milestone payments from Janssen related to daratumumab, marketed as DARZALEX for certain indications of multiple myeloma, or MM, accounted for 75.8% of our revenue, as compared to 90% in 2017, and we anticipate that DARZALEX will continue to account for a substantial portion of our revenue in the near-term. In the three months ended March 31, 2019, royalties from Janssen accounted for 84.9% of our revenue. No milestone payments were recorded in the three months ended March 31, 2019. Only one of our other products, ofatumumab, marketed as Arzerra for certain indications of chronic lymphocytic leukemia, or CLL, has received marketing approval in any jurisdiction. Arzerra royalties accounted for 1.1% and 1.0% of our revenue for the year ended December 31, 2018 and the three months ended March 31, 2019, respectively, as compared to 2.0% for the year ended December 31, 2017, and are not expected to account for a significant portion of our revenue in the near-term. Under our collaboration agreement regarding daratumumab, Janssen is fully responsible for developing and commercializing daratumumab and all costs associated therewith. Consequently, our revenue and resulting operating profit, if any, and near-term prospects are substantially dependent on the success of this collaboration and on Janssen's continued ability to effectively maintain and grow sales of daratumumab for its approved indications and to continue to expand its indications. Janssen has obtained marketing approval for DARZALEX for certain indications of frontline MM and relapsed/refractory, or R/R, MM in the United States and the European Union and in certain other countries. In addition, applications for label expansion in the United States, the European Union and Japan and for initial approval in China are currently pending with applicable regulators. There can be no assurance that Janssen will be successful in obtaining approvals for DARZALEX in these additional indications or jurisdictions or in maintaining existing regulatory approvals. While DARZALEX product sales have grown over time, and our future plans assume that sales of DARZALEX will continue to increase, there can be no assurance that, even with the recent expansion to the prescribing label for DARZALEX in the United States and the European Union, DARZALEX sales will continue to grow or that Janssen will be able to maintain sales of DARZALEX at or near current levels. In particular, DARZALEX is subject to intense competition in the MM therapy market. There are numerous other products approved by the FDA for the same indications as DARZALEX and the competition from these and other therapies is intensifying. We are also aware of numerous additional investigational agents and technologies that are currently being studied for the treatment of MM, any of which may compete with DARZALEX in the future. In particular, in February 2019, Sanofi reported that its Phase III study of isatuximab, a mAb targeting CD38, met its primary endpoint of improving PFS in patients with R/R MM. If Sanofi is able to obtain regulatory approval for isatuximab in this indication, it may directly compete with daratumumab in the MM treatment space. If Janssen is unable to successfully compete with these other agents and technologies, DARZALEX sales could decline materially.

Janssen is also currently conducting clinical trials of daratumumab for the treatment of smoldering MM, or SMM, and additional indications of frontline MM and R/R MM, as well as certain other malignant and pre-malignant diseases in which CD38 is expressed, including amyloidosis, acute lymphocytic leukemia and NKT-cell lymphoma, which are in different stages of clinical development. Although we are able to participate in the development strategy for daratumumab through regular meetings of the joint development and steering committee, we cannot control the amount and timing of resources that Janssen dedicates to the development of daratumumab and our prospects for future milestone payments and royalties related to daratumumab depend on Janssen's decision to continue to conduct clinical trials of daratumumab for expanded indications and to seek new regulatory approvals for daratumumab, and on the success of such studies and applications.

There can be no assurance that Janssen will complete the ongoing and planned studies of daratumumab, successfully or at all, or that Janssen will obtain and maintain the regulatory approvals necessary to market daratumumab for any additional indications. In particular, there can be no assurance that marketing approval will be granted for the additional indications based on the MAIA, CASSIOPEIA and COLUMBA studies, that any of the other studies will be completed on the expected timeline or at all, or, if completed, that the final results of such studies will be positive. Negative or inconclusive results in these or other trials would negatively impact, or preclude altogether, Janssen's ability to obtain regulatory approvals for daratumumab in the proposed indications, which would limit the commercial potential of daratumumab. For example, in May 2018, the CALLISTO Phase Ib/II study of daratumumab in combination with atezolizumab for the treatment of patients with previously treated non-small-cell lung cancer, or NSCLC, was terminated following a planned review by a data monitoring committee. The data monitoring committee had determined that there was no observed benefit in the combination treatment arm versus atezolizumab alone and observed a numerical increase in mortality-related events, which were subsequently determined to be primarily due to disease progression, in this arm of the study. Based on these findings, a Phase I study of daratumumab and Janssen's proprietary anti-PD-1 antibody for the treatment of patients with MM was also discontinued. Even if the results of Janssen's ongoing studies are positive, there can be no assurance that Janssen will apply for regulatory approval of the related indications and, if Janssen applies, that such applications will be successful, each of which would limit the commercial potential of daratumumab. Additionally, even if Janssen receives the required regulatory approvals to market daratumumab for any additional indications or in additional jurisdictions, Janssen may not be able to effectively commercialize daratumumab as a result of unfavorable pricing or reimbursement limitations, competition or other factors, or may choose not to prioritize daratumumab in its marketing efforts.

In addition, the royalties payable by Janssen are limited in time and subject to reduction on a country-by-country basis for customary reduction events, including upon patent expiration or invalidation in the relevant country and upon the first commercial sale of a biosimilar product in the relevant country (for as long as the biosimilar product remains for sale in that country). Pursuant to the terms of the agreement, Janssen's obligation to pay royalties under this agreement will expire on a country-by-country basis on the later of the date that is 13 years after the first sale of daratumumab in such country or upon the expiration of the last-to-expire product patent (as defined in the agreement) covering daratumumab in such country. Our issued U.S., European and Japanese patents covering the composition of matter for daratumumab do not begin to expire until March 2026.

Future prospects for daratumumab are also subject to the risks outlined below with respect to our other product candidates, including risks related to clinical studies, adverse events, regulatory requirements and approvals, intellectual property matters, competition, manufacturing, pricing, reimbursement and marketing. In addition, future prospects for daratumumab are also subject to the risk that we will be unable to successfully manage our relationship with Janssen as outlined below.

Our future prospects for ofatumumab are dependent on our partner Novartis' ability to successfully expand ofatumumab's indications and to effectively commercialize it for its current indications and any new indications that may be approved, as well as on other external factors that could impact ofatumumab's future success.

Ofatumumab has been approved for the treatment of certain CLL indications in the United States and certain other countries and is currently commercialized by Novartis for such CLL indications under the name Arzerra. On January 22, 2018, Novartis announced that it intends to transition Arzerra in non-U.S. markets from commercial availability to limited availability through managed access programs or alternative solutions, where applicable and allowed by local regulations, due to increased availability of treatments for CLL resulting in a low number of patients using Arzerra outside of the United States. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan. Under our collaboration agreement, Novartis is fully responsible for development and commercialization of ofatumumab and all costs associated therewith. Consequently, the commercial success of ofatumumab is dependent on the success of this collaboration and the activities of Novartis. Global net sales of Arzerra have been decreasing since 2013, primarily related to increasing competition from new entrants to the CLL treatment market, with 2018 global net sales of Arzerra by Novartis of \$26 million, as compared to \$36 million in 2017, resulting in royalties to us of DKK 33.3 million in 2018, as compared to DKK 47.5 million in 2017. In the three months ended March 31, 2019, global net sales of Arzerra were \$4.4 million, resulting in royalties to us of DKK 5.8 million. We expect competitive pressures in the CLL treatment space to remain or intensify, which may cause sales to further decline, particularly as Novartis continues to transition Arzerra to compassionate use in most jurisdictions. For these and other reasons, we believe that our prospects for revenue from ofatumumab are largely dependent on Novartis' ability to expand the labeled indications of use for ofatumumab and to successfully commercialize it for such indications. We cannot control the amount and timing of resources that Novartis dedicates to the development and commercialization of ofatumumab and our ability to obtain milestone payments and royalties related to ofatumumab depends on Novartis' decision to continue to study ofatumumab for new indications, to seek regulatory approvals for such indications and to effectively commercialize ofatumumab for new and existing indications, and on the success of such efforts.

Novartis is currently investigating a subQ formulation of ofatumumab in two Phase III clinical studies, ASCLEPIOS I and II, in relapsing multiple sclerosis, or relapsing MS. Although Novartis reported that it completed recruitment for these studies in May 2018 and expects to complete the studies during 2019, there can be no assurance of the exact time of completion, as the studies are event-driven. As expected in a Phase III program, negative or inconclusive results in these or other trials would negatively impact, or preclude altogether, Novartis' ability to obtain regulatory approvals for ofatumumab for the treatment of relapsing MS, or RMS, or for other indications Novartis may pursue in the future, which would limit the commercial potential of ofatumumab. For example, in May 2018, Novartis reported negative topline results showing that a Phase III study of ofatumumab in combination with bendamustine did not meet the primary endpoint of improved PFS in patients with indolent B-cell non-Hodgkin lymphoma, or NHL, who were unresponsive to rituximab or a rituximab-containing regimen, compared to those given bendamustine alone. Equivocal results from the ASCLEPIOS I and II studies could delay, if not altogether eliminate, Novartis' plans for ofatumumab and would negatively impact our prospects for potential income from ofatumumab. Even if the results of the ASCLEPIOS I and II studies are positive, there can be no assurance that Novartis will apply for regulatory approval of ofatumumab for the treatment of RMS or, if Novartis applies, that such application will be successful. In addition, Novartis may not be able to effectively commercialize ofatumumab for RMS, if approved, as a result of unfavorable pricing or reimbursement limitations, competition or other factors, or may choose not to prioritize ofatumumab in its marketing efforts.

Biopharmaceutical product development involves a substantial degree of uncertainty. Our current product candidates are in various stages of development, and it is possible that none of our product candidates will become viable commercial products, on a timely basis or at all.

Our clinical stage product candidates include five proprietary product candidates, ongoing clinical studies for daratumumab and ofatumumab by Janssen and Novartis, respectively, and eight additional product candidates being developed in collaboration with our partners. We also have approximately 20 proprietary and partnered product candidates in pre-clinical development. Other than daratumumab and ofatumumab, which are currently in Phase III clinical studies for certain additional indications, tisotumab vedotin, which is currently in Phase II development, and teprotumumab, which is currently in Phase III development by one of our partners, our current product candidates are in relatively early stages of development. All of our product candidates will require significant further development, financial resources and personnel to obtain regulatory approval and develop into commercially viable products, if at all.

Due to the uncertain, time-consuming and costly clinical development and regulatory approval process, we or our partners may not successfully develop any of our product candidates, or we or our partners may choose to discontinue the development of product candidates for a variety of reasons, including due to safety, risk versus benefit profile, exclusivity, competitive landscape, commercialization potential, production limitations or prioritization of our or our partners' resources. It is possible that none of our current product candidates will ever obtain regulatory approval and, even if approved, such product candidates may never be effectively commercialized. In addition, our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates suitable for clinical development or commercialization. Likewise, we and our partners have to make decisions about which clinical stage and pre-clinical product candidates to develop and advance, and we may not have the resources to invest in all of our current product candidates, or clinical data and other development considerations may not support the advancement of one or more product candidates. Decision-making about which product candidates to prioritize involves inherent uncertainty, and our and our partners' development program decision-making and resource prioritization decisions may not improve our results of operations or future growth prospects or enhance the value of the ADSs and our underlying shares.

Additionally, our most advanced proprietary product candidate, tisotumab vedotin, is currently in Phase II development, and we have not advanced any product candidates through late-stage clinical development ourselves. If we are unable to develop late-stage development capabilities, we will be required to continue to contract with third parties to complete the development of our proprietary product candidates, which we may not be able to do on a timely basis, on terms favorable to us or at all, and the development of our proprietary product candidates could be delayed or terminated. Our failure to effectively advance our development programs could have a material adverse effect on our business, financial condition, results of operations and future growth prospects, and cause the market price of our ADSs to decline.

We have no history of commercializing our marketed products. Building our commercialization capabilities will require significant investment of time and money. There can be no assurance that we will successfully set up our commercialization capabilities in any of the proposed jurisdictions or at all, or that we will successfully commercialize any of our product candidates in the future.

We are currently in the early stages of building and expanding our commercial capabilities to allow us to market our own products in the future for the indications and in the geographies we determine would be most effective to create value for our shareholders. Our goal is to become a commercial-stage company with oncology products in the United States, Europe and Japan, with an initial focus on achieving commercial launch readiness in Western Europe and Japan to support the potential launch of tisotumab vedotin for the treatment of cervical cancer in these jurisdictions, subject to obtaining

regulatory approval and, where applicable, reimbursement approval. Our sales and marketing operations are currently in the early stages of development and setting up full commercialization capabilities in these jurisdictions will require substantial investment of time and money and will divert significant management focus and resources. We will be competing with larger pharmaceutical and biotechnology companies with established commercialization and marketing capabilities. In addition, we may be unable to develop productive relationships with local medical experts, patients and other key stakeholders or may face barriers due to cultural or regulatory differences. We will also compete for staffing with transnational and local pharmaceutical and biotechnology firms and local medical, healthcare and research organizations. Accordingly, there can be no assurance that our efforts to set up commercialization capabilities will be successful in any of the proposed jurisdictions or at all.

Even if tisotumab vedotin or one of our other proprietary product candidates obtains regulatory approval, we may determine that commercializing such product candidate ourselves would not be the most effective way to create value for our shareholders. In addition, if we choose to commercialize any of our product candidates, our marketing efforts may be unsuccessful as a result of unfavorable pricing or reimbursement limitations, delays, competition or other factors. Failure to successfully market one or more of our approved products, or delays in our commercialization efforts, may diminish the commercial prospects for such products and may result in financial losses or damage to our reputation, each of which may have a negative impact on the market price of our ADSs and our financial condition, results of operations and future growth prospects.

Tisotumab vedotin may not obtain regulatory approval, on our expected timeline or at all, and, if it is approved, we may be unable to effectively commercialize it. We do not have sole control over the development and commercialization of tisotumab vedotin.

Tisotumab vedotin is currently our most advanced proprietary product candidate, and our initial commercialization efforts are focused on setting up our commercialization capabilities in Western Europe and Japan to market tisotumab vedotin for the treatment of cervical cancer. However, there can be no assurance that tisotumab vedotin will obtain regulatory approval in our targeted jurisdictions, on our expected timeline or at all. We and Seattle Genetics are currently conducting a potentially registrational Phase II clinical trial of tisotumab vedotin for the treatment of patients with recurrent and/or metastatic cervical cancer and completed enrollment for this study in March 2019. There can be no assurance that this study will be completed, on the proposed timeline or at all, or that the results will be supportive of regulatory filings. Even if we achieve results in this study that support regulatory filings, we may be required to conduct one or more additional clinical trials in order to obtain marketing approval for tisotumab vedotin. Such trials would be time consuming and costly and may not be completed successfully, if at all. If we are not able to complete the ongoing Phase II study and any other studies that may be required and achieve results that support regulatory filings, we will be unable to obtain regulatory approval for tisotumab vedotin in the proposed indications. Even if we file a Biologics License Application, or BLA, or other regulatory application, there is no guarantee that we will obtain marketing approval or, if we obtain marketing approval, that we and Seattle Genetics will be able to successfully commercialize tisotumab vedotin. If we are unable to commercialize tisotumab vedotin for cervical cancer or in the proposed jurisdictions, we may lose a portion of our investment and may incur additional costs to refocus our efforts on other products or indications, which could have a negative impact on our business, financial condition, results of operations and future growth prospects.

We are developing tisotumab vedotin in collaboration with Seattle Genetics under an agreement in which the companies share all future costs and profits for the product on a 50:50 basis. If we and Seattle Genetics are unable to agree on the development and commercialization strategies for tisotumab vedotin, such efforts may be delayed or we may be required to take full responsibility for ongoing development and commercialization efforts, including the costs of such efforts. Under our

agreement, Seattle Genetics will be responsible for tisotumab vedotin commercialization activities in the United States, Canada and Mexico, while we will be responsible for commercialization activities in all other territories. We are currently in discussions with Seattle Genetics regarding the detailed terms on which we will work together to commercialize tisotumab vedotin under this agreement. The results of these discussions may impact the pace and timing of our commercial expansion into the United States or other jurisdictions. In addition, either party may opt out of co-development and profit-sharing in return for receiving milestone payments and royalties from the continuing party.

Furthermore, tisotumab vedotin is developed using Seattle Genetics' proprietary ADC technology in combination with our proprietary HuMax-TF antibody. Any failures or setbacks in Seattle Genetics' ADC development program, including adverse effects resulting from the use of ADC technology in commercial settings or human clinical trials and/or the imposition of clinical holds on any trials for product candidates using this technology, could have a detrimental impact on the continued development of tisotumab vedotin, which could adversely affect our business, financial condition, results of operations and future growth prospects.

Any failures or setbacks in our DuoBody platform or our other proprietary technologies could negatively affect our business and financial condition.

Many of our proprietary and partnered product candidates are created with, and dependent upon, our proprietary technologies, including our proprietary DuoBody-CD3xCD20, DuoBody-CD40x4-1BB and DuoBody-PD-L1x4-1BB product candidates, which were created with our DuoBody technology, as well as several additional product candidates in clinical development by Janssen through our DuoBody collaboration, our proprietary HexaBody-DR5/DR5 product candidate, which was created with our HexaBody technology, and our proprietary DuoHexaBody-CD37 product candidate, which was created with our DuoHexaBody technology. Our DuoBody technology is also the basis of our collaborations with Novo Nordisk, BioNTech and Gilead Sciences. To date, no products based on any of these technologies have been approved for commercial sale in any jurisdiction. Any failures or setbacks with respect to our proprietary technologies, including adverse effects resulting from the use of these technologies in human clinical trials and/or the imposition of clinical holds on trials of any product candidates using our proprietary technologies, could have a detrimental impact on our clinical pipeline, as well as our ability to maintain and/or enter into new corporate collaborations regarding our technologies or otherwise, which would negatively affect our business and financial condition.

Several of our products and product candidates are used or proposed to be used in combination with other therapeutic products, which exposes us to risks related to those products.

Part of our clinical development strategy for certain of our product candidates, including daratumumab and ofatumumab, is to seek to identify patients or patient subsets within a disease category whose treatment may benefit from our products in combination with other therapeutic products. For example, daratumumab has been approved in certain jurisdictions in combination with (i) lenalidomide and dexamethasone, or Rd, for the treatment of MM patients who have received at least one prior line of therapy; (ii) bortezomib and dexamethasone, or Vd, for the treatment of MM patients who have received at least one prior line of therapy; (iii) pomalidomide and dexamethasone, or Pom-d, for the treatment of MM patients who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor, or PI; and (iv) bortezomib, melphalan and prednisone, or VMP, for frontline treatment of transplant-ineligible MM patients. Ofatumumab has been approved in certain jurisdictions in combination with (i) fludarabine and cyclophosphamide, and (ii) chlorambucil and bendamustine for the treatment of certain CLL indications. In addition, daratumumab is currently in Phase III clinical trials in combination with (i) bortezomib, lenalidomide and dexamethasone, or VRd, Rd and VMP for frontline treatment of transplant-ineligible MM patients; (ii) bortezomib, thalidomide and dexamethasone, or VTd, VRd and lenalidomide for frontline treatment of transplant-

eligible MM patients; and (iii) carfilzomib and dexamethasone, or Kd, Pom-d and Vd for the treatment of R/R MM, and in combination with cyclophosphamide, bortezomib and dexamethasone, or CyBord, for the treatment of amyloidosis. We and our partners are also testing other product candidates as combination treatments.

Approval of a product for the treatment of a disease indication in combination with other therapeutic products exposes us and our partners to certain risks related to those other therapeutic products, including the risks that such products will become less competitive or obsolete or will be found to have safety concerns, which could potentially result in removal of such products from the market. For example, in May 2012, the FDA issued a safety announcement relating to the risk of second primary malignancies in patients with newly diagnosed MM that had received lenalidomide, marketed as Revlimid, and on July 18, 2013, Celgene, in consultation with the FDA, discontinued treatment with Revlimid in a Phase III trial for the treatment of previously untreated elderly patients with CLL due to an imbalance observed in the number of deaths in patients treated with Revlimid versus patients treated with chlorambucil. Furthermore, seeking to heighten immune or other therapeutic responses through combination treatments carries an inherent risk that the combination may cause unexpected side effects or safety issues not observed in treatment with the individual products alone. For example, in May 2019, Regeneron Pharmaceuticals Inc. reported that the combination of its bispecific mAb with a PD-1 inhibitor led to enhanced cytokine release syndrome in patients in a Phase I trial and was a potential cause of two patient fatalities in the study. In addition, in May 2018, the CALLISTO Phase Ib/II study of daratumumab in combination with atezolizumab in patients with previously treated NSCLC was terminated following a planned review by a data monitoring committee. The data monitoring committee had determined that there was no observed benefit in the combination treatment arm versus atezolizumab alone and observed a numerical increase in mortality-related events, which were subsequently determined to be primarily due to disease progression, in the combination treatment arm of the study.

Partnerships are an important part of our strategy and we may not be able to continue our current partnerships or establish additional partnerships.

We have entered into a number of different partnerships for development, co-development, commercialization and co-commercialization of our products and product candidates, as well as for the in- and out-licensing of third-party technologies and our proprietary technologies. Our ability to continue our current partnerships and to enter into additional partnerships will depend in large part on whether we are able to successfully demonstrate our ability to select and develop product candidates and that our antibody technology and other platform technologies are attractive formats for developing antibody therapeutic products. Existing or potential partners may pursue alternative technologies, including those of our competitors, or enter into other transactions that could make collaboration with us less attractive to them. For example, if an existing partner purchases or is purchased by one of our competitors, that company could be less willing to continue its collaboration with us. Moreover, disputes may arise with respect to the ownership of rights to any technology or products developed with any current or future partner. Lengthy negotiations with potential new partners or disagreements between us and our partners may lead to delays in or termination of the research, development or commercialization of products and product candidates. If we are not able to establish additional partnerships on terms that are favorable to us or if a significant number of our existing partnerships are terminated and we cannot replace them, we may be required to increase our internal product development and commercialization efforts. This would likely limit the number of product candidates that we would be able to develop and commercialize, significantly increase our need for capital and/or place additional strain on management's time, any of which could materially harm our business, financial condition and results of operations. Furthermore, as discussed above, we cannot assure you that we would be able to establish the necessary internal product development and commercialization

capabilities to develop and commercialize our product candidates ourselves in a timely matter or at all, or that any product development or commercialization activities we carry out would be successful.

We rely on our partners' willingness and ability to devote resources to the development and commercialization of our products and product candidates and to otherwise support our business as contemplated in our partnership agreements, which may be terminated.

We rely on our partners to support our business, including to assist with, or to conduct, clinical and regulatory development, manufacturing and/or commercialization of certain of our products and product candidates or to provide access to antigens, technologies, skills and information that we do not possess. For example, we have granted Janssen worldwide exclusive rights to develop and commercialize daratumumab, have granted Novartis worldwide exclusive rights to co-develop and commercialize ofatumumab, and have also entered into partnerships with Seattle Genetics and BioNTech for certain of our proprietary product candidates. In addition, we have granted Janssen, Novo Nordisk and Gilead Sciences certain rights to develop product candidates using our DuoBody technology platform. We have also created product candidates which have been out-licensed to Janssen, Roche, BMS, ADC Therapeutics, Lundbeck and Amgen, and have entered into a research collaboration and exclusive license agreement with Immatics Biotechnologies GmbH, or Immatics, to discover and develop potential next-generation bispecific immunotherapies to target multiple cancer indications. If we do not realize the contemplated benefits from our collaborations, our business, financial condition and results of operations may be materially harmed.

In particular, the termination of our key partnerships could significantly delay the development and commercialization of our products and product candidates and impact our financial results and future prospects. Our licensing partners generally have the right to terminate our partnerships with notice at any time. For example, Janssen has the right to terminate our collaboration agreement concerning daratumumab with 150 days' written notice to us, Novartis has the right to terminate the co-development and collaboration agreement concerning ofatumumab at any time by providing nine months' prior written notice to us, and Seattle Genetics has the right to opt out of co-development and profit-sharing of tisotumab vedotin in return for receiving milestone payments and royalties from us. In particular, any disruption to our collaboration with Janssen or changes in Janssen's product development or business strategy for daratumumab could result in a material decline in our revenue. In addition, any failure by Janssen to perform its obligations under our agreements for any reason, including its obligations to make milestone payments or pay royalties, could have a material adverse effect on our financial performance. Our near-term prospects for product development and commercialization could also be significantly impacted by any disruption in, or termination of, our collaborations with Novartis and Seattle Genetics for ofatumumab and tisotumab vedotin, respectively.

We also rely on our partners to periodically provide us with information about the status, progress and results of clinical trials and regulatory processes that they are conducting, sponsoring or pursuing with respect to our partnered products. We generally do not have direct access to the underlying data or direct communications with the relevant regulators.

In addition, our reliance on our partners subjects us to a number of additional risks, including the following:

- our partners have significant discretion regarding whether and on what timeline to pursue planned activities;
- we cannot control the quantity and nature of the resources our partners may devote to the development, commercialization, marketing and distribution of products or product candidates;
- our partners may not develop products generated using our antibody technology as expected;

- disputes between us and our partners may delay or terminate the research, development or commercialization of the applicable products and product candidates or result in costly litigation or arbitration that diverts management's attention and resources;
- we may not receive milestone payments from our partners, at the expected time or at all, if our partners do not achieve future milestones or if we and our partners disagree about whether a milestone has been reached;
- with respect to collaborations under which we have an active role, we and our partners may have differing opinions or priorities, or we may encounter challenges in joint decision making, which may delay or terminate the research, development or commercialization of the applicable products and product candidates;
- our partners may delay, terminate or repeat clinical trials or require a new formulation of a product candidate for clinical testing, or may abandon a product candidate;
- our relationships with our partners may divert significant time and effort of our scientific staff and management team;
- our partners may be subject to regulatory sanctions that could adversely affect the development, approval or commercialization of the applicable products or product candidates;
- our partners may not properly maintain or defend relevant intellectual property rights, or may infringe the intellectual property rights of third parties, or may use our or third parties' proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- our partners may develop competing products, therapeutic approaches or technologies;
- business combinations, financial difficulties or significant changes in a partner's business strategy may adversely affect that partner's willingness or ability to continue to pursue our products or product candidates; and
- our collaborations may be terminated, breached or allowed to expire, or our partners may reduce the scope of our agreements with them.

Any one or more of the foregoing risks, if realized, could have a material adverse effect on our business, financial condition and results of operations.

If our license agreements violate the competition provisions of the EC Treaty, then some terms of our key agreements may be unenforceable.

Certain license agreements that we have entered into, or may enter into, will grant or may grant exclusive licenses of patents, patent applications and know-how and, therefore, might be found to be restrictive of competition under Article 81(1) of the EC Treaty. Article 81(1) prohibits agreements which restrict competition within the European Community and affect trade between member states. We determine on an agreement-by-agreement basis whether an existing exemption from the application of Article 81(1) applies to the agreement. If an exemption is not applicable, provisions of any license agreement which are restrictive of competition under Article 81(1), including those relating to the exclusivity of rights, may be unenforceable and we could lose the benefit of the rights granted under the provision and may be ordered to pay fines and damages to third parties.

Our product candidates will need to undergo clinical trials that are time consuming and expensive, the outcomes of which are unpredictable, and for which there is a high risk of failure. If clinical trials of our product candidates fail to satisfactorily demonstrate safety and efficacy to the FDA, the EMA and any other comparable regulatory authority, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development of these product candidates.

The FDA, the EMA and comparable regulatory authorities in other jurisdictions must approve new product candidates before they can be marketed, promoted or sold in those territories. We or our partners must provide these regulatory authorities with data from pre-clinical studies and clinical trials that demonstrate that our product candidates are safe and effective for a specific indication before they can be approved for commercial distribution. DARZALEX and Arzerra are currently our only approved products. We cannot be certain that our or our partners' clinical trials for our product candidates will be successful or that any of our other proprietary or partnered product candidates will receive approval from the FDA, the EMA or any other regulatory authority. In addition, certain other third parties make decisions about products or product candidates based on results of clinical trials, including determinations relating to pricing or reimbursement of approved products or validations or endorsements of treatment options. Such third parties may require additional data or studies for their determinations.

Pre-clinical studies and clinical trials are long, expensive and unpredictable processes that can be subject to extensive delays. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. It may take several years and require significant expenditures to complete the pre-clinical studies and clinical trials necessary to commercialize a product candidate, and delays or failure are inherently unpredictable and can occur at any stage. Topline or interim results of clinical trials do not necessarily predict final results, and success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will be successful. A number of companies in the pharmaceutical, biopharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials even after promising results in earlier trials, and we cannot be certain that we or our partners will not face similar setbacks. If topline or interim data that we or our partners report differ from final results, if others, including regulatory authorities, disagree with our assumptions, calculations, conclusions, or analyses or interpret or weigh the data differently, or if subsequent studies are unsuccessful, we or our partners may be unable to obtain marketing approval for product candidates on a timely basis or at all, which could impact our reputation, business, financial condition, results of operations and future growth prospects.

The design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced or completed. In addition, advancements or changes in the industry standards or techniques may impact the value and recognition of our and our partners' clinical data. Failure to adopt new industry standards may result in less comparable or useful study results. Alternately, early adoption of emerging protocols or endpoints may result in data that is not recognized by certain regulatory bodies or industry professionals, or if such protocols are later found to be ineffective, may require us or our partners to change the design of our clinical trials. For example, Janssen has selected minimal residual disease, or MRD, an emerging efficacy endpoint in MM, as the primary endpoint in the Phase III CEPHEUS trial of daratumumab in combination with VRd for the treatment of frontline MM and in the Phase III AURIGA trial of daratumumab in combination with lenalidomide as maintenance treatment for MM patients who are MRD positive after frontline autologous stem cell transplant. Although these trials include more conventional measures as secondary endpoints, such as PFS and OS, this design may not be sufficient to obtain regulatory approval, and Janssen may be required to change the design of these trials or conduct additional trials to obtain regulatory approval for these indications. Similarly, failure of the industry to adopt MRD as a valid endpoint may result in study results being discounted or disregarded by industry professionals. Changing the design of a clinical trial can be

expensive and time consuming. An unfavorable outcome in one or more trials would be a major setback for our product candidates and for us and may require us or our partners to delay, reduce the scope of or eliminate one or more product development programs, which could have a material adverse effect on our business, financial position, results of operations and future growth prospects. In addition, any delays in product development may allow our competitors to bring products to market before we do or shorten any periods during which we or our partners have the exclusive right to commercialize our product candidates.

In connection with clinical trials of our product candidates, we face a number of risks, including risks that:

- we or our partners may be unable to manufacture or obtain sufficient quantities of qualified materials for clinical trials or may be required to modify manufacturing processes;
- patient recruitment may be slower than expected;
- a product candidate may be ineffective, inferior to existing approved products for the same indications, unacceptably toxic or have unacceptable side effects;
- patients may die or suffer other adverse effects for reasons that may or may not be related to the product candidate being tested;
- a clinical trial may be delayed, suspended or terminated by the institutional review board or ethics committee responsible for overseeing the clinical study, by regulatory authorities or by us or our partners due to failure to meet clinical protocols, safety issues or adverse effects, failure to demonstrate product efficacy, changes in clinical protocols or applicable regulatory requirements, lack of funding or other factors;
- investigators or other third parties could conduct clinical studies on our products or product candidates that could lead to adverse events or results that could negatively impact the development, regulatory approval or marketability of such products;
- extension studies on long-term tolerance could invalidate the use of our product;
- final results of studies may not confirm positive interim results or the results of earlier trials;
- results may not meet the level of statistical significance required by the FDA, the EMA or other relevant regulatory agencies to establish the safety and efficacy of our product candidates for continued trial or marketing approval;
- even if data is sufficient for regulatory approval, it may not be sufficient to secure pricing reimbursement or to secure validation of our products by key industry players, which could delay or prevent the commercial launch of a product; and
- our partners or contract research organizations, or CROs, may be unable or unwilling to perform under their contracts.

Furthermore, we sometimes estimate for planning purposes the timing of the accomplishment of various scientific, clinical, regulatory and other product development objectives. These milestones may include our expectations regarding the commencement or completion of scientific studies or clinical trials, the submission of regulatory filings or the achievement of commercialization objectives. From time to time, we may publicly announce the expected timing of some of these milestones, such as the completion of an ongoing clinical trial, the initiation of other clinical programs, receipt of marketing approval or a commercial launch of a product. The achievement of many of these milestones may be outside of our control. All of these milestones are based on a variety of assumptions, which may cause the timing of achievement of the milestones to vary considerably from our estimates. If we fail to achieve announced milestones in the timeframes we expect, or at all, the commercialization of our

product candidates may be delayed and we may not be entitled to receive certain contractual payments, which could have a material adverse effect on our business, financial condition, results of operations and future growth prospects.

Results of pre-clinical or early clinical trials may not be indicative of results obtained in later clinical trials, the timing and outcomes of which are always uncertain, and our product candidates may not successfully complete clinical trials on our expected timeline or at all.

Even if we or our partners obtain positive results from pre-clinical or early clinical trials, we or they may not achieve the same success in future trials. In particular, the results of pre-clinical trials are based on animal, *in vitro* or other laboratory testing and may not be predictive of the safety or efficacy of our product candidates in humans. Similarly, the results of early stage clinical trials are based on a limited number of patients and may, upon further review, be revised or negated by regulatory authorities or by later stage clinical results. Historically, industry wide results from pre-clinical testing and early clinical trials have often not been predictive of results obtained in later clinical trials. Industry wide, a number of new drug and biologic candidates have shown promising results in early clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals. Data obtained from pre-clinical and clinical activities are susceptible to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, regulatory delays or rejections may be encountered as a result of many factors, including emerging knowledge or changes in regulatory policy during the period of product development.

Clinical trials may not demonstrate statistically sufficient levels of safety and efficacy to obtain the requisite regulatory approvals. The failure of clinical trials to demonstrate safety and efficacy for our desired indications could harm the development of the relevant product candidate as well as other product candidates employing the same technology, which could have a significant impact on our product pipeline and future growth prospects.

We rely on third parties to conduct our clinical trials and if these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be unable to obtain regulatory approval for our product candidates.

We do not currently have the ability to independently conduct clinical trials. With respect to our proprietary product candidates or any other product candidates for which we control the clinical development, we rely on third parties, such as CROs, to conduct clinical trials on our product candidates. For our out-licensed products and product candidates, or for any product candidates where our partner is responsible for clinical development, we rely on such partners to conduct clinical trials. These partners may also hire CROs or other third parties to conduct clinical studies on our products and product candidates. The third parties with whom we and our partners contract for execution of our clinical trials play a significant role in the conduct of these trials and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely on these third parties to conduct our clinical trials, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with its investigational plan and protocol. The FDA and regulatory authorities in Europe and other jurisdictions require us to comply with regulations and standards, commonly referred to as current good clinical practices, or cGCPs, for conducting, monitoring, recording and reporting the results of clinical trials, in order to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials.

Many of the third parties with whom we contract may also have relationships with other commercial entities, some of which may compete with us. If the third parties conducting our clinical trials do not perform their contractual duties or obligations, experience work stoppages, do not meet

expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical trial protocols or to cGCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be costly, and our clinical trials may need to be extended, delayed, terminated or repeated, and we may not be able to obtain regulatory approval in a timely fashion, or at all, for the applicable product candidate, or to commercialize such product candidate being tested in such studies or trials.

We and our partners have conducted and intend to conduct additional clinical trials for selected products and product candidates at sites outside the United States, and the FDA may not accept data from trials conducted in such locations due to the study design and conduct, trial population or for other reasons, or may require additional U.S.-based trials.

We and our partners have conducted, currently are conducting and intend in the future to conduct, clinical trials outside the United States, particularly in the European Union where we are headquartered. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. For example, the clinical trial must be well designed and conducted by qualified investigators in accordance with cGCPs, including review and approval by an independent ethics committee and receipt of informed consent from trial patients. The trial population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. Generally, the patient population for any clinical trial conducted outside of the United States must be representative of the population for which we intend to seek approval in the United States. In addition, while these clinical trials are subject to applicable local laws, FDA acceptance of the data will be dependent upon its determination that the trials also comply with all applicable U.S. laws and regulations. There can be no assurance that the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from any clinical trials that we or our partners conduct outside the United States, it would likely result in the need for additional clinical trials, which would be costly and time-consuming and delay or permanently halt our ability to develop and market these product candidates for the proposed indications in the United States.

For example, the FDA may not accept data from Janssen's ongoing pivotal Phase III CASSIOPEIA study based on its design or other factors. Among other things, the study is assessing daratumumab in combination with VTd, a MM treatment regimen more commonly prescribed in Europe, and is being conducted in certain European countries by French Intergroupe Francophone du Myelome, or IFM, in collaboration with the Dutch-Belgian Cooperative Trial Group for Hematology Oncology, or HOVON, and Janssen. In addition, the FDA may not accept the use of sCR, an emerging endpoint, as the primary endpoint for the consolidation stage of the study or may not be satisfied with other aspects of the trial design, including the double randomization feature, in which patients that achieved a response in the first part of the study undergo a second randomization to either receive maintenance treatment of daratumumab versus no further treatment (observation).

In other jurisdictions, for instance, in Japan, there is a similar risk regarding the acceptability of clinical trial data conducted outside of that jurisdiction. In addition, there are risks inherent in conducting clinical trials in multiple jurisdictions, inside and outside of the United States, such as:

- regulatory and administrative requirements of the jurisdiction where the trial is conducted that could burden or limit our and our partners' ability to conduct clinical trials;
- foreign exchange fluctuations;
- manufacturing, customs, shipment and storage requirements;

- cultural differences in medical practice and clinical research; and
- the risk that the patient populations in such trials are not considered representative as compared to the patient population in the target markets where approval is being sought.

If we or our partners 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 or our partners may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including:

- the size and nature of the patient population;
- the patient eligibility criteria defined in the protocol;
- the size of the study population required for analysis of the trial's primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials for similar therapies or other new therapeutics not involving our product candidates and or related technologies;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete a clinical trial.

In addition, our and our partners' clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available for our and our partners' clinical trials, 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. We expect that we and our partners will 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 and our partners' clinical trials at such clinical trial sites. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to only use conventional therapies, such as chemotherapy and radiation, rather than enroll patients in any future clinical trial.

Even if we and our partners 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 prevent completion of these trials and adversely affect our and our partners' ability to advance the development of our product candidates.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics, or to enter into successful commercial arrangements for such diagnostics, could harm our development strategy.

We may seek to identify patient subsets within a disease category that may derive selective and meaningful benefit from the product candidates we are developing. Through collaborations, we may

develop companion diagnostics to help us to more accurately identify patients within a particular subset, both during our clinical trials and in connection with the commercialization of our product candidates. Companion diagnostics are subject to regulation by the FDA, the EMA and comparable foreign regulatory authorities as companion diagnostic medical devices and typically require separate regulatory approval prior to commercial use. We expect that we may develop companion diagnostics in collaboration with third parties and may be dependent on the scientific insights and sustained cooperation and effort of such partners in developing and obtaining approval for companion diagnostics. We and our partners may encounter difficulties in developing and obtaining approval for any companion diagnostics, including issues relating to selectivity/specificity, analytical validation, reproducibility or clinical validation. Any delay or failure by us or our partners to obtain regulatory approval of companion diagnostics could delay or prevent approval of our product candidates. In addition, we or our partners may encounter production difficulties that could constrain the supply of the companion diagnostics, and may experience difficulties gaining acceptance of the use of such companion diagnostics in the clinical community. Failure to gain market acceptance of such companion diagnostics could have an adverse effect on our or our partners' ability to successfully commercialize such product candidates. In addition, the diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic that we or our partners anticipate using in connection with development and commercialization of our product candidates, or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative companion diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our product candidates.

We are subject to extensive and costly government regulation, and are required to obtain and maintain governmental approvals to commercialize our products.

Product candidates employing our antibody technology are subject to extensive and rigorous government regulation. The FDA, the EMA and similar regulatory agencies in other countries regulate the development, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biopharmaceutical products. The regulatory review and approval or licensing process is lengthy, expensive and uncertain and requires the submission of extensive pre-clinical and clinical data and supporting information for each indication to establish the product candidate's safety and efficacy. We or our partners may be unable to obtain regulatory approval on the basis of such data if the relevant regulatory authorities disagree with the design or implementation of the clinical trials, determine that the results of such trials do not meet the requisite level of statistical significance, disagree with our or our partners' interpretation of such data, determine that we or our partners have not demonstrated the safety and efficacy of the product candidate or that its benefits outweigh its risks or fail to approve the manufacturing processes or facilities for the product candidate. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, particularly as we move towards the commercial stage of our product candidates, we may be required to report some of these relationships to the FDA or other regulatory authorities, as well as to certain national registers or other applicable agencies. The FDA or other regulatory authorities may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected the integrity of the study. We have not obtained regulatory approval for any of our proprietary product candidates and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Even if we or our partners are able to obtain approval for our products or product candidates, regulatory authorities may grant approval for fewer or more limited indications than requested, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of such product candidate.

In addition, once a product obtains regulatory approval, numerous post-approval requirements apply, including periodic monitoring and reporting obligations, review of promotional material, reports on ongoing clinical trials and adverse events and inspections of manufacturing facilities. In addition, material changes to approved products, including any changes to the manufacturing process or labeling, require further review by the appropriate authorities before marketing. Approvals may also be withdrawn or revoked due to safety, effectiveness or potency concerns, including as a result of adverse events reported in patients or ongoing clinical trials, or failure to comply with current good manufacturing practices, or cGMPs. In addition to revocation or withdrawal of approvals, we and our partners may be subject to warnings, fines, recalls, criminal prosecution or other sanctions if we fail to comply with regulatory requirements. If we or our partners are unable to obtain or maintain regulatory approvals for our products and product candidates, our business, financial condition, results of operations and future growth prospects will be negatively impacted and we or our partners may be subject to sanctions. In addition, even if our products are approved for marketing, we or our partners may be unable to market our products, successfully or at all, if we are unable to obtain favorable pricing for our products or if third party payors do not agree to provide reimbursement for our products, at favorable rates or at all. See "—Risks Related to Government Regulation" below for more information about the regulatory risks we and our partners face.

Any approval granted for our products or product candidates in the United States does not assure approval of such products in the European Union or other foreign jurisdictions.

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

Reports of adverse or undesirable events or safety concerns involving daratumumab, ofatumumab or our proprietary or partnered product candidates could delay or prevent us or our partners from obtaining or maintaining regulatory approvals, or could negatively impact sales and prospects of our products and product candidates.

As with most biological drug products, use of our products and product candidates could be associated with undesirable side effects or adverse events which can vary in severity from minor reactions to death and in frequency from infrequent to prevalent. In particular, many of our and our partners' clinical trials are conducted in patients with serious life-threatening diseases for whom conventional treatments have been unsuccessful or for whom no conventional treatment exists, and in some cases, our product candidates are used in combination with approved therapies that themselves have significant adverse event profiles. During the course of treatment, these patients could suffer

adverse medical events or die for reasons that may or may not be related to our product candidates. Reports of adverse events or safety concerns could have negative impacts on our or our partners' clinical trials, regulatory processes, reputation and results.

Such adverse events or safety concerns involving our products or product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials, or could negatively impact patient enrolment in, or completion of, clinical trials. For example, in May 2018, the CALLISTO Phase Ib/II study of daratumumab in combination with atezolizumab in patients with previously treated NSCLC was terminated following a planned review by a data monitoring committee. The data monitoring committee had determined that there was no observed benefit in the combination treatment arm versus atezolizumab alone and observed a numerical increase in mortality-related events, which were subsequently determined to be primarily due to disease progression, in the combination arm of the study. Based on these findings, a Phase I study of daratumumab and Janssen's proprietary anti-PD-1 antibody for the treatment of patients with MM was also terminated. In addition, in June 2018, a Phase I study of JNJ-63709178, one of the product candidates being developed by Janssen through our DuoBody collaboration was put on clinical hold due to the occurrence of a Grade 3 adverse event. This hold was subsequently lifted and the study is ongoing. However, there can be no assurance that this study will not be halted again or terminated in the future.

In addition, reports of adverse events or safety concerns involving our products or product candidates could result in regulatory authorities limiting, denying, withdrawing approval of or recalling such product for any or all indications, including the use of such product in its previously approved indications, or may require additional clinical trials, updates to the prescribing information, including boxed warnings, contraindications, or other labeling statements, implementation of a Risk Evaluation and Mitigation Strategy or the issuance of field alerts, warnings or other communications to physicians, pharmacies or patients. For example, the prescribing information for Arzerra includes a warning that Arzerra may cause hepatitis B virus, or HBV, infection to reoccur, which may cause serious liver problems and death, and may cause progressive multifocal leukoencephalopathy, or PML, a rare brain infection that causes severe disability and can lead to death. In certain cases, regulatory authorities may order us or our partners to conduct additional trials or to cease further development or commercialization of the product or product candidate entirely.

Furthermore, actual or potential drug related side effects could affect patient recruitment or the ability of enrolled patients to complete a trial for our products or product candidates. Reports of adverse events or safety concerns, or changes to regulatory approvals or labeling, may also have a significant impact on market acceptance of our products by patients and physicians or may trigger potential product liability claims, fines, injunctions or the imposition of civil or criminal penalties. Any of these events could prevent us or our partners from developing, commercializing or maintaining market acceptance of daratumumab, ofatumumab or the particular product candidate or could substantially increase commercialization costs, which could significantly harm our business, financial condition, results of operations and future growth prospects. In addition, the reporting of adverse safety events involving daratumumab, ofatumumab or our product candidates, or public rumors about such events, could cause our stock price to decline or experience periods of volatility. There are no assurances that patients receiving daratumumab, ofatumumab or our product candidates will not experience serious adverse events in the future.

We have received Fast Track Designation, or FTD, and Breakthrough Therapy Designation, or BTD, for certain indications in the past and may seek FTD or BTD, or may seek to participate in other programs for expedited development or review, in the future. We may fail to obtain such designation and may not be eligible for participation in such programs, and even if received, such designations or programs may not lead to a faster development or regulatory review or approval process.

If a product candidate is intended for the treatment of a serious or life-threatening disease or condition, and pre-clinical or clinical data demonstrate the potential to address an unmet medical need for this condition, a product sponsor may apply for FTD from the FDA for such indication. Similarly, the FDA may grant BTD to expedite the development and review of products that treat serious or life-threatening diseases when "preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development." In addition, the FDA or other regulatory bodies periodically introduce other pilot programs for expedited review of applications, including the FDA's recently released Real-Time Oncology Review, or RTOR, Pilot Program, which is currently available for certain supplemental applications for already-approved cancer drugs. The RTOR Pilot Program allows the FDA to review data before the applicant formally submits its completed supplemental application, resulting in a more efficient review when the applicant submits the full supplemental application. The FDA has indicated that it plans to review Janssen's sBLA submission for daratumumab as a combination treatment for frontline MM based on the MAIA study under the RTOR Pilot Program.

Although these designations and pilot programs are intended to expedite the review and approval of drug candidates, they do not ensure that marketing approval will be granted in a particular timeframe or at all. The FDA and other regulatory authorities have broad discretion whether or not to grant these designations or include product candidates within pilot programs, and, even if we or our partners believe a particular product candidate is eligible for these designations or programs, we cannot assure you that such authority would agree. Even though the FDA plans to review the sBLA for daratumumab based on the MAIA study under its RTOR Pilot Program, and even if we or our partners receive such designations or are eligible for inclusion in expedited review pilot programs in the future, we may not experience a faster development, review or approval process compared to conventional procedures. In addition, such designations or processing under such pilot programs may be withdrawn if the FDA or the relevant regulatory body no longer believes such product candidate meets the criteria for the designation or program. See "Business—Government Regulation" for more information about BTD and FTD and other programs for expedited review.

Daratumumab has received BTD for three indications of R/R MM and FTD for one indication of R/R MM, and ofatumumab has received BTD and FTD, each for one CLL indication. These products have been approved for each of the designated indications and these designations are not applicable to ongoing studies for daratumumab and ofatumumab in other indications. In addition, teprotumumab, one of our product candidates currently in Phase III clinical development by Horizon Pharma through our collaboration with Roche has received FTD and BTD for the treatment of Graves' Orbitopathy. Although Horizon Pharma announced that it expects to submit a BLA to the FDA for teprotumumab based on positive topline results in the Phase III study reported in February 2019, there can be no assurance that the regulatory review for teprotumumab will be expedited as a result of such designations or that it will obtain regulatory approval. We or our partners may seek FTD or BTD or seek eligibility for other expedited review or approval programs for some or all of our other product candidates in the future, but we may never receive such designation or be accepted to such program, and, even if received or accepted, the development or regulatory review of our product candidates may not be expedited or benefited by such designation or program. In addition, such designation or acceptance to such program does not assure ultimate approval by the FDA or the applicable regulatory body.

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

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

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

We currently rely primarily on one contract manufacturer to produce our product candidates for clinical trials and are currently negotiating arrangements for commercial scale production.

To ultimately be successful, our antibody products must be manufactured in commercial quantities in compliance with regulatory requirements and at acceptable costs. Janssen is responsible for the manufacture of daratumumab, and Novartis for the manufacture of ofatumumab. For the products we are responsible to manufacture, we currently rely primarily upon one single source third-party contract manufacturing organization, or CMO, Lonza, to manufacture and supply large quantities of our product candidates. As part of our efforts in building our in-house commercialization capabilities, we are currently in negotiations with a CMO for commercial production of tisotumab vedotin if and when approved. If these negotiations are unsuccessful, we believe that additional facilities would be available for commercial production of tisotumab vedotin if and when approved. We expect to negotiate contracts for commercial production on a product-by-product basis for products that we choose to commercialize ourselves.

We are aware of only a limited number of companies on a worldwide basis who operate manufacturing facilities in which our product candidates can be manufactured under cGMP regulations. It would take a substantial period of time for a contract facility that has not been producing antibodies

to begin producing antibodies under cGMP. We cannot be certain that we will be able to contract with any of these companies on acceptable terms, if at all. New suppliers would also need to have sufficient rights under applicable intellectual property laws to the method of manufacturing such ingredients. In addition, significant cancellation penalties and the long lead times required for initial orders or to make any changes to existing orders, including changing the scale of production, limit our flexibility in connection with product development, clinical trials or commercial sales. For example, we may be required to order products for the second part of a clinical trial or for a proposed follow-on clinical trial before we have initial results from the study, which could result in loss if we terminate the study or need to make changes to the product.

We and our manufacturing partners must obtain and maintain compliance with applicable laws and regulations, including cGMPs.

Before commercializing new pharmaceutical and biologic products, manufacturers must comply with the laws and regulations, including drug and biologic cGMPs, of the applicable governmental authorities. Compliance with cGMP regulations requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturing facilities are also subject to pre-approval and ongoing periodic inspection by applicable governmental agencies, including unannounced inspections, and must be licensed before they can be used in commercial manufacturing of products employing our technology. The FDA, the EMA or similar regulatory agencies at any time may also implement new standards, or change their interpretation and enforcement of existing standards for manufacture, packaging or testing of products.

Manufacturers of pharmaceutical and biologic products often encounter difficulties in production, including difficulties with production yields, stability of the product candidate, quality control and assurance, shortages of qualified personnel, compliance with relevant regulations, production costs and development of advanced manufacturing techniques and process controls. If our manufacturer were to encounter any of these difficulties or otherwise fail to comply with its obligations to us or under applicable regulations, our ability to provide study materials in our pre-clinical studies and clinical trials would be jeopardized. Any delay or interruption in the supply of pre-clinical study or clinical trial materials could delay the completion of our pre-clinical studies and clinical trials, increase the costs associated with maintaining our pre-clinical study and clinical trial programs and, depending upon the period of delay, require us to commence new trials at significant additional expense or terminate the studies and trials completely.

In addition, we have little control over our manufacturers' compliance with these regulations and standards and manufacturers of our products and product candidates may be unable to comply with these cGMP requirements and with other regulatory requirements. The discovery of manufacturing, quality control or regulatory documentation problems or failure to maintain compliance with cGMP or other requirements after approval of a product may result in restrictions on the marketing of a product, revocation of the license, withdrawal of the product from the market, seizures, injunctions, fines or criminal sanctions. If the safety of any product supplied is compromised due to the manufacturers' failure to adhere to applicable laws or for other reasons, we or our partners may not be able to obtain regulatory approval for or successfully commercialize such products, and we or our partners may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals or commercialization of our products and product candidates or entail higher costs or impair our reputation. No assurance is given that third party manufacturers will be able to comply adequately with the applicable regulations.

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

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Many third parties compete with us in developing various approaches to antibody therapy. They include pharmaceutical companies, biotechnology companies, academic institutions and other research organizations. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approval and marketing than we do. In addition, many of these competitors are active in seeking patent protection and licensing arrangements in anticipation of collecting royalties for use of technology that they have developed. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to our programs. In addition, many other pharmaceutical and biotechnology companies are developing and/or marketing therapies for the same types of cancer that our products and product candidates are designed and being developed to treat. For example, in February 2019, Sanofi reported that its Phase III study of isatuximab, a mAb targeting CD38, met its primary endpoint of improving PFS in patients with R/R MM. If Sanofi is able to obtain regulatory approval for isatuximab in this indication, it may directly compete with daratumumab in the MM treatment space. We are also aware of other companies that have or are developing technologies that may be competitive with ours, including bispecific, ADC, CAR modified T-cell, or CAR-T, and ribonucleic acid, or RNA,-based, technologies. In addition, our DuoBody and other technology partners may develop compounds utilizing our technologies that may compete with product candidates that we are developing. See "Business—Competition" below for more information about our competitors.

In addition, in the United States, the Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological products that are demonstrated to be "highly similar" or "biosimilar" to or "interchangeable" with an FDA-approved biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first approved by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first approved. The 12-year exclusivity period runs from the initial approval of the innovator product and not from approval of a new indication. In addition, the 12-year exclusivity period does not prevent another company from independently developing a product that is highly similar to the innovative product, generating all the data necessary for a full BLA and seeking approval. Exclusivity only assures that another company cannot rely on the FDA's prior approvals in approving a BLA for an innovator's biological product to support the biosimilar product's approval. Further, under the FDA's current interpretation, it is possible that a biosimilar applicant could obtain approval for one or more of the indications approved for the innovator product by extrapolating clinical data from one indication to support approval for other indications. The BPCIA is complex and is still being interpreted and implemented by the FDA. As a result, the ultimate impact of the BPCIA is subject to uncertainty.

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

in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

In the European Union, the European Commission has granted marketing authorizations for several biosimilars pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued since 2005. We are aware of many pharmaceutical and biotechnology and other companies that are actively engaged in research and development of biosimilars or interchangeable products.

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

In addition, the pricing of our products depend, and the pricing of our products and product candidates, if and when approved for marketing, will depend, in part, on the pricing strategies adopted by our competitors. If we or our partners are forced to reduce the prices of our products, or if sales of our products fall, due to competitive pricing, our revenue from milestone payments, sales or royalties related to such products will be negatively affected.

We may face increased competition from lower-cost products imported from other countries.

Any products we or our partners are able to commercialize in the United States and the European Union may be subject to competition from lower priced imports of those same products, leading to reduced revenues and lower sales margins, as well as lower priced imports of competing products from Eastern Europe, Canada, Mexico and other countries with government price controls or other market dynamics that, in each case, reduce prices of products. The ability of patients and other customers to obtain these lower priced imports has grown significantly. Some of these foreign imports are illegal under current law. However, the volume of imports is now significant, due in part to the limited enforcement resources and the pressure in the current political environment to permit the imports as a mechanism for expanding access to lower priced medicines. Parallel importation or importation of foreign products could adversely affect our future profitability. This impact potentially could become even greater if there is a further change in relevant protective legislation or if state or local governments take further steps to import products from abroad.

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

If any of our product candidates receive marketing approval or if any of our marketed products receive marketing approval for additional indications, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare 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. If our products or product candidates do not achieve an adequate level of acceptance, our commercial opportunity may be limited and/or our revenues from sales of these products may be negatively impacted. The degree of market acceptance of our product candidates and new indications for our marketed products, if approved for commercial sale, will depend on a number of factors, including the price, efficacy, safety, convenience

and ease of administration of such products, along with their competitive advantages vis-à-vis other therapies, designation as a first-, second- or third-line treatment and any labeling restrictions or warnings. The processes developed for safe administration and any changes to the standard of care for the targeted indications may also have an impact on market acceptance of such products. The willingness of the target patient population to try, and of physicians to prescribe, the product, as well as the availability and amount of coverage and reimbursement from government payors, managed care plans and other third-party payors are also key factors that impact market acceptance of a new product. In addition, the strength of the sales, marketing and distribution support provided by us or our partners will play a key role in the effective commercialization of a new product.

Our target patient population may be lower than our estimates and we may be unable to recoup our investment due to small patient population or restrictions to the approved indication of a product.

Periodically, we and our partners make estimates regarding the incidence and prevalence of target patient populations for particular diseases based on various third-party sources and internally generated analysis and use such estimates in making decisions regarding product development strategy, including determining indications on which to focus in pre-clinical or clinical trials. These estimates may be inaccurate or based on imprecise data, or patient incidence and prevalence for selected indications may evolve over time as treatments and patient outcomes change. The number of patients in the addressable markets may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products, or new patients may become increasingly difficult to identify or gain access to, all of which could materially adversely affect our business, financial condition, results of operations and future growth prospects.

Even if our product candidates obtain significant market share for their approved indications, because certain potential target populations are small, we may never recoup our investment in such product candidate without obtaining regulatory approval for additional indications for such product candidates. In addition, we expect that we or our partners will initially seek approval of some of our product candidates as second- or third-line therapies for patients who have failed other approved treatments, which further limits the size of the potential patient population for such indication. For product candidates that prove to be sufficiently beneficial as second- or third-line therapies, we expect that we or our partners would seek approval of such products as a second-line therapy (with respect to products initially approved as third-line therapies) and/or as frontline therapies. However, such applications may require us or our partners to conduct additional clinical trials at significant cost and risk, and there can be no assurance that such clinical trials or regulatory applications would be successful. If we or our partners are unable to obtain regulatory approval for such products for frontline or second-line therapy, we may be unable to recoup our investment in such products.

We may need to raise additional funding, which may not be available on acceptable terms, or at all, and failure to obtain this capital when needed may force us to delay, limit or terminate our product development efforts or other operations.

We are currently advancing our proprietary product candidates through clinical development and are conducting pre-clinical studies with respect to other programs. Developing product candidates is expensive, time-intensive and risky, and we expect our research and development expenses to increase in connection with our ongoing activities, particularly as we seek to advance our proprietary product candidates toward commercialization. In addition, we expect our general and administrative expenses to increase over the next few years as we begin to build and eventually expand our commercialization capabilities in a number of jurisdictions. Although we believe that our existing revenue streams, along with the proceeds of this offering, will be sufficient to fund our current projects and commercialization activities, our operating plans may change as a result of a variety of factors, and we may need to seek additional funds sooner than planned through public or private equity or debt financings, government

or other third party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. Further, we may seek additional capital if market conditions are favorable or if we have specific strategic objectives which could benefit from additional capital.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our ADS holders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of the ADSs to decline. The sale of additional equity or convertible debt securities could be dilutive to our ADS holders. The incurrence of indebtedness would result in increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with partners or at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or proprietary product candidates or otherwise agree to terms unfavorable to us. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research or development programs or the commercialization of any proprietary product candidate or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, any of which could impair our business, financial condition, results of operations and future growth prospects.

We expect to incur higher research and development costs and general and administrative expenses in future periods as we advance our proprietary product candidates through clinical development and expand our commercial capabilities.

We expect to incur higher research and development costs in future periods, including increasing costs for clinical trials and manufacturing as our proprietary product candidates advance in clinical development and we increase the number of product candidates under active clinical development. Our ongoing research and development and, increasingly, pre-launch commercial activities will require substantial amounts of capital and may not ultimately be successful. Over the next several years, we expect that we will continue to incur substantial expenses, primarily as a result of activities related to the continued development of our clinical pipeline and building our late-stage development and commercialization capabilities. Our proprietary product candidates will require significant further development, financial resources and personnel to pursue and obtain regulatory approval and develop into commercially viable products, if at all. Our commitment of resources to the research and continued development of our product candidates and the expansion of our pipeline will likely result in our operating expenses increasing and/or fluctuating as a result of such activities in future periods. We may also incur significant milestone payment obligations to certain of our licensors as our product candidates progress through clinical trials towards potential commercialization.

We also expect our general and administrative expenses to increase over the next few years as we begin to build and eventually expand our commercialization capabilities in a number of jurisdictions. In addition, we expect the structure and composition of our staff and expenses to change as we focus on advancing our proprietary product candidates and develop our late-stage development and commercialization capabilities.

We have revenues and expenses in foreign currencies and we have invested a part of our cash position in both Danish and foreign marketable securities and are therefore exposed to different kinds of financial risks including foreign exchange risk, changes in interest rates and credit risks.

Most of our financial transactions are made in Danish kroner, U.S. dollars and Euro. As our reporting currency is Danish kroner, we experience exchange rate risk with respect to our holdings and transactions denominated in currencies other than Danish kroner. Our U.S. dollar currency exposure is mainly related to cash deposits, marketable securities, and receivables related to our collaborations with Janssen and Novartis. In addition, our reported revenue is affected by the translation of milestone payments, royalties and other income denominated in foreign currencies, primarily U.S. dollars, into Danish kroner as our reporting currency.

We do not generally hedge our currency exposure on our milestone payments, royalties or other income and expense items in the ordinary course of business. Due to long-standing policy of Danmarks Nationalbank with respect to the €/DKK exchange rate, we believe that there are currently no material transaction exposure or exchange rate risks regarding transactions in Euros. However, should Denmark's policy towards the Euro change, the DKK values of our Euro-denominated assets and costs could be materially different compared to what is calculated and reported under the existing Danish policy towards the €/DKK exchange rate.

If we fail to manage our financial risks adequately, our business, financial condition, results of operations and future growth prospects and the value of our ADSs may be adversely affected.

We may face product liability claims related to the use or misuse of our products or technologies.

Our business exposes us to potential product liability risks which are inherent in research and development, pre-clinical and clinical testing, manufacturing, marketing and use of antibody products. Product liability claims may be expensive to defend and may result in judgments against us which are potentially punitive. It is generally necessary for us to secure certain levels of insurance as a condition for the conduct of clinical trials. Although we believe that our current coverage limits are adequate, we cannot be certain that the insurance policies will be sufficient to cover all claims that may be made against us. Product liability insurance is expensive, difficult to obtain and may not be available in the future on acceptable terms. Any claims against us, regardless of their merit, could cause our business to suffer.

Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, product liability claims may result in decreased demand for our products, 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, exhaustion of any available insurance and our capital resources, the inability to commercialize any product or product candidate, loss of any potential future revenue and a decline in the market price of our ADSs.

Our internal computer systems, or those of our partners or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our business and product development.

Our computer systems, including those hosted by third parties, and those of our partners and other contractors or consultants, may be vulnerable to cyber security breaches, computer viruses and unauthorized access, as well as damage or loss of data due to natural disasters, terrorism, war and telecommunication and electrical failures. If such an event were to occur, it could result in a material disruption of our development programs and our business operations. In addition, any loss or disclosure of trade secrets, clinical data or other proprietary information as a result of such disruption or breach could subject us to litigation or regulatory review and sanctions and may impact our reputation and our

and our partners' ability to further develop and commercialize our products and product candidates, any of which could have a material adverse effect on our business, financial condition, results of operations and the market price of our ADSs.

We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions or alliances.

Should attractive opportunities arise, we may acquire companies or technologies that facilitate our access to new medicines, research projects or geographical areas, or that enable us to achieve synergies with our existing operations. However, we may not be able to identify appropriate targets or make acquisitions under satisfactory conditions, in particular, satisfactory price conditions. In addition, we may be unable to obtain the financing for these acquisitions on favorable terms and could be led to finance these acquisitions using cash that could otherwise be allocated to other purposes in the context of our existing operations, or issuances of equity or convertible debt securities, which could be dilutive to our shareholders and ADS holders, including those purchasing ADSs in this offering, and adversely affect the market price of our ADSs. If we acquire or enter into strategic alliances with businesses with promising markets or technologies, we may not be able to realize the benefits of such acquisitions or alliances, including if we are unable to successfully integrate them with our existing operations and company culture, or if we encounter difficulties in developing, manufacturing and marketing any new products resulting from such acquisitions or alliances. We cannot assure you that we will achieve the expected synergies to justify any such transaction, which could have a material adverse effect on our business, financial condition, results of operations and future growth prospects and your ability to realize on your investment.

As a result of the listing of the ADSs on the Nasdaq Global Select Market, we will become subject to the Foreign Corrupt Practices Act.

As a result of the listing of the ADSs on the Nasdaq Global Select Market, we will become subject to the Foreign Corrupt Practices Act, or FCPA, which generally prohibits companies and their intermediaries from making or offering improper payments to non-U.S. officials for the purpose of obtaining or retaining business. The FCPA generally also requires companies listed on a U.S. stock exchange to maintain a system of adequate internal accounting controls and to make and keep books, records and accounts that accurately and fairly reflect transactions and dispositions of assets. Because of the predominance of government-sponsored health care systems around the world, many of our commercial relationships outside of the United States are with governmental entities, and personnel of such entities may be considered non-U.S. officials for purposes of the FCPA. Violations of the FCPA and other applicable anti-bribery laws are punishable by criminal fines and imprisonment, civil penalties, disgorgement of profits, injunctions, debarment from government contracts as well as other remedial measures. In connection with this offering, we are adopting an amended written code of business conduct and other policies and procedures to assist us and our personnel in complying with the FCPA and other applicable anti-bribery laws. However, our personnel and others acting on our behalf could take actions that violate these requirements, which could adversely affect our reputation, business, financial condition and results of operations.

Risks Related to Our Intellectual Property

Our ability to compete may decline if we or our partners are unable to or do not adequately protect intellectual property rights or if our intellectual property rights are inadequate for our products, product candidates or future products or product candidates.

Our commercial success and viability depend in part on our and our partners' ability to obtain and maintain adequate intellectual property protection in the United States, Europe and other countries with respect to our existing products, product candidates and processes and related technologies owned

by us and to successfully defend these rights against third party challenges, successfully enforce these rights to prevent third-party infringement, as well as our ability to maintain adequate intellectual property protection for any future technologies and products. If we or our partners do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could materially harm our business, negatively affect our position in the marketplace, limit our ability to commercialize our products and product candidates and delay or render impossible our achievement of profitability.

While we rely on a combination of patents, trademarks and trade secret protection, as well as nondisclosure, confidentiality and other contractual agreements to protect the intellectual property related to our brands, products, product candidates and proprietary technologies, our strategy and future prospects are based, in particular, on our patent portfolio. We and our partners or licensees will best be able to protect our technologies, products and product candidates and their uses from unauthorized use by third parties to the extent that valid and enforceable patents, effectively protected trade secrets, or other regulatory exclusivities, cover them. However, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

The patent position and other intellectual property rights of biopharmaceutical companies involve complex legal, administrative and factual questions, and the issuance, scope, validity and enforceability of patents cannot be predicted with certainty. Also, intellectual property rights have limitations and do not necessarily address all potential threats to our competitive advantage. Our ability to obtain patent protection for our technologies, products and product candidates is uncertain and the degree of future protection afforded by our intellectual property rights is uncertain due to a number of factors, including, but not limited to:

- we or our partners may not have been the first to make or file patent applications for the inventions covered by pending patent applications or issued patents;
- others may independently develop identical, similar or alternative technologies, products or compositions and uses thereof;
- any or all of our or our partners' pending or any future patent applications may not result in issued patents;
- any patents issued to us or our partners may not provide a basis for commercially viable products, or may not provide any competitive advantages in countries of significant business opportunity;
- third parties may initiate interference, re-examination, post-grant review, inter partes review, or derivation actions in the U.S. Patent and Trademark Office, or USPTO, or oppositions in the European Patent Office, or EPO, or observations or protests, or any similar actions in other patent administrative or court proceedings worldwide that challenge the validity, enforceability or scope of such patents, which may result in our patent claims being narrowed or invalidated which could limit our ability to prevent competitors from developing and marketing similar products;
- our or our partners' technologies, compositions and methods may not be patentable;
- others may design around our or our partners' patent claims to produce competitive products or uses which fall outside of the scope of our patents;
- third parties may have blocking patents that could prevent us from marketing our products or practicing our own patented technology;

- patent terms may be inadequate to protect our competitive position on our technologies, products and product candidates for an adequate amount of time; or
- the Supreme Court of the United States, other U.S. federal courts, Congress, the USPTO or similar foreign authorities may change the standards of patentability and any such changes could narrow or invalidate, or change the scope of, or change the patent life time of, our or our partners' patents.

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

Even if our patents do successfully issue and even if such patents cover our technologies, products, product candidates, compositions and methods of use, third parties may initiate interference, re-examination, post-grant review, inter partes review, or derivation actions in the USPTO, third party oppositions in the EPO or observations or protests, or similar actions challenging the validity, enforceability or scope of such patents in other patent administrative proceedings worldwide, which may result in our patent claims being narrowed or invalidated. Such proceedings could result in revocation or amendment of our patents in such a way that they no longer cover our technologies, product candidates or competitive products. Further, if we initiate legal proceedings against a third party to enforce a patent covering our product candidate or technology, the defendant could counterclaim that the patent covering our product candidate or technology is invalid or unenforceable. In patent litigation in the United States, certain European and other countries worldwide, it is commonplace for defendants to make counterclaims alleging invalidity and unenforceability in the same proceeding, or to commence parallel defensive proceedings such as patent nullity actions to challenge validity and enforceability of asserted patent claims.

In administrative and court actions, grounds for a patent validity challenge may include alleged failures to meet any of several statutory requirements, including lack of novelty, obviousness (lack of inventive step) and in some cases, lack of sufficiently teaching, or non-enablement of, the claimed invention. Grounds for unenforceability assertions include allegations that someone connected with prosecution of the patent withheld relevant information from the patent examiner during prosecution in the USPTO, the EPO or elsewhere, or made a misleading statement during prosecution in the USPTO. Third parties may also raise similar claims before administrative bodies in the USPTO or the EPO, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to validity, for example, we cannot be certain that there is no invalidating prior art, of which we or the patent examiner were unaware during prosecution. Further, we cannot be certain that all of the potentially relevant art relating to our patents and patent applications has been cited in every patent office. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our technologies, products, product candidates, compositions and methods of use.

We currently rely on proprietary technology licensed from third parties and may rely on other third party licensors in the future. If we lose our existing licenses or are unable to acquire or license additional proprietary rights from these licensors or other third parties, we may not be able to continue developing our products.

We currently in-license certain intellectual property from third parties to be able to use such intellectual property in our products and product candidates and to aid in our research activities. In the future we may in-license intellectual property from additional licensors.

We rely on certain of these licensors to file and prosecute patent applications and maintain patents and otherwise protect the intellectual property we license from them. We have limited control over these activities or any other intellectual property that may be related to our in-licensed intellectual

property. For example, we cannot be certain that such activities by these licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. We have limited control over the manner in which our licensors initiate an infringement proceeding against a third-party infringer of the intellectual property rights, or defend certain of the intellectual property that is licensed to us.

The growth of our business may depend in part on our ability to acquire or in-license additional proprietary rights. For example, our programs may involve additional product candidates that may require the use of additional proprietary rights held by third parties. We may be unable to acquire or in-license any relevant third-party intellectual property rights that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, which would harm our business. We may need to proceed without making use of the technologies, compositions or methods covered by such third-party intellectual property rights, and may need to attempt to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible at a reasonable cost or at all. The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources or greater clinical or commercialization capabilities than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates, products and related proprietary technologies. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Even if we are able to obtain a license under third party intellectual property rights, any such license may be non-exclusive, which may allow our competitors to access the same technologies licensed to us. If we are unable to successfully obtain rights to additional technologies or products, our business, financial condition, results of operations and prospects for growth could suffer.

Our existing licenses impose various diligence, milestone payment, royalty and other obligations on us. If we fail to comply with these obligations or otherwise materially breach a license agreement, our licensors or partners may have the right to terminate the license. In the event of termination of any of these agreements, we may not be able to develop or market the products covered by such licensed intellectual property. In addition, any claims asserted against us by our licensors may be costly and time-consuming, divert the attention of key personnel from business operations or otherwise have a material adverse effect on our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.

Competitors may infringe our patents, trademarks or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims on a country-by-country basis, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from continuing its activities on the grounds that our patent claims do not cover these activities. An adverse outcome in a litigation or proceeding involving one or more of our patents could limit our ability to assert those patents against those parties or other competitors, and may curtail or

preclude our ability to exclude third parties from making and selling similar or competitive products, which could materially harm our business and negatively affect sales of our products. Similarly, if we assert trademark or trade name infringement claims, a court may determine that the trademarks or trade names we have asserted are invalid or unenforceable, or that the party against whom we have asserted infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks or trade names, which we may need in order to build name recognition with potential partners or customers in our markets of interest, thus this could materially harm our business and negatively affect our position in the marketplace.

In addition, the standards that courts use to interpret patents are not always applied predictably or uniformly and can change, particularly as new technologies develop. As a result, we cannot predict with certainty how much protection, if any, will be given to our patents if we attempt to enforce them and they are challenged in court. Further, even if we prevail against an infringer in a U.S. district court or foreign trial-level court, there is always the risk that the infringer will file an appeal and the initial court judgment will be overturned at the appeals court and/or that an adverse decision will be issued by the appeals court relating to the validity or enforceability of our patents. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted in a manner insufficient to achieve our business objectives.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation in certain territories, there is a risk that some of our confidential information could be compromised by disclosure during litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments, which securities analysts or investors could perceive to be negative. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

Claims that our products or product candidates or their uses infringe the intellectual property rights of third parties could result in costly litigation, and unfavorable outcomes could require us to pay damages or royalties and could limit our research and development activities or our ability to commercialize certain products.

Even if we or our partners have or obtain patents covering our technologies, products, product candidates, compositions or uses, we or our partners may still be barred from making, using, importing or selling or otherwise exploiting our products, product candidates or technologies because of the patent rights of others. Our competitors have filed, and in the future may file, patent applications covering technology, compositions or products and uses that are similar or identical to ours. There are many issued U.S., European and other worldwide patents relating to therapeutic drugs, and some of these may relate to compounds we or our partners intend to commercialize. Numerous worldwide patents and pending patent applications owned by others exist in the cancer field and may cover products or product candidates which we or our partners are developing. It is difficult for industry participants, including us, to identify all third-party patent rights relevant to our products, product candidates and technologies. We cannot guarantee that our technologies, products, product candidates, compositions and their uses do not or will not infringe third party patent or other intellectual property rights. Because patent applications usually take 18 months to publish and many years to issue, there may be currently pending applications with patent claims unknown to us or which will change over time and may later result in issued patents that purportedly cover our technologies, products, product candidates or compositions and uses. These patent applications may have been filed earlier than or have priority over patent applications filed by us or our partners. We may be required to develop or

obtain alternative technologies, review product design or, in the case of claims concerning registered trademarks, rename our products or product candidates.

Claims that our or our partners' technologies, products, product candidates, compositions or their uses infringe or interfere with the patent rights of third parties, or that we or our partners have misappropriated third party trade secrets, could result in costly litigation and could require substantial time and money to resolve, even if litigation were avoided. The basis of such litigation could be existing patents or patents that are granted in the future. If we or our partners were to face infringement claims or challenges by third parties, an adverse outcome could subject us or our partners to significant liabilities to such third parties. Litigation or threatened litigation could result in significant demands on the time and attention of our management team. A negative outcome could expose us or our partners to payment of costs, damages and other financial remedies, including in some jurisdictions, increased damages, such as treble damages and attorneys' fees, if we were found to have willfully infringed a patent. Litigation with third parties concerning alleged infringement of their intellectual property rights could require us and our partners to bear substantial costs and impose burdens on our and their management and personnel, even if we or our partners were to ultimately succeed in such proceedings. Costs of patent litigation and awards of damages in patent infringement cases can be significant, and equitable remedies such as temporary restraining orders and injunctions can negatively impact or prevent product development and commercialization. A negative outcome could also lead us or our partners to delay, curtail or cease the development and commercialization of some or all of our products and product candidates, or could cause us or our partners to seek legal or administrative actions against third parties. We or our partners may need to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms, or at all. Even if we are able to obtain licenses from a third party to resolve a dispute, such settlement arrangements could involve substantial costs including one-time and/or ongoing royalty payments.

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

In addition to seeking patent protection for our products and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, partners, consultants, advisors, vendors, university and/or institutional researchers and other third parties. We also have entered or seek to enter into confidentiality and invention or patent assignment agreements with our employees, advisors and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and once disclosed we may lose trade secret protection. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for such breaches. Our trade secrets may also be obtained by third parties by other means, such as breaches of our physical or computer security systems. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time consuming, and the outcome is unpredictable and may be inadequate. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Moreover, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to, or independently developed by, a competitor, our competitive position would be harmed.

Further, our competitors may independently develop knowledge, methods and know-how similar, equivalent, or superior to our proprietary technologies. Competitors could purchase our products and

attempt to reverse engineer and replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technologies, or develop their own competitive technologies that fall outside of our intellectual property rights. In addition, our key employees, consultants, suppliers or other individuals with access to our proprietary technologies and know-how may incorporate such technologies and know-how into projects and inventions developed independently or with third parties. As a result, disputes may arise regarding the ownership of the proprietary rights to such technologies or know-how, and any such dispute may not be resolved in our favor. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us and our competitive position could be adversely affected. If our intellectual property is not adequately protected so as to protect our market against competitors' products and processes, our competitive position could be adversely affected, as could our business.

We will not seek to protect our intellectual property rights or technologies in all jurisdictions throughout the world, and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

Obtaining and maintaining a patent portfolio entails significant expense and resources. Part of the expense includes periodic maintenance fees, renewal fees, annuity fees, various other governmental fees on patents or applications due in several stages over the lifetime of patents or applications, as well as the cost associated with complying with numerous procedural provisions during the patent application process. Filing, prosecuting and defending patents on our technologies, products and product candidates in all countries and jurisdictions throughout the world would be prohibitively expensive and, therefore, we typically elect to seek less extensive protections in certain jurisdictions only. We may choose not to pursue or maintain protection for particular inventions, products or product candidates. In addition, there are situations in which failure to make certain payments or noncompliance with certain requirements in the patent process can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we choose to forego patent protection or allow a patent application or patent to lapse purposefully or inadvertently, our competitive position could suffer. Competitors may use our technologies in jurisdictions where we do not pursue and obtain patent protection to develop their own products in a manner that exploits our technologies and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States or in Europe, and thus such protection may not be sufficient to prevent or stop infringing activities.

The requirements for patentability may differ from country to country, particularly in developing countries, and the breadth of patent claims allowed can be inconsistent. In addition, the legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to biopharmaceuticals or biotechnologies. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. Also, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties if the patents are not being exploited within a certain time period. In addition, many countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Patent protection must ultimately be sought on a country-by-country or region-by-region basis, which is an expensive and time consuming process with uncertain outcomes. If we fail to timely file a patent application in a specific country or major market, we may be precluded from doing so at a later date. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. Proceedings and legal actions to enforce our patent rights in the United States or in Europe and in foreign jurisdictions can

be expensive, could result in substantial costs, and could divert management time and our efforts and attention from other aspects of our business. In addition, such proceedings or legal actions could put our patents at risk of being invalidated, found unenforceable or interpreted narrowly, could put our patent applications at risk of not being issued and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. We may or may not choose to pursue litigation or other actions against those that have infringed our patents, or used them without authorization, due to the associated expense and time commitment of monitoring these activities. If we fail to protect or to enforce our intellectual property rights successfully, our competitive position could suffer, which could harm our results of operations.

In addition, changes in the law and legal decisions by courts in the United States, Europe and foreign countries may affect our ability to obtain adequate protection for our technologies, products, product candidates or compositions or uses thereof and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Third parties may challenge the inventorship of our patent filings and other intellectual property or may assert ownership or commercial rights to inventions we develop.

Third parties may in the future make claims challenging the inventorship or ownership of our intellectual property. We have written agreements with our partners that provide for the ownership of intellectual property arising from our collaborations. In some instances, there may not be adequate written provisions to address clearly the resolution of intellectual property rights that may arise from collaboration. Disputes may arise with respect to ownership of the intellectual property developed pursuant to such collaborations. In addition, we may face claims by third parties that our agreements with employees, contractors or consultants obligating them to assign intellectual property to us are ineffective, or in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and interfere with our ability to capture the commercial value of such inventions. Litigation may be necessary to resolve an ownership dispute, and if we are not successful, we may be precluded from using certain intellectual property, or may lose our exclusive rights in that intellectual property. Either outcome could have an adverse impact on our business, financial condition, results of operations and future growth prospects.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our existing and future products and processes.

Recent patent reform legislation in the United States could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, Leahy-Smith America Invents Act, or the Leahy-Smith Act was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and switched the United States patent system from a "first-to-invent" system to a "first-to-file" system. Under a "first-to-file" system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had conceived or reduced to practice the invention earlier. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, in particular, the first-to-file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. The Leahy-Smith Act and its implementation could increase the uncertainties and costs

surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

In addition, patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement and defense of our patents and pending patent applications. 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. Furthermore, the U.S. Supreme Court and the U.S. Court of Appeals for the Federal Circuit have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. Similarly, foreign courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by United States and foreign legislative bodies. Those changes may materially affect our patents or patent applications and our ability to obtain additional patent protection in the future.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. In addition, periodic maintenance fees on issued patents often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent. While an unintentional 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. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our partners fail to maintain the patents and patent applications covering our products, product candidates, technologies or procedures, we may not be able to stop a competitor from marketing products that are the same as or similar to our own, which would have a material adverse effect on our business.

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

Patents have a limited lifespan, and the protection patents afford is limited. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Even if patents covering our products and product candidates are obtained, once the patent term has expired for patents covering a product or product candidate, we may be open to competition from competitive products and services. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products or product candidates similar or identical to ours.

Third parties may assert that our employees or consultants or we have wrongfully used or disclosed confidential information or misappropriated trade secrets, or claim ownership of what we regard as our own intellectual property.

Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, and no such claims against us are currently pending, we may be subject to claims that we or our employees, consultants or independent contractors have used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If

we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees, and could otherwise adversely impact our business.

Our intellectual property agreements with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology.

Certain provisions in our intellectual property agreements, including our in-licenses of third party intellectual property or technology, may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or 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 conceives or develops intellectual property that we regard as our own. Our assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

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

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

In addition, any proprietary name we propose to use with any of our product candidate in the United States or other jurisdictions must be approved by the FDA, the EMA or other governmental authorities, regardless of whether we have registered, or applied to register, the proposed proprietary name as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

Risks Related to Government Regulation

Government restrictions on pricing and reimbursement, as well as other healthcare payor cost-containment initiatives, may negatively impact our ability to generate revenue.

Sales of certain of our products and our product candidates, if and when approved for marketing, have and will depend, in part, on the extent to which our products will be covered by third party payors, such as government health care programs like Medicare and Medicaid, commercial insurance and managed healthcare organizations. These third party payors play an important role in determining the extent to which new drugs, biologics and medical devices will be covered. The Medicare and Medicaid programs increasingly are used as models for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs, biologics and medical devices. It is difficult to predict at this time what third party payors will decide with respect to coverage and reimbursement for our product candidates. Further, the adoption and implementation of any future governmental cost containment or other health reform initiative may result in additional downward pressure on the price that we may receive for any approved product. The primary trend in the U.S. healthcare industry and elsewhere has been cost containment, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products and/or biosimilars. Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits. Adoption of price controls, cost containment measures and adoption of more restrictive policies in jurisdictions with existing controls and measures, could limit our net revenue and results.

Further, from time to time, typically on an annual basis, payment rates are updated and revised by third-party payors. Such updates could impact the demand for our products, to the extent that patients who are prescribed our products, if approved, are not separately reimbursed for the cost of the product. For example, Medicare reimbursement under the Medicare Physician Fee Schedule is updated on an annual basis. The Medicare Access and CHIP Reauthorization Act of 2015 instituted a 0.5% payment update for July 2015 through the end of 2019, and a 0% payment update for 2020 through 2025, along with a merit-based incentive payment system beginning January 1, 2019, that will replace current incentive programs. For 2026 and subsequent years, the payment update will be either 0.75% or 0.25% depending on which Alternate Payment Model the physician participates.

In addition, in certain jurisdictions, marketing approval for a product, or the ability to launch an approved product, is subject to determination of pricing and reimbursement levels. In such jurisdictions, even if we or our partners are able to obtain marketing approval for our products, commercialization of our products may be significantly delayed or prevented altogether if we are unable to secure reimbursement for our products, at competitive levels or at all.

Moreover, increasing efforts by governmental and third party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs, medical devices and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the successful commercialization of new products.

Even if approved, our products will be subject to extensive post-approval regulation, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Once a product is approved, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. For U.S. approvals, the holder of an approved BLA is subject to periodic and other FDA monitoring and reporting obligations, including obligations to monitor and report adverse events and instances of the failure of a product to meet the specifications in the BLA. In addition, the FDA strictly regulates the promotional claims that may be made about pharmaceutical products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. Application holders must also submit advertising and other promotional material to the FDA and report on ongoing clinical trials. Advertising and promotional materials must comply with FDA rules in addition to other potentially applicable federal and state laws. In addition, we or our partners may be subject to significant liability if physicians prescribe any of our products to patients in a manner that is inconsistent with the approved label and if we are found to have promoted off-label uses of such products. For example, the U.S. federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. Manufacturing facilities remain subject to FDA inspection and must continue to adhere to the FDA's cGMP requirements. Application holders must obtain FDA approval for product and manufacturing changes, depending on the nature of the change. In addition, any regulatory approvals that we or our partners receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the product candidate.

Sales, marketing and scientific/educational grant programs must comply with the U.S. Medicare-Medicaid Anti-Fraud and Abuse Act, as amended, the False Claims Act, also as amended, and similar state laws. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, and the Veteran's Health Care Act, as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

Within the European Union, once a Marketing Authorization is obtained, numerous post-approval requirements also apply. The requirements are regulated by both EU regulations (such as reporting of adverse events, etc.) as well as national applicable regulations (related to, for example, prices and promotional material). In addition, as part of its marketing authorization process, the EMA may grant marketing authorizations on the basis of less complete data than is normally required, when, for certain categories of medicinal products, doing so may meet unmet medical needs of patients and serve the interest of public health. In such cases, it is possible for the Committee for Medicinal Products for Human Use, or CHMP, to recommend the granting of a marketing authorization, subject to certain specific obligations to be reviewed annually, which is referred to as a conditional marketing authorization. This may apply to medicinal products for human use that fall under the jurisdiction of the EMA, including those that target the treatment, prevention, or medical diagnosis of seriously debilitating diseases or life-threatening diseases and those designated as orphan medicinal products. The granting of a conditional marketing authorization is restricted to situations in which only the clinical part of the application is not yet fully complete. Incomplete non-clinical or quality data may

only be accepted if duly justified and only in the case of a product intended to be used in emergency situations in response to public-health threats. Conditional marketing authorizations are valid for one year, on a renewable basis. The holder will be required to complete ongoing studies or to conduct new studies with a view to confirming that the benefit-risk balance is positive. In addition, specific obligations may be imposed in relation to the collection of pharmacovigilance data. Although we may seek a conditional marketing authorization for one or more of our product candidates by the EMA, the EMA or CHMP may ultimately not agree that the requirements for such conditional marketing authorization have been satisfied. Certain approvals of DARZALEX and Arzerra in the European Union were initially granted on the basis of conditional marketing authorizations. Each of these conditions have been met.

Other jurisdictions also impose certain post-approval requirements or may grant conditional marketing approvals. Depending on the circumstances, failure to meet these post-approval requirements can result in criminal prosecution, fines or other penalties, injunctions, notices or warning letters, recall or seizure of products, total or partial suspension of production or changes to manufacturing processes, denial or withdrawal of pre-marketing product approvals, import controls, or refusal to allow us to enter into supply contracts, including government contracts, each of which could have a significant impact on our business, financial condition, results of operations, future growth prospects and reputation. In addition, even if we and our partners comply with FDA, EMA and other applicable requirements, new information regarding the safety or effectiveness of a product could lead the FDA, the EMA or other regulatory authorities to modify or withdraw a product approval. Any government investigation of alleged violations of law could also require us or our partners to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our and our partners' ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results could be adversely affected.

We may face difficulties from changes to current regulations and future legislation.

Existing regulatory policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our products and product 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, the European Union or in other countries. We expect more rigorous coverage criteria in the future in the U.S. healthcare market and an additional downward pressure on the prices that we or our partners receive for approved products, which may trigger a similar reduction in payments from private payors. If we or our partners are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we and our partners are not able to maintain regulatory compliance, we or they may lose any marketing approval that we or they may have obtained, which could adversely impact our business and financial results.

In particular, since its enactment, there have been judicial and congressional challenges to certain aspects of the Affordable Care Act, or the ACA, as well as efforts by the current administration to repeal or replace certain aspects of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. There is currently uncertainty with respect to the impact any such repeal may have and any resulting changes may take time to unfold, which could have an impact on coverage and reimbursement for healthcare items and services covered by plans that were authorized by the ACA. However, we cannot predict the ultimate content, timing or effect of any such legislation or executive action or the impact of potential legislation or executive action on us. Most recently, the Tax Cuts and Jobs Act was enacted, which, among other things, removes the penalties for not complying with the ACA's individual mandate to carry health insurance. On December 14, 2018, a

U.S. District Court Judge in the Northern District of Texas, ruled that the individual mandate is a critical and inseparable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. While the Trump Administration and the Centers for Medicare & Medicaid Services, or CMS, have both stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, if any, and other efforts to repeal and replace the ACA will impact the ACA and our business. There may be additional challenges and amendments to the ACA in the future.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2027 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the U.S. government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our out-licensed products and product candidates (if and when approved) and accordingly, our financial results.

Furthermore, the Trump Administration has taken several executive actions, including the issuance of a number of executive orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuing guidance, and reviewing and approving marketing applications. It is difficult to predict how these orders will be implemented and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose restrictions on the FDA's ability to engage in oversight and implementation activities in the normal course, we and our partners could be limited and/or delayed in obtaining new regulatory approvals or maintaining existing approvals, either of which could have a material adverse effect on our business, financial condition, results of operations and future growth prospects.

We are subject to various laws protecting the confidentiality of certain patient health information, and our failure to comply could result in penalties and reputational damage.

Numerous countries in which we, our partners and our third party contractors, including CROs and CMOs, operate, manufacture and sell our products have, or are developing, laws protecting personal data and the individual's right to privacy as well as the confidentiality of certain patient health information. EU member states and other jurisdictions have adopted data protection laws and regulations, which impose significant compliance obligations. For example, the EU General Data Protection Regulation, or the GDPR, became applicable on May 25, 2018, introduced new data protection requirements in the European Economic Area (the 28 member states of the European Union plus Iceland, Liechtenstein and Norway), or the EEA, and substantial fines for infringements of the data protection rules. For several EEA jurisdictions, the GDPR expanded significantly the jurisdictional reach of EEA data protection law by extending the law's application to the processing of personal data in connection with the offering of goods or services to data subjects located in the EEA and processing personal data in connection with monitoring the behavior of data subjects located in the EEA. The GDPR imposes several increased obligations and specific restrictions on controllers and processors processing personal data including, for example, additional requirements in relation to the information obligation, where applicable, higher standards for organizations to demonstrate compliance, such as obtainment of valid consent or assessment of another legal basis to justify the data processing activities, increased requirements pertaining to health data (including, in certain situations, where such data is key-coded), mandatory data breach notification requirements, appointment of a data protection officer where the core activities of the controller or the processor consist of processing of sensitive

personal data (i.e., health data) on a large scale, additional mandatory requirements for the content of data processing agreements with service providers processing personal data, implementation of appropriate technical and organizational measures, and expanded rights for individuals over their personal data. This could affect our and our partners or third party contractors' ability to collect, analyze and transfer personal data, including health data from clinical trials and adverse event reporting, or could cause our costs to increase, potentially leading to harm to our business and financial condition. If the measures implemented by us or our partners or service providers in order to comply with the GDPR requirements are not considered sufficient to ensure the necessary compliance level, we may be subject to litigation, regulatory investigations, enforcement notices requiring us to change the way we use personal data and/or fines of up to €20 million or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, as well as compensation claims by affected individuals, negative publicity and a potential loss of business. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

While the GDPR, as a directly effective regulation, was designed to harmonize data protection law across the EEA, it does permit member states to legislate in many areas (particularly with regard to the processing of genetic, biometric or health data), meaning that inconsistencies between different member states will still arise. EEA member states have their own regimes on medical confidentiality and national and EEA-level guidance on implementation and compliance practices is often updated or otherwise revised, which adds to the complexity of processing personal data in the EEA.

In addition to the GDPR, we, our partners and our third party contractors are subject to similar data privacy and confidentiality laws in other countries in which we or they operate or market our products. Such laws and regulations may also impose costly compliance obligations and potentially significant fines or other penalties for non-compliance.

Our operations involve hazardous materials and we and third parties with whom we contract must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

As a biotechnology company, we are subject to environmental and safety laws and regulations, including those governing the use of hazardous materials. The cost of compliance with health and safety regulations is substantial. Our business activities involve the controlled use of hazardous materials. Our research and development activities involve the controlled storage, use and disposal of hazardous materials, including the components of our product candidates and other hazardous compounds. We, our partners and manufacturers and suppliers with whom we may contract are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We cannot eliminate the risk of accidental contamination or injury from these materials, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. We cannot guarantee that the safety procedures utilized by our partners and by third party manufacturers and suppliers with whom we may contract will comply with the standards prescribed by laws and regulations or will eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources. In addition, European, U.S. federal and state or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future

compliance. We do not currently carry biological or hazardous waste insurance coverage. In the event of an accident or environmental discharge, we may be held liable for any consequential damage and any resulting claims for damages, which may exceed our financial resources and may materially adversely affect our business, financial condition, results of operations and future growth prospects, and the value of our ADSs.

We are subject to healthcare laws and regulations, which may require substantial compliance efforts and could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings, among other penalties.

Healthcare providers, such as physicians and others, play a primary role in the recommendation and prescription of our products. Our or our partners' arrangements with such persons and third party payors and our general business operations will expose us or our partners to broadly applicable fraud and abuse regulations, as well as other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research, market, sell and distribute our products. Restrictions under applicable U.S. federal and state and non-U.S. healthcare laws and regulations include, but are not limited to, the Anti-Kickback Statute, the Beneficiary Inducement Statute, the Health Insurance Portability and Accountability Act of 1996, as amended, or HIPAA, federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, the federal transparency requirements under the Physician Payments Sunshine Act and analogous U.S. state laws. Rules and regulations covering many of the same matters are found in numerous other countries, including in Denmark, and may be more stringent or result in higher exposures than those in the United States.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations were found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. For more information about these and other applicable regulations, see "Business—Government Regulation" below.

Our employees and partners may engage in misconduct or other improper activities, including violating applicable regulatory standards and requirements, which could significantly harm our business.

We are exposed to the risk of fraud or other misconduct of our employees and partners. Misconduct by our partners could include intentional failures to comply with legal requirements or the requirements of the FDA, the EMA and other comparable regulatory authorities; failure to provide accurate information to applicable government authorities; failure to comply with fraud and abuse and other healthcare laws and regulations in the United States, Denmark and other jurisdictions; failure to comply with the FCPA and other applicable anti-bribery laws; failure to report financial information or data accurately; or failure to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing, bribery and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Our collaboration

agreements include provisions regarding regulatory compliance, but it is not always possible to identify and deter misconduct, and the precautions we and our partners take to detect and prevent this activity may be ineffective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Changes in Danish, U.S. or other foreign tax laws or compliance requirements, or the practical interpretation and administration thereof, could have a material adverse effect on our business, financial condition and results of operations.

We are affected by various Danish, U.S. and foreign taxes, including direct and indirect taxes imposed on our global activities, such as corporate income, withholding, customs, excise/energy, value added, sales, environmental and other taxes. Significant judgment is required in determining our provisions for taxes and there are many transactions and calculations where the ultimate tax determination is uncertain.

Changes in Danish or foreign direct or indirect tax laws or compliance requirements, including the practical interpretation and administration thereof, including in respect to market practices, or otherwise, could have a material adverse effect on our business, financial condition, results of operations and future growth prospects.

Risks Related to this Offering

You will not be directly holding our shares.

As a holder of the ADSs, you will not be treated as one of our shareholders and you will not have shareholder rights. Our depositary, Deutsche Bank Trust Company Americas, will be the holder of the shares underlying your ADSs. As a holder of ADSs, you will have contractual ADS holder rights. The deposit agreement among us, the depositary and you, as an ADS holder, and all other persons directly or indirectly holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. ADS holders may only exercise voting rights with respect to the shares underlying their respective ADSs in accordance with the provisions of the deposit agreement, which provides that you may vote the shares underlying your ADSs either by withdrawing the shares or by instructing the depositary to vote the shares or other deposited securities underlying your ADSs. However, you may not know about the meeting sufficiently in advance to withdraw the shares and, even if you instruct the depositary to vote the shares underlying your ADSs, we cannot guarantee you that the depositary will vote in accordance with your instructions. Please see the risk factor entitled "—You may not be able to exercise your right to vote the shares underlying your ADSs."

In addition to voting rights, your right to receive any dividends we declare on our shares, whether in the form of cash or bonus securities, will also be more limited than that of our shareholders. For example, we may elect to offer subscription rights to our shareholders without offering such rights directly to you as ADS holders as such subscription rights will be offered to the depositary as shareholder. The depositary has substantial discretion as to what will happen with any offered subscription rights and may determine that it is not legal or reasonably practicable to make such rights available to ADS holders, in which case the depositary will endeavor to sell such rights and distribute the proceeds to ADS holders, which it may not be able to do at the then-current market price or at all. If the depositary is unable to distribute or sell such rights, they will lapse, and ADS holders will receive no value. See "Description of American Depositary Shares —Dividends and Other Distributions."

There has been no prior market for the ADSs on a U.S. national securities exchange and an active and liquid market for our securities may fail to develop, which could harm the market price of the ADSs.

Prior to this offering, while our shares have been traded on Nasdaq Copenhagen since October 2000 and certain ADRs have been traded on the over-the-counter market in the United States since May 2013 through our existing sponsored Level 1 ADR program with Deutsche Bank Trust Company Americas, there has been no public market on a U.S. national securities exchange for the ADSs or our shares. Although we intend to apply to list the ADSs on the Nasdaq Global Select Market, an active trading market for the ADSs may never develop or be sustained following this offering. The offering price of the ADSs will be based on the market price for our shares on Nasdaq Copenhagen at the time of this offering. This offering price may not be indicative of the market price of the ADSs or shares after this offering. In the absence of an active trading market for the ADSs or shares, investors may not be able to sell their ADSs at or above the offering price or at the time they would like to sell. The absence of an active trading market may also impair our ability to raise additional capital by selling ADSs and may impair our ability to acquire other businesses or technologies or in-license new product candidates using our ADSs as consideration.

In addition, although we expect the price of the ADSs in this offering to be based on the closing price of the underlying shares on Nasdaq Copenhagen at the time of this offering, there is no guarantee that such price will be free from challenge by our existing shareholders based on allegations that it does not reflect the "market price" at which we are required by our articles of association and Danish law to sell our shares. Any such shareholder challenge could be time-consuming and costly and, if decided in a manner unfavorable to us, could result in liability to us and our directors, and could prevent this offering from closing.

The trading price of our equity securities may be volatile due to factors beyond our control, and purchasers of the ADSs could incur substantial losses.

The market prices of the ADSs and shares may be volatile. The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their ADSs or shares at or above the price originally paid for the security. The market price for the ADSs and shares may be influenced by many factors, including, but not limited to:

- actual or anticipated fluctuations in our financial condition and operating results;
- the release of new data from the clinical trials of our products and product candidates;
- actual or anticipated changes in our growth rate relative to our competitors;
- competition from existing products or new products that may emerge;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- currency fluctuations;
- price and volume fluctuations attributable to inconsistent trading volume levels of our ADSs;
- additions or departures of key management or scientific personnel;

- disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies, products and product candidates;
- changes to coverage policies or reimbursement levels by commercial third party payors and government payors and any announcements relating to coverage policies or reimbursement levels;
- announcement or expectation of additional debt or equity financing efforts;
- issuances or sales of our shares or ADSs by us, our insiders or our other shareholders or ADS holders; and
- general economic and market conditions.

These and other market and industry factors may cause the market price and demand for the ADSs to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their shares or ADSs at a favorable price or at all, and may otherwise negatively affect the liquidity of the trading market for our ADSs. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of the holders of shares or ADSs were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit, the attention of our senior management would be diverted from the operation of our business, and we could incur significant liabilities, any one of which could have a material adverse effect on our business, financial condition and results of operations.

We have broad discretion over the use of the net proceeds from this offering and may use them in ways with which you do not agree and in ways that may not enhance our operating results or the price of our ADSs.

Our board of directors and management will have broad discretion over the application of the net proceeds that we receive from this offering. We may spend or invest these proceeds in ways with which our shareholders and holders of ADSs disagree or that do not yield a favorable return, if at all. We intend to use the net proceeds from this offering to continue the development of our proprietary product candidates, to continue our pre-commercial activities, to continue building our commercial capabilities and to advance our earlier stage product candidates, as described in "Use of Proceeds." However, our actual use of the net proceeds from this offering may differ substantially from our current plans. Failure by our management to apply these funds effectively could harm our business and financial condition and cause the market price of the ADSs to decline. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, the price of the ADSs and their trading volume could decline.

The trading market for the ADSs and shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. We are currently followed by analysts, but there can be no assurance that these analysts will continue to follow us or that additional securities or industry analysts will commence coverage of us. If no or only limited securities or industry analysts cover our company, the trading price for the ADSs would be negatively impacted. If one or more of the analysts who covers us downgrades our equity securities, publishes inaccurate or unfavorable research about our business or expresses a negative opinion regarding the performance of our securities, or if our clinical trial results or operating performance fail to meet analyst expectations, the price of the ADSs would likely decline. If one or more of these analysts ceases coverage of our

company or fails to publish reports on us regularly, or downgrades our securities, demand for ADSs could decrease, which could cause the price of the ADSs and their trading volume to decline.

We currently intend to retain all available funds and any future earnings and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of the ADSs.

We have never declared or paid any cash dividends on our shares, and we currently intend to retain all available funds and any future earnings to fund the development and expansion of our business. Therefore, you are not likely to receive any dividends on your ADSs for the foreseeable future and the success of an investment in ADSs will depend upon any future appreciation in their value. Consequently, investors may need to sell all or part of their holdings of ADSs after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that the ADSs will appreciate in value or even maintain the price at which our investors have purchased them. Investors seeking cash dividends should not purchase the ADSs or shares.

In addition, if we choose to pay dividends in the future, exchange rate fluctuations may affect the amount of Danish kroner that we are able to distribute, and the amount in U.S. dollars that our ADS holders receive, upon the payment of cash dividends or other distributions we declare and pay in Danish kroner, if any. Additionally, dividends will generally be subject to Danish withholding tax. See the section of this prospectus titled "Material Danish Income Tax Consequences" for a more detailed description of Danish taxes on dividends. These factors could impair the value of the ADSs.

ADS investors may also not realize all of the benefits of being a shareholder in our company. For instance, the votes of ADS holders will not be represented directly on our books, but only through a vote by the depository of the underlying shares on the basis of the instructions received by the ADS holders, if any. Separately, we may elect to offer subscription rights to our shareholders without offering such rights to ADS holders.

Furthermore, even if we declare and pay cash dividends in the future, your right to receive such dividends as an ADS holder, and the amount you will be entitled to receive, may be more limited than that of our shareholders. If we pay cash dividends on our shares in the future, the depository will convert or cause to be converted such amounts into U.S. dollars, provided that, if the depository determines in its judgment that such conversions or transfers are not practicable or lawful, or if any government approval or license is needed and cannot be obtained at a reasonable cost within a reasonable period or otherwise sought, the depository will distribute such amounts in the form of Danish kroner, but only to those ADS holders to whom it is possible to do so, and will hold the foreign currency on behalf of any ADS holders that were not paid. If the exchange rates fluctuate at a time when the depository cannot convert the foreign currency, you may lose some or all of the value of the distribution. In addition, prior to making any such distributions, the depository will deduct its own fees and expenses, in addition to the taxes described above. See "Description of American Depositary Shares—Dividends and Other Distributions."

Investors in this offering will experience immediate and substantial dilution in the book value of their investment.

We expect the initial public offering price of the ADSs to be substantially higher than the as adjusted net book value per ADS after giving effect to this offering. Accordingly, if you invest in the ADSs in this offering, you will incur immediate and substantial dilution of approximately DKK _____ per ADS (\$ _____), representing the difference between the assumed initial public offering price of \$ _____ per ADS (DKK _____), and our as adjusted net book value per ADS as of March 31, 2019. In addition, following this offering, investors in this offering will have contributed approximately _____ % of the total gross consideration paid to purchase our outstanding shares and ADSs, but will only own ADSs

representing approximately % of our shares outstanding after this offering. Furthermore, if additional shares are issued pursuant to the underwriters' exercise of their option to purchase additional ADSs, if our board of directors authorizes us to issue additional shares, including in the form of ADSs, or if warrants or other convertible securities are issued and subsequently exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

We may issue additional shares in the future without pre-emptive rights to our existing shareholders and at a price that may cause further dilution of the investment made by the investors in the ADSs or our shareholders.

In addition, as of March 31, 2019, warrants in respect of 1,419,895 shares at a weighted average exercise price of approximately DKK 523.74 were outstanding, representing approximately 2.3% of our issued and outstanding share capital as at March 31, 2019 and, after giving effect to this offering (assuming no exercise of the underwriters' option to purchase additional ADSs), would have represented approximately % of our issued and outstanding share capital as at March 31, 2019. If any such warrants are exercised, investors will suffer further dilution. In addition, warrants may be granted under our warrant plan in the future at prices that are lower than the price paid by the investors. For a further description of our warrant program and outstanding warrants, see "Management—Compensation—Warrant Program."

Investors should be aware that the rights provided to our shareholders and holders of ADSs under Danish corporate law and our articles of association differ in certain respects from the rights that you would typically enjoy as a shareholder of a U.S. company under applicable U.S. federal and state laws.

Under Danish corporate law, except in certain limited circumstances, which require at a minimum that a proposal for inspection has been supported by a minimum of 25% of the share capital at a general meeting, our shareholders may not require an inspection of our corporate records, while under Delaware corporate law any shareholder, irrespective of the size of such shareholder's shareholdings, may do so. Shareholders of a Danish limited liability company are also unable to initiate a derivative action, a remedy typically available to shareholders of U.S. companies, in order to enforce a right of our company, in case we fail to enforce such right ourselves, other than in certain cases of board member/management liability under limited circumstances. In addition, a majority of our shareholders may release a member of our board of directors or our registered managers from any claim of liability we may have, including if such board member or manager has acted in bad faith or has breached his or her duty of loyalty. However, a shareholder may bring a derivative action on behalf of our company against, among other persons, a member of our board of directors or one or more of our registered managers, provided that the circumstances of the act or omission giving rise to the claim of liability were not known to the shareholders at the time of such shareholder resolution, or if shareholders representing at least 10% of the share capital represented at the relevant general meeting has opposed such shareholder resolution. In contrast, most U.S. federal and state laws prohibit a company or its shareholders from releasing a board member from liability altogether if such board member has acted in bad faith or has breached such board member's duty of loyalty to our company. Additionally, distribution of dividends from Danish companies to foreign companies and individuals can be subject to non-refundable withholding tax, and not all receiving countries allow for deduction. See "Material Danish Income Tax Consequences" for a more detailed description of the withholding tax. In addition, the use of the tax asset consisting of the accumulated tax losses requires that we are able to generate positive taxable income and the use of tax losses carried forward to offset against future income is subject to certain restrictions and can be restricted further by future amendments to Danish tax law. Finally, Danish corporate law may not provide appraisal rights in the case of a business combination equivalent to those generally afforded a shareholder of a U.S. company under applicable U.S. laws. For additional information on these and other aspects of Danish corporate law and our articles of association, see the section herein entitled "Description of Share Capital and Certain Corporate

Matters." As a result of these differences between Danish corporate law and our articles of association, on the one hand, and U.S. federal and state laws, on the other hand, in certain instances, you could receive less protection as an equity holder of our company than you would as a shareholder of a U.S. company.

You may not be able to exercise your right to vote the shares underlying your ADSs.

ADS holders may only exercise voting rights with respect to the shares underlying their respective ADSs in accordance with the provisions of the deposit agreement and not as a direct shareholder of the company. In order to vote the shares underlying their ADSs, ADS holders may either withdraw the shares underlying their ADSs or instruct the depository to vote the shares underlying such ADSs. However, you may not know about the meeting far enough in advance to withdraw the underlying shares, and after such withdrawal, you would no longer hold ADSs, but would instead hold the underlying shares directly.

The depository will try, as far as practicable, to vote the shares underlying the ADSs as instructed by the ADS holders. In such an instance, if we ask for your instructions, the depository, upon timely notice from us, will notify you of the upcoming vote and arrange to deliver our voting materials to you. We cannot guarantee that you will receive the voting materials in time to ensure that you will be able to instruct the depository to vote your shares or to withdraw your shares so that you can vote them yourself. If the depository does not receive timely voting instructions from you, it may give a proxy to a person designated by us to vote the shares underlying your ADSs. Voting instructions may be given only in respect of a number of ADSs representing an integral number of shares or other deposited securities. In addition, the depository and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise any right to vote that you may have with respect to the underlying shares, and there may be nothing you can do if the shares underlying your ADSs are not voted as you requested. In addition, the depository is only required to notify you of any particular vote if it receives timely notice from us in advance of the scheduled meeting. Our articles of association permit, in the case of general meetings, notice to be delivered within a relatively short time span, in which case the depository would not be required to provide you with notice of and access to such vote.

You may be subject to limitations on the transfer of your ADSs and the withdrawal of the underlying shares.

Your ADSs, which may be evidenced by ADRs, are transferable on the books of the depository. However, the depository 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 depository may refuse to deliver, transfer or register transfers of your ADSs generally when our books or the books of the depository are closed, or at any time if we or the depository 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, or for any other reason subject to your right to cancel your ADSs and withdraw the underlying shares. Temporary delays in the cancellation of your ADSs and withdrawal of the underlying shares may arise because the depository has closed its transfer books or we have closed our transfer books, the transfer of shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our shares. In addition, you may not be able to cancel your ADSs and withdraw the underlying 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 shares or other deposited securities. See "Description of American Depositary Shares."

Future sales, or the perception of future sales, of a substantial number of our shares or ADSs could adversely affect the price of the ADSs, and actual sales of our equity will dilute shareholders and ADS holders.

Future sales of a substantial number of our shares or ADSs, or the perception that such sales will occur, could cause a decline in the market price of the ADSs. Following the completion of this offering, based on the number of shares outstanding as of March 31, 2019, we will have _____ shares outstanding (assuming no exercise of the underwriters' option to purchase additional ADSs). This includes the shares underlying the ADSs offered in this offering, which may be resold in the public market immediately without restriction, other than the shares underlying any ADSs purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act, which may be resold only if registered under the Securities Act or in accordance with the requirements of Rule 144 or another applicable exemption from the registration requirements of the Securities Act. See "Shares and American Depositary Shares Eligible for Future Sale—Rule 144." Shares held by our directors and senior management will be subject to the lock-up agreements described in the "Underwriting" section of this prospectus. If, after the period during which such lock-up agreements restrict sales of the ADSs and shares, or if the representatives of the underwriters waive the restrictions set forth therein (which may occur at any time), one or more of our directors or senior management sells a substantial number of their shares, or the market perceives that such sales may occur, the market price of the ADSs and our ability to raise capital through an issue of equity securities in the future could be adversely affected.

Shareholders outside Denmark may be subject to exchange rate risk.

The shares underlying the ADSs are denominated in Danish kroner. Accordingly, an investment in the ADSs by an investor whose principal currency is not the Danish krone may expose such investor to foreign currency exchange rate risk. Any depreciation of the Danish krone against such foreign currency would reduce the value of the investment in the ADSs in terms of such foreign currency.

Your rights to pursue claims against the depositary as a holder of ADSs are limited by the terms of the deposit agreement.

The deposit agreement governing the ADSs provides that the depositary may, in its sole discretion, require that any dispute or difference arising from the relationship created by the deposit agreement be referred to and finally settled by an arbitration conducted under the terms described in the deposit agreement, although the arbitration provisions do not preclude you from pursuing claims under U.S. federal securities laws in federal courts. Furthermore, if you are unsuccessful in such arbitration, you may be responsible for the fees of the arbitrator and other costs in connection with such arbitration pursuant to the deposit agreement.

In addition, the deposit agreement provides that, subject to the depositary's right to require a claim to be submitted to arbitration, the federal or state courts in the City of New York have non-exclusive jurisdiction to hear and determine claims arising under the deposit agreement and in that regard, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable U.S. state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the U.S. federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement. In determining whether

to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before investing in the ADSs.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depository in connection with matters arising under the deposit agreement or the ADSs, including claims under U.S. federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and/or the depository. If a lawsuit is brought against us and/or the depository under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver provision is not enforced, to the extent a court action proceeds, it would proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depository of compliance with any substantive provision of, or a disclaimer of liability under, the U.S. federal securities laws and the rules and regulations promulgated thereunder.

Claims of U.S. civil liabilities may not be enforceable against us.

We are incorporated under the laws of Denmark. Although our wholly owned subsidiary, Genmab US, Inc., has an office in the United States, substantially all of our assets are located outside the United States. The majority of our directors and senior management reside outside the United States. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or to enforce judgments against them or us in U.S. courts, including judgments predicated upon the civil liability provisions of the U.S. securities laws.

The United States and Denmark currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Consequently, a final judgment for payment given by a U.S. court, whether or not predicated solely upon U.S. securities laws, would not be enforceable in Denmark.

In order to obtain a judgment that is enforceable in Denmark, the party in whose favor a final and conclusive judgment of the U.S. court has been rendered will be required to file its claim again with a court of competent jurisdiction in Denmark. The Danish court will not be bound by the judgment by the U.S. court, but the judgment may be submitted as evidence. It is up to the Danish court to assess the judgment by the U.S. court and decide if and to what extent the judgment should be followed. Danish courts are likely to deny claims for punitive damages and may grant a reduced amount of damages compared to U.S. courts.

Based on the lack of a treaty as described above, U.S. investors may not be able to enforce against us or members of our board of directors or our senior management, or certain experts named herein who are residents of Denmark or countries other than the United States any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

We are a "foreign private issuer," as defined in the SEC's rules and regulations, and, consequently, we are not subject to all of the disclosure requirements applicable to public companies organized within the United States.

We are a "foreign private issuer," as defined in the SEC's rules and regulations, and, consequently, we are not subject to all of the disclosure requirements applicable to public companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act that

regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act, including the U.S. proxy rules under Section 14 of the Exchange Act. In addition, our directors and senior management are exempt from the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, while we currently publish annual and quarterly reports on our website pursuant to the rules of Nasdaq Copenhagen and expect to file such financial reports on an annual and quarterly basis with the SEC, we will not be required to file such reports with the SEC as frequently or as promptly as U.S. public companies and will not be required to file quarterly reports on Form 10-Q or current reports on Form 8-K that a U.S. domestic company would be required to file under the Exchange Act. Accordingly, there may be less publicly available information concerning our company than there would be if we were not a foreign private issuer.

As a foreign private issuer and as permitted by the listing requirements of the Nasdaq Stock Market LLC, or the Nasdaq Stock Market, we will comply with certain home country corporate governance practices rather than the corporate governance requirements of Nasdaq Stock Market.

We qualify as a foreign private issuer and intend to apply to have the ADSs listed on the Nasdaq Global Select Market. As a result, in accordance with the listing requirements of the Nasdaq Stock Market and exemptions thereunder, we will comply with certain home country governance practices rather than the corporate governance requirements of the Nasdaq Stock Market. For example, the listing rules for the Nasdaq Stock Market, or the Nasdaq Listing Rules, for domestic U.S. issuers require, among other things, that a majority of the directors of a listed company be independent, and that independent directors have oversight over executive compensation, nomination of board members and corporate governance matters. While we intend to comply with the majority of these requirements, we are permitted to follow home country practice in lieu of the above requirements. Danish law does not require that a majority of our directors be independent directors or the implementation of a nominating and corporate governance committee, and our board may thus in the future not include, or include fewer, independent directors than would be required if we were subject to the Nasdaq Listing Rules, or they may decide that it is in our interest not to have a compensation committee or nominating and corporate governance committee, or may decide to have such committees governed by practices that would not comply with the Nasdaq Listing Rules. We intend to follow home country practice with regard to, among other things, quorum requirements generally applicable to general meetings of shareholders. Danish law does not have a regulatory regime for the solicitation of proxies and the solicitation of proxies is not a generally accepted business practice in Denmark; thus, our practice will vary from the requirement of Nasdaq Listing Rule 5620(b). In addition, our shareholders have authorized our board of directors to issue securities, including in connection with certain events such as the acquisition of shares or assets of another company, the establishment of or amendments to equity-based compensation plans for employees, rights issues at or below market price, certain private placements, directed issues at or above market price, and issuance of convertible notes. To this extent, our practice varies from the requirements of Nasdaq Listing Rule 5635, which generally requires an issuer to obtain shareholder approval for the issuance of securities in connection with such events. We also intend to follow home country practice with respect to the composition of the compensation committee rather than Nasdaq Listing Rule 5605, which states that the compensation committee must be composed of independent directors. Danish law does not have such a requirement. One of the members of our compensation committee, who will remain thereon, is considered non-independent by our board of directors, solely by virtue of his length of tenure as a director. Finally, we intend to follow home country practice with respect to the oversight of the director nominations process, rather than Nasdaq Listing Rule 5605, which requires that such oversight be independent. There is no such requirement under Danish law. The chairman of our nominating and corporate governance committee, who will remain thereon, is considered by our board of directors to be non-independent solely by virtue

of the length of his tenure as a director. For an overview of our corporate governance principles, see "Description of Share Capital and Certain Corporate Matters." Accordingly, you may not have the same protections afforded to shareholders of companies that are subject to these Nasdaq Listing Rule requirements.

If we lose our foreign private issuer status in the future, we would incur significant additional costs and expenses.

As a foreign private issuer, we are not required to comply with all the periodic disclosure and current reporting requirements of the Exchange Act and related rules and regulations. While we currently qualify as a foreign private issuer, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter and, accordingly, we could lose our foreign private issuer status in the future. We will next make a determination with respect to our foreign private issuer status on June 30, 2019.

The regulatory and compliance costs to us under U.S. securities laws if we lose our foreign private issuer status would be significantly more than the costs we expect to incur as a foreign private issuer. If we lose our foreign private issuer status, we would be required to report as a U.S. domestic issuer and be subject to other U.S. securities laws applicable to U.S. domestic issuers. The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly greater than the costs we incur as a foreign private issuer. For example, as a U.S. domestic issuer, we would be required to file periodic reports and registration statements with the SEC on U.S. domestic issuer forms, which are more detailed and extensive in certain respects than the forms available to us as a foreign private issuer. We would also be required to prepare our financial statements in accordance with U.S. GAAP and modify certain of our policies to comply with corporate governance practices applicable to U.S. domestic issuers. Such conversion and modifications would involve additional costs. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers, which could also increase our costs.

If we are a passive foreign investment company for U.S. federal income tax purposes for any taxable year, U.S. holders of our ADSs could be subject to adverse U.S. federal income tax consequences.

A non-U.S. corporation will be a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for any taxable year if either (i) at least 75% of its gross income for such taxable year is "passive income" (as defined in the relevant provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code) or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce or are held for the production of passive income. Based on the current and anticipated value of our assets and the nature and composition of our income and assets, we do not expect to be a PFIC for U.S. federal income tax purposes for our current taxable year ending December 31, 2019 or in the foreseeable future. However, the determination of whether or not we are a PFIC according to the PFIC rules is made on an annual basis and will depend on the nature and composition of our income and assets and the value of our assets from time to time. Therefore, changes in the nature and composition of our income or assets or the value of our assets may cause us to become a PFIC. The determination of the value of our assets (including goodwill not reflected on our balance sheet) may be based, in part, on the total market value of our shares and ADSs, which is subject to change and may be volatile.

If we are a PFIC for any taxable year during which a U.S. person holds ADSs, certain adverse U.S. federal income tax consequences could apply to such U.S. person. See "Material U.S. Federal Income Tax Considerations—Passive Foreign Investment Company Considerations."

As a result of becoming a public company in the United States, we will become subject to additional regulatory compliance requirements, including Section 404 of the Sarbanes-Oxley Act, and if we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

As a U.S. public company listed on the Nasdaq Global Select Market, we will incur legal, accounting and other expenses that we did not previously incur. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Nasdaq Listing Rules and other applicable securities rules and regulations, as well as the FCPA. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time consuming or costly and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company" and/or a foreign private issuer. The Exchange Act would require that, as a public company, we file annual, semi-annual and current reports with respect to our business, financial condition and result of operations. However, as a foreign private issuer, we are not required to file quarterly and current reports with respect to our business and results of operations. We currently issue annual and quarterly reports with respect to our listing on Nasdaq Copenhagen. Following this offering, we intend to submit, on a quarterly basis, interim financial data to the SEC under cover of the SEC's Form 6-K.

Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, our management will be required to assess and attest to the effectiveness of our internal control over financial reporting in connection with issuing our audited consolidated financial statements beginning with our audited consolidated financial statements as of and for the year ending December 31, 2020. Section 404 also requires an attestation report on the effectiveness of internal control over financial reporting be provided by our independent registered public accounting firm beginning with our first annual report following the date on which we are no longer an "emerging growth company", which may be up to five fiscal years following the date of this offering. See "Prospectus Summary—Implications of Being an 'Emerging Growth Company' and a Foreign Private Issuer."

Compliance with Section 404 will significantly increase our compliance costs and management's attention may be diverted from other business concerns, which could adversely affect our results of operations. We may need to hire more employees in the future or engage outside consultants to comply with these requirements, which would further increase expenses. If we fail to comply with the requirements of Section 404 in the required timeframe, we may be subject to sanctions or investigations by regulatory authorities, including the SEC and the Nasdaq Stock Market. Furthermore, if we are unable to attest to the effectiveness of our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, and the market price of our shares and ADSs could decline. Failure to implement or maintain effective internal control over financial reporting could also restrict our future access to the capital markets and subject each of us, our directors and our senior management to significant monetary and criminal liability. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue generating activities to compliance activities. Furthermore, as a public reporting company in the United States and Denmark with securities listed on the Nasdaq Global Select Market and Nasdaq Copenhagen, we will

have the additional burden of complying with multiple regulatory and disclosure regimes, which may result in further uncertainty regarding compliance matters, additional costs and further diversion of management's time and attention. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business, financial condition, results of operations and future growth prospects may be adversely affected.

Holders of the ADSs will not be able to exercise the pre-emptive subscription rights related to the shares that they represent, and may suffer dilution of their equity holdings in the event of future issuances of our shares.

Under the Danish Companies Act (*Selskabsloven*), or DCA, our shareholders benefit from a pre-emptive subscription right on the issuance of shares for cash consideration only and not in the event of issuance of shares against non-cash contribution or debt conversion. Shareholders' pre-emptive subscription rights, in the event of issuances of shares against cash payment, may be dis-applied by a resolution of the shareholders at a general meeting of our shareholders and/or the shares may be issued on the basis of an authorization granted to the board of directors pursuant to which the board may dis-apply the shareholders' pre-emptive subscription rights. The absence of pre-emptive rights for existing equity holders in these situations may cause substantial dilution to such holders.

Our ADS holders in the United States will not be entitled to exercise or sell such pre-emptive subscription rights related to the shares underlying their ADSs unless we register the pre-emptive subscription rights and the securities to which such pre-emptive subscription rights relate under the Securities Act, or if an exemption from the registration requirements of the Securities Act is available. We are under no obligation to file a registration statement with respect to any such rights or securities. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, ADS holders may be unable to participate in any rights offering and may experience dilution in their holdings.

If we offer shareholders any rights to subscribe for additional shares, we will advise the depositary whether we wish to make such rights available to ADS holders. If we decide to make such rights available to ADS holders, but the depositary determines that it is not legal or reasonably practicable to make the rights available to ADS holders, the depositary will endeavor to sell the rights and in a riskless principal capacity or otherwise, at such place and upon such terms (including public or private sale) as it may deem proper and distribute the net proceeds in the same way as it does with cash. However, if timing or market conditions do not permit such sale, the depositary will allow rights that are not distributed or sold to lapse, in which case, you would receive no value for such rights.

We are a Danish company with limited liability. The rights of our shareholders may be different from the rights of shareholders in companies governed by the laws of U.S. jurisdictions.

We are, and will upon the consummation of this offering be, a Danish company with limited liability. Our corporate affairs are governed by our articles of association and by the laws governing companies incorporated in Denmark. The rights of shareholders and the responsibilities of members of our board of directors may be different from the rights and obligations of shareholders and boards of directors in companies governed by the laws of U.S. jurisdictions. In the performance of its duties, our board is required by Danish law to consider the interests of our company, its shareholders, its employees and other stakeholders. It is possible that some of these parties will have interests that are different from, or in addition to, the interests of our shareholders. See "Description of Share Capital and Certain Corporate Matters—Articles of Association and Danish Corporate Law."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology.

These forward-looking statements include, but are not limited to, statements about:

- our expectations regarding sales, clinical development, regulatory approvals and commercialization of daratumumab and ofatumumab by Janssen and Novartis, respectively;
- our expectations regarding the clinical development, regulatory approval and commercialization of tisotumab vedotin and our other proprietary and partnered product candidates;
- our expectations with regard to our ability to create and develop additional product candidates and to submit INDs and/or CTAs for our pre-clinical product candidates;
- our receipt of future milestone payments and royalties from our partners, and the expected timing of such payments;
- our estimates and expectations regarding the potential market size and the size of the patient populations for our products and product candidates;
- our expectations regarding the potential advantages of our products and product candidates over existing therapies or therapies currently in development;
- our expectations regarding the potential advantages of our proprietary technologies over existing antibody technologies and the prospects for our ongoing and future technology collaborations;
- our plans to expand our translational research platform and the potential benefits of such platform;
- our expectations with regard to the willingness and ability of our current and future partners to pursue the development, approval and commercialization of our products and product candidates;
- our and our partners' product discovery, development and commercialization plans with respect to our products and product candidates and our proprietary technologies;
- our potential to enter into new collaborations;
- our and our partners' ability to develop, acquire and advance product candidates into, and successfully complete, clinical trials;
- the initiation, timing, progress and results of our pre-clinical studies and clinical trials, and our research and development programs;
- the timing or likelihood of regulatory filings and approvals for our products and product candidates;
- our ability to identify, and to negotiate contracts with, suitable CMOs and the ability of such CMOs to manufacture sufficient quantities of our products and product candidates for clinical trials or commercialization in compliance with cGMPs;

- the commercialization and market acceptance of our products and product candidates;
- our plans to build our commercialization capabilities and to potentially commercialize tisotumab vedotin or other proprietary product candidates in-house;
- the pricing of and reimbursement for our approved products;
- the implementation of our business model and strategic plans for our business, products, product candidates and technologies;
- our ability to operate our business without violating applicable laws and regulations;
- our and our partners' ability to operate our businesses without infringing the intellectual property rights and proprietary technology of third parties;
- the scope of protection we and our partners are able to establish and maintain for intellectual property rights covering our products, product candidates and technologies;
- our analysis of our actual or potential patent infringement claims and the rights of our partners with respect to such claims;
- estimates of our future expenses and revenue;
- our expectations regarding regulatory developments in the United States, the European Union and other jurisdictions;
- our exposure to additional scrutiny as a U.S. public company;
- our ability to effectively manage our anticipated growth;
- our ability to attract and retain suitably qualified employees and key personnel, particularly for our commercialization efforts;
- our use of proceeds from this offering;
- our future financial performance; and
- developments and projections relating to our competitors and our industry, including competing therapies and technologies.

These forward-looking statements are based on our current expectations, estimates, forecasts and projections about our business and the industry in which we operate and management's beliefs and assumptions, and are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC, after the date of this prospectus. See "Where You Can Find More Information."

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for our products and product candidates. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable.

In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause our future performance to differ materially from our assumptions and estimates. See "Special Note Regarding Forward-Looking Statements."

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$ (DKK), after deducting the underwriting commission and estimated offering expenses payable by us, based on an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the U.S. dollar/DKK exchange rate of as of , 2019, multiplied by the ADS-to-share ratio of to 1. If the underwriters exercise their option to purchase additional ADSs in full, we estimate that the net proceeds to us from this offering will be approximately \$, after deducting the underwriting commission and estimated offering expenses payable by us. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per ADS would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting commission and estimated offering expenses payable by us, by \$, assuming that the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of ADSs we are offering. An increase (decrease) of in the number of ADSs we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting commission and estimated offering expenses payable by us, by \$, assuming the assumed initial public offering price stays the same.

We intend to use the net proceeds from this offering to continue the development of our proprietary product candidates, to continue our pre-commercial activities, to continue building our commercial capabilities and to advance earlier stage product candidates.

We intend to use the net proceeds from the offering as follows:

- Approximately \$ to advance tisotumab vedotin through to commercialization in recurrent and/or metastatic cervical cancer, to progress tisotumab vedotin in other solid tumor indications and to continue building our commercial capabilities in connection with the potential future approval of tisotumab vedotin;
- Approximately \$ to fund drug discovery efforts, to further our development of existing and new technology platforms, and to fund the development of our earlier stage clinical and pre-clinical programs, including:
 - the ongoing development of enapotamab vedotin in various solid tumor indications;
 - the ongoing Phase I/II clinical trial of HexaBody-DR5/DR5 for the treatment of solid tumors;
 - the ongoing Phase I/II clinical trial of DuoBody-CD3xCD20 for the treatment of B-cell malignancies; and
 - the launch of Phase I/II clinical trials following submission of INDs and/or CTAs in 2019 for DuoBody-PD-L1x4-1BB, DuoBody-CD40x4-1BB and DuoHexaBody-CD37.

We intend to use any remaining net proceeds to maximize relationships with partners, to increase strategic flexibility to potentially retain significant ownership and value of select products and product candidates and for general corporate purposes.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. We cannot predict with certainty all of the particular uses of the net proceeds of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the relative success and cost of our research, pre-clinical and clinical development programs, our ability to obtain regulatory approvals in respect of our product candidates, changes in the competitive landscape,

ongoing developments in our relationships with current and future partners, reduction in existing royalty streams and any unforeseen cash needs. As a result, management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. See "Risk Factors—Risks Related to this Offering—We have broad discretion over the use of the net proceeds from this offering and may use them in ways with which you do not agree and in ways that may not enhance our operating results or the price of our ADSs."

Pending our application of the net proceeds from this offering as described above, we plan to invest such proceeds in a variety of capital preservation investments, including short- and intermediate-term interest-bearing obligations and certificates of deposit.

DIVIDEND POLICY

We do not currently pay out cash dividends on our shares and have not paid out any dividends within the last three financial years. Any future determination related to our dividend policy and the declaration of any dividends will be made at the discretion of our board of directors and will depend on a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant.

To understand how any future determination by us regarding the payment of dividends would affect you as a holder of ADSs, please see the section of this prospectus entitled "Description of American Depositary Shares—Dividends and Other Distributions."

Legal and Regulatory Requirements

In accordance with the DCA, ordinary dividends, if any, are declared with respect to a financial year at the annual general meeting of shareholders in the following year, where the statutory annual report (which includes the audited financial statements) for that financial year is approved. Further, our shareholders may resolve at a general meeting to distribute interim dividends and our shareholders may also grant our board of directors an authorization to distribute interim dividends. Any resolution to distribute interim dividends within six months of the date of the balance sheet as set out in our latest adopted annual report must be accompanied by the balance sheet from our latest annual report or an interim balance sheet which must be reviewed by our auditor. If the decision to distribute interim dividends is passed more than six months after the date of the balance sheet as set out in our latest adopted annual report, an interim balance sheet must be prepared and reviewed by our auditor. The balance sheet or the interim balance sheet, as applicable, must show that sufficient funds are available for distribution. Dividends may not exceed the amount recommended by the board of directors for approval by the general meeting of shareholders. Moreover, ordinary dividends and interim dividends may only be made out of distributable reserves and may not exceed what is considered sound and adequate with regard to our financial condition or be to the detriment of our creditors and such other factors as the board of directors may deem relevant.

In accordance with the DCA, share buybacks may only be carried out by the board of directors using funds that could have been distributed as dividends at the latest annual general meeting of shareholders. Any share buyback must be conducted in accordance with an authorization obtained at a general meeting of our shareholders. The authorization must be granted for a defined period of time not exceeding five years. In addition, the authorization must specify the maximum permitted value of treasury shares as well as the minimum and maximum amount that we may pay as consideration for such shares. A decision by our board of directors to engage in share buybacks, if any, will be made in accordance with the factors applicable to dividend payments set forth above.

Our board of directors, under two separate authorizations, is currently authorized to repurchase up to a total of 1,000,000 shares (with a nominal value of DKK 1,000,000) at a price per share that may not deviate by more than 10% from the price quoted on Nasdaq Copenhagen at the time of the acquisition. The first authorization, granted on March 17, 2016, authorizes the board of directors to repurchase up to a total of 500,000 shares (with a nominal value of DKK 500,000) and shall lapse on March 17, 2021. The second authorization, granted on March 29, 2019, authorizes the board of directors to repurchase up to an additional 500,000 shares (with a nominal value of DKK 500,000) and shall lapse on March 28, 2024. The authorizations are intended to cover obligations in relation to the RSU program and reduce the dilution effect of share capital increases resulting from future exercises of warrants. As of March 31, 2019, we have repurchased a total of 225,000 shares (with a nominal value of DKK 225,000) under the first authorization and no shares under the second authorization. As of March 31, 2019, up to a further 275,000 shares (with a nominal value of DKK 275,000) can be

repurchased under the first authorization and up to 500,000 shares (with nominal value of DKK 500,000) can be repurchased under the second authorization.

See "Material Danish Income Tax Considerations" for a description of Danish withholding taxes and certain other Danish considerations relevant to the purchase or holding of shares and ADSs and "Material U.S. Federal Income Tax Considerations" for a description of U.S. federal income tax considerations relevant to the purchase or holding of shares and ADSs.

CAPITALIZATION

The following table sets forth our cash position and capitalization as of March 31, 2019 on an actual basis, and on an as adjusted basis to give effect to the issuance of ADSs, representing shares, in this offering at an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the U.S. dollar/DKK exchange rate of as of , 2019, multiplied by the ADS-to-share ratio of to 1, after deducting the underwriting commission and estimated offering expenses payable by us.

Actual data as of March 31, 2019 in the table below is derived from our unaudited consolidated financial statements. The as adjusted data included in the table below is unaudited. You should read this information together with our consolidated financial statements appearing elsewhere in this prospectus and the information set forth under the headings "Selected Consolidated Financial Data," "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

(in thousands)	As of March 31, 2019			
	Actual		As adjusted ⁽²⁾	
	\$(⁽¹⁾)	DKK	\$(⁽¹⁾)	DKK
Cash position⁽³⁾	1,027,943	6,830,272		
Shareholders' equity:				
Share capital	9,259	61,524		
Share premium	1,213,614	8,063,977		
Other reserves	14,399	95,674		
Accumulated deficit	(14,149)	(94,013)		
Total shareholders' equity	1,223,123	8,127,162		
Total capitalization	1,223,123	8,127,162		

- (1) Translated solely for convenience into U.S. dollars at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate of such currencies as of March 31, 2019 as reported by Danmarks Nationalbank.
- (2) A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the U.S. dollar/DKK exchange rate of as of , 2019 and an ADS-to-share ratio of to 1, would increase (decrease) our as adjusted cash position, total shareholders' equity and total capitalization by approximately DKK (\$), assuming the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the underwriting commission and estimated offering expenses payable by us. We may also increase or decrease the number of ADSs we are offering. An increase (decrease) of in the number of ADSs we are offering would increase (decrease) our as adjusted cash position, total shareholders' equity and total capitalization by approximately DKK (\$), assuming the assumed initial public offering price per ADS remains the same, after deducting the underwriting commission and estimated offering expenses payable by us. The as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.
- (3) Represents cash and cash equivalents and marketable securities.

DILUTION

If you invest in the ADSs in this offering, your interest will be immediately diluted to the extent of the difference between the initial public offering price per ADS in this offering and the net book value per ADS after this offering. Dilution results from the fact that the initial public offering price per ADS is substantially in excess of the net book value per ADS. As of March 31, 2019, we had a historical net book value per ADS of \$18.79, or DKK 124.85 per share. Our net book value per share represents total consolidated tangible assets less total consolidated liabilities, all divided by the number of shares outstanding as of March 31, 2019.

After giving effect to the sale of ADSs in this offering at an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the DKK/U.S. dollar exchange rate of as of , 2019, multiplied by the ADS-to-share ratio of to 1, and after deducting the underwriting commission and estimated offering expenses, our as adjusted net book value at March 31, 2019 would have been \$ per share, or \$ per ADS. This represents an immediate increase in the as adjusted net book value of \$ per share to existing shareholders and an immediate dilution of \$ per ADS to new investors. The following table illustrates this dilution per ADS:

Assumed initial public offering price per ADS	\$
Historical net book value per ADS as of March 31, 2019	\$ 18.79
Increase in net book value per ADS attributable to new investors purchasing ADSs in this offering	
As adjusted net book value per ADS after this offering	
Dilution per ADS to new investors participating in this offering	<u>\$</u>

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the DKK/U.S. dollar exchange rate of as of , 2019 and an ADS-to-share ratio of to 1, would increase (decrease) our as adjusted net book value as of March 31, 2019, after giving effect to this offering (excluding the potential exercise by the underwriters of their option to purchase additional ADSs) by approximately DKK per share, or \$ per ADS, and would increase (decrease) dilution to investors in this offering by \$ per ADS assuming that the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the underwriting commission and estimated offering expenses payable by us. We may also increase or decrease the number of ADSs we are offering. An increase (decrease) of in the number of ADSs we are offering would increase (decrease) our as adjusted net book value as of March 31, 2019 after giving effect to this offering (excluding the potential exercise by the underwriters of their option to purchase additional ADSs) by approximately DKK per share (\$), or approximately \$ per ADS, and would decrease (increase) dilution to investors in this offering by approximately \$ per ADS, assuming the assumed initial public offering price per ADS remains the same, after deducting the underwriting commission and estimated offering expenses payable by us. The as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing. If the underwriters fully exercise their option to purchase additional ADSs, the as adjusted net book value after this offering would increase to approximately \$ per ADS, and there would be an immediate dilution of approximately \$ per ADS to new investors.

We may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our equity holders.

The following table shows, as of March 31, 2019, on an as adjusted basis, the number of ADSs purchased from us, the total consideration paid to us and the average price paid per share by existing shareholders and by new investors purchasing ADSs in this offering at an assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at the DKK/U.S. dollar exchange rate of as of , 2019, multiplied by the ADS-to-share ratio of to 1, before deducting the underwriting commission and estimated offering expenses payable by us (in thousands, except share and per share amounts and percentages):

	ADS Purchased ⁽¹⁾		Shares Purchased		Total Consideration		Average Price per Share	Average Price per ADS
	Number	Percentage	Number	Percentage	Amount (in millions)	Percentage		
Existing shareholders		%		100%	\$	%	\$	\$
New investors		%	—	0%	\$	%	\$	\$
Total		100%		100%	\$	100%		

(1) Each ADS represents of one share and as such any sale of ADSs will be reflected in the amount of the new shares which we will issue and for which the underwriters will subscribe.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per ADS, the U.S. dollar equivalent of the closing price of our shares on Nasdaq Copenhagen of DKK on , 2019, at DKK/U.S. dollar exchange rate of as of , 2019 and an ADS-to-share ratio of to 1, would increase (decrease) total consideration paid by new investors by , assuming that the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated underwriting commission and estimated offering expenses payable by us.

The number of shares and ADSs outstanding after this offering is based on the number of shares outstanding as of March 31, 2019, and excludes up to 1,419,895 shares that may be issued upon the exercise of warrants outstanding as of March 31, 2019, and assumes no exercise of the underwriters' option to purchase up to additional ADSs.

To the extent that warrants are exercised or we issue additional ADSs or shares, including shares underlying additional ADSs, in the future, there will be further dilution to investors participating in the offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

SELECTED CONSOLIDATED FINANCIAL DATA

The following tables present selected consolidated financial data of our business. We derived the selected consolidated income statement data for the years ended December 31, 2018 and 2017 and the selected consolidated balance sheet data as of December 31, 2018 from our audited consolidated financial statements included elsewhere in this prospectus. We derived the selected consolidated income statement data for the three months ended March 31, 2019 and 2018 and the selected consolidated balance sheet data as of March 31, 2019 from our unaudited interim consolidated financial statements included elsewhere in this prospectus. We maintain our books and records and report our financial results in DKK, and prepare our audited consolidated financial statements in accordance with IFRS as issued by the IASB. You should read this data together with our consolidated financial statements and related notes included elsewhere in this prospectus and the information under the captions "Capitalization" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our historical results are not necessarily indicative of our future results, and our results for any interim period are not necessarily indicative of the results to be expected for a full year.

Consolidated Income Statement Data

(in thousands, except per share data)	Year Ended December 31,			Three Months Ended March 31,		
	2018	2018	2017	2019	2019	2018
	\$ ⁽¹⁾	DKK	DKK	\$ ⁽¹⁾	DKK	DKK
Revenue	455,278	3,025,137	2,365,436	88,946	591,009	681,012
Operating expenses						
Research and development expenses	(215,387)	(1,431,159)	(874,278)	(82,184)	(546,080)	(312,551)
General and administrative expenses	(32,161)	(213,695)	(146,987)	(10,664)	(70,853)	(44,416)
Total operating expenses	(247,548)	(1,644,854)	(1,021,265)	(92,848)	(616,933)	(356,967)
Operating result	207,730	1,380,283	1,344,171	(3,902)	(25,924)	324,045
Financial income	36,567	242,975	71,699	18,351	121,936	14,695
Financial expenses	(1,698)	(11,287)	(352,150)	(299)	(1,990)	(83,175)
Net result before tax	242,599	1,611,971	1,063,720	14,150	94,022	255,565
Corporate tax	(21,045)	(139,830)	39,831	(3,283)	(21,813)	(56,991)
Net result	221,554	1,472,141	1,103,551	10,867	72,209	198,574
Basic net result per share ⁽²⁾	3.62	24.03	18.14	0.18	1.18	3.25
Diluted net result per share ⁽²⁾	3.57	23.73	17.77	0.18	1.17	3.20

- (1) Translated solely for convenience into U.S. dollars at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate of such currencies as of March 31, 2019 as reported by Danmarks Nationalbank.
- (2) See note 2.5 to our audited consolidated financial statements included elsewhere in this prospectus for further details regarding the calculation of basic and diluted net result per share.

Consolidated Balance Sheet Data

(in thousands)	As of March 31,		As of December 31,
	2019	2019	2018
	\$ ⁽¹⁾	DKK	DKK
Total assets	1,314,559	8,734,717	8,460,999
Accumulated deficit	(14,149)	(94,013)	(197,459)
Share capital	9,259	61,524	61,498
Total shareholders' equity	1,223,123	8,127,162	8,014,360
Total liabilities	91,436	607,555	446,639

- (1) Translated solely for convenience into U.S. dollars at an assumed exchange rate of DKK 6.6446 per \$1.00, which was the rounded official exchange rate of such currencies as of March 31, 2019 as reported by Danmarks Nationalbank.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this prospectus. The following discussion is based on our financial information prepared in accordance with IFRS, as issued by the IASB, which might differ in material respects from accounting principles generally accepted in other jurisdictions, including accounting principles generally accepted in the United States. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are an international biotechnology company specializing in antibody therapeutics for the treatment of cancer and other diseases. Our core purpose is to improve the lives of patients by creating and developing innovative antibody products. Our vision is to transform cancer treatment by launching our own proprietary product by 2025 and advancing our pipeline of differentiated and well-tolerated antibodies. We are building and expanding our late-stage development and commercial capabilities to allow us to bring our proprietary products to market in the future. Today, we have a well-diversified portfolio of products, product candidates and technologies. Our portfolio includes two marketed partnered products, daratumumab, marketed as DARZALEX for the treatment of certain MM indications, and ofatumumab, marketed as Arzerra for the treatment of certain CLL indications, in addition to a broad pipeline of differentiated product candidates. Our pipeline includes five proprietary product candidates in clinical development and approximately 20 proprietary and partnered pre-clinical programs, including two proprietary product candidates for which we have submitted or intend to submit an IND to the FDA and/or a CTA to the EMA in 2019. In addition to our proprietary clinical product candidates and our partners' ongoing label expansion studies for daratumumab and ofatumumab, our partners have eight additional product candidates in clinical development through collaboration agreements with us. Our portfolio also includes four proprietary antibody technologies that play a key role in building our product pipeline, enhancing our partnerships and generating revenue. We selectively enter into strategic alliances with other biotechnology and pharmaceutical companies that build our network in the biotechnology space and give us access to complementary novel technologies or products that move us closer to achieving our vision and fulfilling our core purpose.

In addition to our partnered marketed products, we are currently in the early stages of building and expanding our commercial capabilities to allow us to market our own products in the future for the indications and in the geographies we determine would be most effective to create value for our shareholders. Our goal is to become a commercial-stage company with oncology products in the United States, Europe and Japan. Our initial focus will be on achieving commercial launch readiness in Western Europe and Japan to support the potential launch of tisotumab vedotin for the treatment of cervical cancer, subject to obtaining regulatory approval and, where applicable, reimbursement approval.

In the three months ended March 31, 2019, we generated revenue of DKK 591.0 million (\$88.9 million) and recorded operating losses of DKK 25.9 million (\$3.9 million) and net income of DKK 72.2 million (\$10.9 million). In 2018, we generated revenue of DKK 3,025.1 million (\$464.0 million) and recorded operating income of DKK 1,380.3 million (\$211.7 million) and net income of DKK 1,472.1 million (\$225.8 million), as compared to revenue of DKK 2,365.4 million

(\$362.8 million), operating income of DKK 1,344.2 million (\$206.2 million) and net income of DKK 1,103.6 million (\$169.3 million) in 2017. Our results of operations have been, and we expect them to continue to be, affected by our collaboration with Janssen for the development and commercialization of daratumumab. Since inception, we have funded our operating requirements primarily through proceeds from equity financings and milestone payments and royalties from our partners. We expect to continue to fund a significant portion of our development costs for our proprietary product candidates as well as our planned commercialization activities with funds received from royalties and milestone payments from our partners as well as the net proceeds of this offering.

Our Collaborations and Technology Licenses

We enter into collaborations with biotechnology and pharmaceutical companies to advance the development and commercialization of our product candidates and to supplement our internal pipeline. We seek collaborations that will allow us to retain significant future participation in product sales through either profit-sharing or royalties paid on net sales. Below is an overview of some of our collaborations that have had a significant impact or that we expect may in the near term have a significant impact on our financial results. This is not a complete list, and we have several other collaborations or other agreements with third parties that could affect our results and financial condition. See "Business—Product and Technology Collaborations."

Collaboration with Janssen (Daratumumab/DARZALEX)

In August 2012, we entered into a global license, development, and commercialization agreement with Janssen for daratumumab (marketed as DARZALEX for the treatment of MM). Under this agreement, Janssen is fully responsible for developing and commercializing daratumumab and all costs associated therewith. We receive tiered royalty payments between 12% and 20% based on Janssen's annual net product sales. The royalties payable by Janssen are limited in time and subject to reduction on a country-by-country basis for customary reduction events, including upon patent expiration or invalidation in the relevant country and upon the first commercial sale of a biosimilar product in the relevant country (for as long as the biosimilar product remains for sale in that country). Pursuant to the terms of the agreement, Janssen's obligation to pay royalties under this agreement will expire on a country-by-country basis on the later of the date that is 13 years after the first sale of daratumumab in such country or upon the expiration of the last-to-expire patent (as defined in the agreement) covering daratumumab in such country. We are also eligible to receive certain additional payments in connection with development, regulatory and sales milestones.

Sales of DARZALEX have grown since it received its first marketing approval in the United States in 2015. In the fourth quarter of 2018, we moved from the 13% royalty tier (applicable to net sales exceeding \$750.0 million in a calendar year) to the royalty tier of 16% on the portion of net 2018 sales exceeding \$1.5 billion, and then to the 18% royalty tier on the portion of net 2018 sales exceeding \$2.0 billion. The 20% royalty tier will be payable on the portion of net sales in excess of \$3.0 billion in any calendar year. The total amount of potential milestone payments under the contract is approximately \$1,015 million, and to date, we have recorded approximately \$571.0 million in milestone payments from Janssen and could be entitled to receive up to \$444.0 million in further payments if certain additional milestones are met. The next sales milestones are payable upon net sales reaching \$2.5 billion and \$3.0 billion in a calendar year.

See "Business—Product and Technology Collaborations—Collaborations for our Marketed Products—Janssen Daratumumab License and Development Agreement."

Collaboration with Novartis (Ofatumumab)

Ofatumumab is commercialized by Novartis under a co-development and collaboration agreement with us, which it acquired from GSK in 2015. Under the agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales for non-cancer treatments, as well as certain potential regulatory and sales milestones, of which only certain sales milestones remain. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab.

See "Business—Product and Technology Collaborations—Collaborations for our Marketed Products—Novartis Ofatumumab Collaboration."

Collaboration with Seattle Genetics (Tisotumab vedotin)

In October 2011, we entered into a license and collaboration agreement with Seattle Genetics. In August 2017, Seattle Genetics exercised an option it was granted pursuant to this agreement to co-develop and co-commercialize tisotumab vedotin with us. All costs and profits for tisotumab vedotin will be shared on a 50:50 basis.

Our cost-sharing arrangement with Seattle Genetics in respect of the co-development and co-commercialization of tisotumab vedotin is such that, from time to time, one partner may be required to bear certain costs in furtherance of the collaboration for which it would be entitled to seek reimbursement of 50% of the costs from the other partner. Such reimbursements may not be immediate or may be offset by other costs incurred or profits received by one or both partners. As a result, we may incur costs for which we are not ultimately responsible, and this may affect our working capital, liquidity and availability of resources for other projects. On the other hand, we may also be responsible for reimbursing Seattle Genetics in respect of the portion of its spending in furtherance of the collaboration for which we are responsible. In addition, we record all development expenses incurred by us in connection with this collaboration as research and development expenses, while reimbursements received from Seattle Genetics related to such development expenses are recorded in revenue as reimbursement income.

See "Business—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—Seattle Genetics Tisotumab Vedotin Collaboration."

Collaboration with BioNTech (DuoBody-CD40x4-1BB and DuoBody-PD-L1x4-1BB)

In May 2015, we entered an agreement with BioNTech to jointly research, develop and commercialize bispecific antibody products using our DuoBody technology platform and antibodies. If BioNTech and us jointly select any product candidates for clinical development, development costs and product ownership will be shared equally going forward. If one of the companies does not wish to move a product candidate forward, the other company is entitled to continue developing the product on predetermined licensing terms. The agreement also includes provisions which will allow the parties to opt out of joint development at key points. Two product candidates are currently in development in connection with this agreement, DuoBody-PD-L1x4-1BB and DuoBody-CD40x4-1BB. We submitted CTAs for these products in 2019 and are currently recruiting patients for a Phase I/II study of DuoBody-PD-L1x4-1BB.

Our cost sharing arrangement with BioNTech is similar to the one with Seattle Genetics described above with respect to tisotumab vedotin.

See "Business—Product and Technology Collaborations—Collaboration for our Proprietary Product Candidates—BioNTech DuoBody Collaboration."

In-Licensed Technology

While not material in 2018 or in the three months ended March 31, 2019, in the future, our results and financial condition could be affected by milestone payments and royalties related to technology we have licensed or acquired. This includes payments under our asset purchase agreement with IDD Biotech in connection with our development of HexaBody-DR5/DR5, our ADC license agreement with Seattle Genetics in connection with our HuMax-AXL antibody and our research, collaboration and exclusive license agreement with Immatics to discover and develop next-generation bispecific immunotherapies to target multiple cancer indications.

Key Components of Our Results and Related Trends

Revenues

Our revenues are currently comprised of royalties, milestone payments, license fees and reimbursement income. Royalty income from licenses is based on third-party sales of licensed products. Milestone payments are typically related to reaching particular stages in product development, regulatory approval or net sales. License fees are non-refundable, upfront fees for our intellectual property received from our partners. Reimbursement income is mainly comprised of the reimbursement of certain research and development costs related to the development work under our collaboration agreements.

In the three months ended March 31, 2019, royalties, milestone payments, license fees and reimbursement income represented 86%, nil, nil and 14%, respectively, of our total revenues. The corresponding percentages were 58%, 23%, 11% and 8% in 2018 and 45%, 48%, 4% and 3% in 2017. At this time, all of our revenues come from payments made to us by our partners under our collaboration agreements. We do not earn any revenue from direct sales of our own products, and we will not earn such revenue unless and until we obtain regulatory approvals for any candidates in our proprietary pipeline and successfully commercialize such candidates. Our reported revenue is affected by the translation of royalties and other income denominated in foreign currencies—primarily U.S. dollars—into Danish kroner as our reporting currency.

In the three months ended March 31, 2019, DKK 502.2 million, or 85% of our total revenues, related to our various collaborations with Janssen, as compared to DKK 2,390.4 million, or 79% of our total revenues, in 2018 and DKK 2,214.0 million, or 94% of our total revenues, in 2017. In the three months ended March 31, 2019, all DKK 502.2 million of our revenues received under our various collaborations with Janssen were related to royalties and milestone payments with respect to DARZALEX, as compared to DKK 2,294.0 million, or 96% of revenues, in 2018, and DKK 2,121.4 million, or 96%, in 2017.

In addition to existing approvals of DARZALEX for the treatment of certain MM indications in the United States, the European Union, Japan and certain other countries, applications for label expansion in the United States, the European Union and Japan and for initial approval in China are currently pending with applicable regulators. Clinical studies are ongoing to expand daratumumab to new indications of MM. In March 2019, Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA for daratumumab as a combination treatment for frontline MM based on the pivotal Phase III MAIA study. The FDA plans to review the MAIA sBLA submission under its RTOR Pilot Program. In March 2019, Janssen also submitted an sBLA to the FDA and an MAA to the EMA for daratumumab as a combination treatment for frontline MM based on the pivotal Phase III CASSIOPEIA study. In addition, we expect Janssen to submit regulatory applications for a subQ formulation of daratumumab based on the Phase III COLUMBA study in 2019 and to release efficacy data for the Phase II GRIFFIN study for daratumumab as a combination treatment for frontline MM. In addition to the ongoing studies of daratumumab for the treatment of MM, Janssen is conducting a number of studies to assess the use of daratumumab in the treatment of other malignant

and pre-malignant diseases in which CD38 is expressed, including amyloidosis, acute lymphocytic leukemia and NKT-cell lymphoma. Our ability to generate revenue will significantly depend on the success of Janssen's continued ability to effectively maintain and grow sales of DARZALEX for its approved indications, expand its indications, and successfully compete with existing and additional investigational agents and technologies that are currently being marketed or studied for the same indications as DARZALEX.

Our historical revenue also reflects milestone payments and royalties related to our collaboration with Novartis for ofatumumab, marketed as Arzerra for the treatment of certain indications of CLL, and milestone and other payments relating to our other collaborations. We expect competitive pressures in the CLL treatment space to remain or intensify, which may cause sales of Arzerra to further decline, particularly as Novartis continues to transition Arzerra to compassionate use in most jurisdictions. For these and other reasons, we believe that our future prospects for material revenues from ofatumumab depend on Novartis' ability to expand the labeled indications of use for ofatumumab and to successfully commercialize it for such indications. Novartis is currently investigating a subQ formulation of ofatumumab in two Phase III clinical studies, ASCLEPIOS I and II, in RMS. Novartis reported that it completed recruitment for these studies in May 2018 and expects to complete the studies during 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter.

In addition to the key studies ongoing for daratumumab and ofatumumab outlined above, we anticipate that our partners under our collaboration agreements will report results or preliminary data for a number of additional clinical studies in 2019. However, there can be no assurance that any of the studies conducted by Janssen or Novartis or by us or our other partners will be completed on the expected timeline or at all, or that the final results will be positive. Our ability to generate revenue from our partnered product candidates depends on our and our partners' ability to successfully complete clinical trials for our product candidates and receive regulatory approvals, which could impact the commercial potential of such products and our potential to receive milestone payments and royalties for these products in the future.

Operating Expenses

Our operating expenses currently consist of research and development expenses and general and administrative expenses. Research and development expenses represent the majority of our operating expenses.

Our research and development expenses include internal costs relating to our research and development departments as well as external costs relating to studies performed by external suppliers and partners. Internal research and development costs consist primarily of salaries and benefits for our research and development staff and related expenses, including expenses related to cash bonuses, warrant and restricted stock unit, or RSU, programs as applicable to such personnel, costs of related facilities, equipment and other overhead expenses that have been determined to be directly attributable to research and development, costs associated with obtaining and maintaining patents for intellectual property, amortization of licenses and rights, amortization and impairment of intangible assets and property, and depreciation of capital assets used to develop our product candidates.

Major components of the external costs are fees and other costs paid to CROs in conjunction with pre-clinical studies and the performance of clinical trials, milestone payments for in-licensed technology, as well as fees paid to contract manufacturers in conjunction with the production of clinical compounds, drug substances and drugs. This includes (i) antibody clinical material for use in clinical trials and (ii) preparation for production of process validation batches for potential future regulatory submissions and related activities. These costs are expensed as incurred, because they do not qualify to be capitalized as inventory under IFRS since the technical feasibility of the materials is not proven and

no alternative use for them exists in the absence of marketing approval. Research and development expenses include amortization of intangible assets only in connection with licenses and rights we have acquired and capitalized. We do not capitalize intellectual property generated through our internal development activities.

We expect to incur higher research and development costs in future periods, including increasing costs for clinical trials and manufacturing as our proprietary product candidates advance in clinical development and we increase the number of product candidates under active clinical development. Our research and development expenses may vary substantially from period to period based on the timing of our research and development activities, including timing due to regulatory approvals and enrollment of patients in clinical trials. See "—Liquidity and Capital Resources" below.

Our general and administrative expenses consist primarily of wages and salaries for personnel other than research and development staff, including expenses related to cash bonus and warrant and RSU programs as applicable to such personnel. Also included are expenses related to depreciation, amortization and impairment of intangible assets, property, plant and equipment, to the extent such expenses are related to the administrative functions. As a result of becoming a U.S. public company listed on the Nasdaq Global Select Market, we will incur legal, accounting, and other expenses that we did not previously incur, resulting in increases in our general and administrative expenses in future periods.

Overhead expenses are allocated to research and development expenses or general and administrative expenses based on the number of employees and their relevant functions. The Dutch Research and Development Act, or WBSO, provides compensation for a part of research and development wages and other costs at our Utrecht facility through a reduction in payroll taxes in The Netherlands. WBSO grant amounts are offset against wages and salaries included in research and development costs.

Our ongoing research and development and, increasingly, pre-launch commercialization activities will require substantial amounts of capital and may not ultimately be successful. Over the next several years, we expect that we will continue to incur substantial expenses, primarily as a result of activities related to the continued development of our proprietary pipeline and building our commercial capabilities. Our proprietary product candidates will require significant further development, financial resources and personnel to pursue and obtain regulatory approval and develop into commercially viable products, if they are approved and commercialized at all. Our commitment of resources to the research and continued development of our product candidates and expansion of our proprietary pipeline will likely result in our operating expenses increasing and/or fluctuating as a result of such activities in future periods. We may also incur significant milestone payment obligations to certain of our licensors as our product candidates progress through clinical trials towards potential commercialization.

Other Income and Expense Items

Financial income includes interest on our marketable securities and other financial income, as well as realized and unrealized exchange rate and fair value hedge adjustments. Financial expenses include interest and other financial expenses, as well as realized and unrealized exchange rate and marketable securities adjustments. We record realized losses on marketable securities when a security is purchased at a price above par and held to maturity. We are compensated for these realized losses with above market interest rates.

Exchange rate adjustments recognized in financial income or expenses reflect adjustments to the value of assets and liabilities denominated in foreign currencies as a result of exchange rate movements. Transactions denominated in foreign currencies are translated into Danish kroner, our reporting currency, at the exchange rates in effect on the date of the transaction. Exchange rate gains and losses arising between the transaction date and the settlement date (or the balance sheet date for

unsettled assets or liabilities) are recognized in the income statement as either financial income or expenses. See "—Quantitative and Qualitative Disclosures about Market Risk—Exchange Rate Risk" below.

Our corporate tax is comprised of current tax and the adjustment of deferred taxes during the period. In any given period, the adjustment to our deferred tax position, including the reversal of valuation allowances, may partially or wholly offset current tax expense.

We record a valuation allowance to reduce deferred tax assets to reflect the net amount that is more likely than not to be realized. Realization of our deferred tax assets is dependent upon the generation of future taxable income, the amount and timing of which is uncertain. The valuation allowance requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. As our profitability outlook has changed, we determined that it was appropriate to reverse a portion of the valuation allowance in 2017 and a further portion in 2018. There was no reversal of the valuation allowances on deferred tax assets in the three months ended March 31, 2019.

Results of Operations

Financial Results for the Three Months Ended March 31, 2019 Compared to the Three Months Ended March 31, 2018

Revenue

The following table provides information regarding our revenue by source for the three months ended March 31, 2019, as compared to the three months ended March 31, 2018.

<u>(in millions of DKK)</u>	<u>Three Months Ended March 31,</u>		<u>Percentage</u>
	<u>2019</u>	<u>2018</u>	<u>change</u>
			<u>2019/2018</u>
<i>Revenue by source</i>			
Royalties	508.0	317.8	59.8
Milestone payments	—	—	—
License fees	—	304.1	(100.0)
Reimbursement income	83.0	59.1	40.4
Total revenue	591.0	681.0	(13.2)
<i>Revenue by collaboration partner</i>			
Janssen	502.2	309.8	62.1
Novartis	5.8	312.5	(98.1)
Other partners	83.0	58.7	41.4
Total revenue	591.0	681.0	(13.2)

Revenue for the three months ended March 31, 2019 was DKK 591.0 million, as compared to DKK 681.0 million for the three months ended March 31, 2018. Revenues in the three months ended March 31, 2018 were DKK 90.0 million, or 13.2%, higher than in the three months ended March 31, 2019, mainly driven by the one-time payment from Novartis of \$50.0 million (DKK 304.1 million) during the three months ended March 31, 2018 for lost potential milestones and royalties following announcement of Novartis' intention to transition Arzerra to limited availability via compassionate use programs for CLL in non-U.S. markets, partly offset by higher DARZALEX royalties and reimbursement income from our collaborations with Seattle Genetics and BioNTech.

Of the revenue for the three months ended March 31, 2019, DKK 508.0 million, or 86%, was attributable to royalties and DKK 83.0 million, or 14%, to reimbursement income. This is compared to DKK 317.8 million, or 47%, attributable to royalties, DKK 304.1 million, or 44%, to license fees, and DKK 59.1 million, or 9%, to reimbursement income for the three months ended March 31, 2018.

Royalty income was DKK 508.0 million for the three months ended March 31, 2019, as compared to DKK 317.8 million for the three months ended March 31, 2018, representing an increase of DKK 190.2 million. The increase was driven by higher DARZALEX royalties under our daratumumab collaboration with Janssen, which were partly offset by lower Arzerra royalties under our collaboration with Novartis. In the three months ended March 31, 2019, net sales of DARZALEX by Janssen were \$629 million, as compared to \$432 million in the three months ended March 31, 2018. The increase of \$197 million, or 46%, was driven by the continued strong uptake following the regulatory approval of DARZALEX in the United States, the European Union and Japan. Royalty income on net sales of DARZALEX was DKK 502.2 million in the three months ended March 31, 2019, as compared to DKK 309.8 million in the three months ended March 31, 2018, representing an increase of DKK 192.4 million, or 62%. The increase in royalties was higher than the increase in the underlying sales due primarily to currency fluctuations between the U.S. dollar and the Danish krone. In the three months ended March 31, 2018, net sales of Arzerra by Novartis were \$4 million, as compared to \$7 million in the three months ended March 31, 2018, representing a decrease of \$3 million, or 43%. Royalty income on net sales of Arzerra was DKK 5.8 million in the three months ended March 31, 2019, as compared to DKK 8.4 million in the three months ended March 31, 2018, representing a decrease of DKK 2.6 million, or 31%. The decrease in Arzerra net sales and resulting royalties was due to Novartis' ongoing transition of Arzerra to limited availability in most jurisdictions and continued ongoing competition in the CLL treatment space.

There was no milestone income recognized during the three months ended March 31, 2019 or 2018. Milestone income may fluctuate significantly from period to period due to both the timing of achievements and the varying amount of each individual milestone under our license and collaboration agreements.

There was no license fee income during the three months ended March 31, 2019. By comparison, license fee income was DKK 304.1 million for the three months ended March 31, 2018, driven by the one-time payment from Novartis of \$50.0 million (DKK 304.1 million) during the three months ended March 31, 2018.

We recorded reimbursement income of DKK 83.0 million in the three months ended March 31, 2019, as compared to DKK 59.1 million in the three months ended March 31, 2018, representing an increase of DKK 23.9 million. The increase was driven by reimbursement payments associated with our development activities relating to tisotumab vedotin under our collaboration with Seattle Genetics and the continued advancement of product candidates under our collaboration with BioNTech.

Research and Development Expenses

Research and development expenses for the three months ended March 31, 2019 were DKK 546.1 million, or 89% of our total operating expenses for three months ended March 31, 2019, as compared to DKK 312.6 million, or 88% of our total operating expenses for the three months ended March 31, 2018. The increase of DKK 233.5 million, or 74.7%, was driven by the advancement of enapotamab vedotin and tisotumab vedotin, the additional investment in our product pipeline, and the increase in the number of employees undertaking research and development.

The following table provides information regarding our research and development spending for the three months ended March 31, 2019, as compared to the three months ended March 31, 2018.

(in millions of DKK)	Three Months ended		Percentage Change
	2019	2018	
Research ⁽¹⁾	125.8	82.7	52.1
Development and contract manufacturing ⁽²⁾	209.4	105.3	98.9
Clinical ⁽³⁾	154.3	100.1	54.1
Other ⁽⁴⁾	56.6	24.5	131.0
Total research and development expenses	546.1	312.6	74.7

- (1) Research expenses include, among other things, personnel, occupancy and laboratory expenses, technology access fees associated with identification of new mAbs, expenses associated with development of new proprietary technologies and research activities associated with our product candidates, such as *in vitro* and *in vivo* studies, translational research, and IND enabling toxicology studies.
- (2) Development and contract manufacturing expenses include personnel and occupancy expenses, external contract manufacturing costs for the scale-up and pre-approval manufacturing of drug product used in research and our clinical trials, costs for drug product supplied to our collaborators, costs related to preparation for production of process validation batches to be used in potential future regulatory submissions, quality control and assurance activities, and storage and shipment of our product candidates.
- (3) Clinical expenses include personnel, travel, occupancy costs, and external clinical trial costs including costs for clinical sites, CROs, contractors and regulatory activities associated with conducting human clinical trials.
- (4) Other research and development expenses primarily include share-based compensation, depreciation and amortization expenses.

The increase in research and development expenses of DKK 233.5 million, or 74.7%, was driven by the advancement of enapotamab vedotin and tisotumab vedotin, the additional investment in our product pipeline, and the increase in the number of employees undertaking research and development.

We utilize our employee and infrastructure resources across multiple research and development projects. We track human resource efforts expended on many of our programs for purposes of billing our collaborators for time incurred at agreed upon rates and for resource planning. We do not account for actual costs on a project basis as it relates to our infrastructure, facility, employee and other indirect costs; however, we do separately track significant third-party costs including clinical trial costs, manufacturing costs and other contracted service costs on a project basis.

The following table shows third-party costs incurred for research, contract manufacturing of our product candidates and clinical and regulatory services for the three months ended March 31, 2019, as compared to the three months ended March 31, 2018. The table also presents unallocated costs and overhead consisting of third-party costs for our pre-clinical stage programs, personnel, facilities and other indirect costs not directly charged to development programs.

<u>(in millions of DKK)</u>	For the Three Months ended March 31,		Percentage Change
	2019	2018	2019/2018
Tisotumab vedotin	107.9	84.4	27.8
Enapotamab vedotin	71.9	21.5	234.4
Other clinical stage programs	46.9	26.1	79.7
Total third-party costs for clinical stage programs	226.7	132.0	71.7
Pre-clinical projects	112.2	65.8	70.5
Unallocated costs and overhead	207.2	114.8	80.5
Total research and development expenses	546.1	312.6	74.7

Third-party costs for tisotumab vedotin increased by DKK 23.5 million, or 27.8%, in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, primarily due to advancement of clinical trials.

Third-party costs for enapotamab vedotin increased by DKK 50.4 million, or 234.4%, in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, primarily due to increases in clinical trial and contract manufacturing costs related to the progression of the program.

Third-party costs for our other clinical stage programs increased by DKK 20.8 million, or 79.7%, in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, primarily due to an increase in contract manufacturing costs.

Research and development expenses related to our pre-clinical projects increased by DKK 46.4 million, or 70.5%, in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, driven by the expansion and continued advancement of our pre-clinical programs.

Unallocated costs and overhead increased by DKK 92.4 million, or 80.5%, in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, primarily due to an increase in staffing levels and the expansion of our facilities to accommodate our growth.

General and Administrative Expenses

General and administrative expenses for the three months ended March 31, 2019 were DKK 70.9 million, or 11% of our total operating expenses for the quarter, as compared to DKK 44.4 million for the three months ended March 31, 2018, or 12% of our total operating expenses for the quarter. The increase of DKK 26.5 million, or 59.7%, was driven by higher general consultancy expenses and an increase in administrative employees to support the expansion of our product pipeline.

Net Financial Items

Financial income for the three months ended March 31, 2019 was DKK 121.9 million, reflecting net realized and unrealized exchange rate gains of DKK 84.5 million, interest and other financial income of DKK 21.2 million, and gains on marketable securities of DKK 16.2 million. By comparison, financial income for the three months ended March 31, 2018 was DKK 14.7 million, reflecting interest and other financial income of DKK 12.4 million and net realized and unrealized gains on fair value hedges of DKK 2.3 million.

Financial expenses for the three months ended March 31, 2019 were DKK 2.0 million, which were solely related to interest and other financial expenses, as compared to DKK 83.2 million for the three months ended March 31, 2018, of which DKK 74.3 million was related to net realized and unrealized

exchange rate losses, DKK 8.8 million was related to net realized and unrealized losses on marketable securities and DKK 0.1 million was related to interest and other financial expenses.

As a result of the above, net financial items for the three months ended March 31, 2019 were a net gain of DKK 119.9 million, as compared to a net loss of DKK 68.5 million for the three months ended March 31, 2018. The variance in net financial items was driven primarily by foreign exchange movements, which positively impacted our U.S. dollar-denominated portfolio and cash holdings in 2019, as compared to 2018. In the three months ended March 31, 2019, the U.S. dollar strengthened significantly against the Danish krone, increasing from 6.5194 at December 31, 2018 to 6.6446 at March 31, 2019. By comparison, in the three months ended March 31, 2018, the U.S. dollar weakened significantly against the Danish krone, decreasing from 6.2067 at December 31, 2017 to 6.0101 at March 31, 2018.

Income Tax

Corporate tax for the three months ended March 31, 2019 was an expense of DKK 21.8 million, as compared to an expense of DKK 57.0 million for the three months ended March 31, 2018. The corporate tax expense in the three months ended March 31, 2019 was based on an estimated annual effective corporate tax rate of 23%, as compared to 22% for the three months ended March 31, 2018. There has been no reversal of the valuation allowances on deferred tax assets in the three months ended March 31, 2019 or 2018.

Financial Results for the Year Ended December 31, 2018 Compared to the Year Ended December 31, 2017

Revenue

The following table provides information regarding our revenue by source for the year ended December 31, 2018, as compared to the year ended December 31, 2017.

(in millions of DKK)	Year Ended December 31,		Percentage change
	2018	2017	2018/2017
Revenue by source			
Royalties	1,741.5	1,060.7	64.2
Milestone payments	687.3	1,133.3	(39.4)
License fees ⁽¹⁾	347.7	90.1	285.9
Reimbursement income	248.6	81.3	205.8
Total revenue	3,025.1	2,365.4	27.9
Revenue by collaboration partner			
Janssen	2,390.4	2,214.0	8.0
Novartis	337.7	48.1	602.1
Other partners	297.0	103.3	187.5
Total revenue	3,025.1	2,365.4	27.9

(1) For the year ended December 31, 2017, license fees income consisted only of deferred revenue related to the amortization of upfront payments previously received under our license and collaboration agreements. In 2018, the full deferred revenue balance was reclassified to accumulated deficit as a result of the adoption of IFRS 15. See "—Implementation of New and Revised Standards and Interpretations" below.

Revenue for the year ended December 31, 2018 was DKK 3,025.1 million, as compared to DKK 2,365.4 million for the year ended December 31, 2017. The increase of DKK 659.7 million, or 28%, was mainly driven by higher DARZALEX royalties under our daratumumab collaboration with Janssen, the one-time payment from Novartis of \$50.0 million (DKK 304.1 million) for lost potential

milestones and royalties due to Novartis' planned transition of Arzerra to compassionate use in most jurisdictions, and reimbursement income from our collaborations with Seattle Genetics and BioNTech, partly offset by a decrease in DARZALEX milestone payments in the year ended December 31, 2018.

Of the 2018 revenue, DKK 1,741.5 million, or 58%, was attributable to royalties, DKK 687.3 million, or 23%, to milestone payments, DKK 347.7 million, or 11%, to license fees and DKK 248.6 million, or 8%, to reimbursement income. This is compared to DKK 1,133.3 million, or 48%, attributable to milestone payments, DKK 1,060.7 million, or 45%, to royalties, DKK 90.1 million, or 4%, to deferred revenue associated with license fees, and DKK 81.3 million, or 3%, to reimbursement income for the year ended December 31, 2017.

The 28% increase in revenue in 2018 was mainly related to an increase of DKK 680.8 million, or 64%, in royalty income, driven by higher DARZALEX royalties under our daratumumab collaboration with Janssen, which was partly offset by lower Arzerra royalties. Net sales of DARZALEX by Janssen were \$2,025 million in 2018 compared to \$1,242 million in 2017. The increase of \$783 million, or 63%, was driven by the continued strong uptake of DARZALEX following regulatory approvals in the United States, the European Union and Japan. The resulting royalty income on net sales of DARZALEX was DKK 1,708.1 million in 2018 compared to DKK 1,013.2 million in 2017, an increase of DKK 694.9 million, or 69%. During the fourth quarter of 2018, the royalty rate on net sales of DARZALEX moved into the 16% royalty tier on net sales exceeding \$1.5 billion in a calendar year and the 18% royalty tier on net sales exceeding \$2.0 billion in a calendar year, up from the 13% royalty tier on net sales exceeding \$750.0 million in a calendar year achieved in the third quarter of 2017. The increase in royalties of 69% is higher than the increase in the underlying sales due to the change in royalty tiers in 2018. Novartis' net sales of Arzerra were \$26 million in 2018 compared to \$36 million in 2017, a decrease of \$10 million, or 28%. The resulting royalty income on net sales of Arzerra was DKK 33.3 million in 2018 compared to DKK 47.5 million in 2017, a decrease of DKK 14.2 million, or 30%. The decrease in Arzerra net sales and resulting royalties was due to Novartis' ongoing transition of Arzerra to limited availability in most jurisdictions and continued ongoing competition in the CLL treatment space.

Increased royalty revenues in 2018 were partially offset by a decrease in milestone payments, as compared to 2017. Milestone income was DKK 687.3 million in 2018, as compared to DKK 1,133.3 million in 2017, a decrease of DKK 446.0 million, or 39%. The decrease was mainly driven by lower DARZALEX milestone payments received in 2018, as compared to 2017, partially offset by milestones achieved under the Janssen and Novo Nordisk DuoBody collaborations in 2018. In 2018, we recorded \$100.5 million in milestone payments from Janssen, including (i) a \$75.0 million payment related to achievement of \$2.0 billion in net sales of DARZALEX in the fourth quarter of 2018 and (ii) a \$13.0 million milestone payment related to the first sale of DARZALEX in combination with VMP in patients with newly diagnosed MM. The remaining \$12.5 million included milestone payments related to pre-clinical and clinical progress under our DuoBody collaboration with Janssen. By comparison, in 2017, we recorded \$171.0 million in milestone payments from Janssen, including (i) a \$20.0 million milestone payment relating to progress in the ongoing Phase III ANDROMEDA (AMY3001) study of subQ daratumumab in combination with cyclophosphamide, bortezomib and dexamethasone, or CyBord, for the treatment of amyloidosis, (ii) a \$50.0 million sales volume milestone payment triggered by annual sales of DARZALEX reaching \$1.0 billion in 2017, (iii) a \$25.0 million milestone payment in connection with the regulatory approval and first commercial sale of DARZALEX in Japan, (iv) a \$25.0 million milestone payment in connection with the FDA approval and first commercial sale of DARZALEX in combination with pomalidomide and dexamethasone, or Pom-d, for the treatment of patients with MM who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor, or PI, and (v) a \$48.0 million milestone payment in connection with the first commercial sales of DARZALEX in combination with lenalidomide and dexamethasone, or Rd, or bortezomib and dexamethasone, or Vd, for the treatment of MM patients who have received at least

one prior line of therapy. Milestone income may fluctuate significantly from period to period due to both the timing of achievements and the varying amount of each individual milestone under our license and collaboration agreements.

License fees income was DKK 347.7 million for 2018, as compared to DKK 90.1 million in 2017, representing an increase of DKK 257.6 million, which was driven by (i) the \$50.0 million one-time payment from Novartis related to lost potential Arzerra milestones and royalties due to the transition of Arzerra to limited availability in most jurisdictions, under the Novartis ofatumumab collaboration, (ii) payment from Janssen for additional DuoBody target pairs under the Janssen DuoBody collaboration and (iii) the payment from Novo Nordisk for extending exclusivity of the commercial license for a DuoBody target pair under the Novo Nordisk DuoBody collaboration. During 2017, license fees income consisted only of deferred revenue related to the amortization of upfront payments previously received under our license and collaboration agreements on a straight line basis over the planned development periods. There was no deferred revenue for the year ended December 31, 2018 and the full deferred revenue balance of DKK 150.6 million as of December 31, 2017 was reclassified to accumulated deficit in the first quarter of 2018 as a result of the adoption of IFRS 15. See "—Implementation of New and Revised Standards and Interpretations" below.

We recorded reimbursement income in 2018 of DKK 248.6 million, as compared to DKK 81.3 million in 2017, representing an increase of DKK 167.3 million. The increase was driven by our collaboration agreements with Seattle Genetics and BioNTech. Seattle Genetics exercised its option to co-develop and co-commercialize tisotumab vedotin in 2017, resulting in increased reimbursement payments from Seattle Genetics in 2018 for our development activities relating to tisotumab vedotin. Pre-clinical projects under the BioNTech collaboration continued to advance in 2018.

Research and Development Expenses

Research and development expenses for the year ended December 31, 2018 were DKK 1,431.2 million, or 87% of our total operating expenses for 2018, as compared to DKK 874.3 million, or 86% of our total operating expenses for 2017. The increase of DKK 556.9 million, or 64%, was driven by the clinical advancement of tisotumab vedotin and enapotamab vedotin, additional investment in our proprietary pipeline, and the increase in employees to support the expansion of our proprietary pipeline, partly offset by (i) an increase of DKK 21.7 million in WBSO grants, to DKK 85.7 million in 2018 from DKK 64.0 million in 2017, and (ii) the absence of impairment losses in 2018, as compared to DKK 22.2 million of impairment losses in 2017, which related to licensed assets and were recognized as part of research and development expenses as certain programs were discontinued.

The following table provides information regarding our research and development spending for the year ended December 31, 2018, as compared to the year ended December 31, 2017.

(in millions of DKK)	Year ended December 31,		Percentage Change
	2018	2017	2018/2017
Research ⁽¹⁾	355.9	287.8	23.7
Development and contract manufacturing ⁽²⁾	509.2	275.6	84.8
Clinical ⁽³⁾	423.9	206.9	104.9
Other ⁽⁴⁾	142.2	104.0	36.7
Total research and development expenses	1,431.2	874.3	63.7

- (1) Research expenses include, among other things, personnel, occupancy and laboratory expenses, technology access fees associated with identification of new mAbs, expenses associated with development of new proprietary technologies and research activities associated with our product candidates, such as *in vitro* and *in vivo* studies, translational research, and IND enabling toxicology studies.

- (2) Development and contract manufacturing expenses include personnel and occupancy expenses, external contract manufacturing costs for the scale-up and pre-approval manufacturing of drug product used in research and our clinical trials, costs for drug product supplied to our collaborators, costs related to preparation for production of process validation batches to be used in potential future regulatory submissions, quality control and assurance activities, and storage and shipment of our product candidates.
- (3) Clinical expenses include personnel, travel, occupancy costs, and external clinical trial costs including costs for clinical sites, CROs, contractors and regulatory activities associated with conducting human clinical trials.
- (4) Other research and development expenses primarily include share-based compensation, depreciation and amortization expenses.

The increase in research and development expenses of DKK 556.9 million, or 63.7%, was driven by the advancement of tisotumab vedotin and enapotamab vedotin, the additional investment in our product pipeline, and the increase in research and development employees.

The following table shows third-party costs incurred for research, contract manufacturing of our product candidates and clinical and regulatory services for the year ended December 31, 2018, as compared to the year ended December 31, 2017. The table also presents unallocated costs and overhead consisting of third-party costs for our pre-clinical stage programs, personnel, facilities and other indirect costs not directly charged to development programs.

(in millions of DKK)	For the year ended December 31,		Percentage Change
	2018	2017	2018/2017
Tisotumab vedotin	291.9	161.2	81.1
Enapotamab vedotin	126.3	50.1	152.1
Other clinical stage programs	102.0	109.6	(6.9)
Total third-party costs for clinical stage programs	520.2	320.9	62.1
Pre-clinical projects	404.7	182.1	122.2
Unallocated costs and overhead	506.3	371.3	36.4
Total research and development expenses	1,431.2	874.3	63.7

Third-party costs for tisotumab vedotin increased by DKK 130.7 million, or 81%, in 2018 as compared to 2017, primarily due to advancement of clinical trials and initiation of new phase 2 clinical trials.

Third-party costs for enapotamab vedotin increased by DKK 76.2 million, or 152%, in 2018 as compared to 2017, primarily due to increases in clinical trial and contract manufacturing costs related to the progression of the program.

Third-party costs for our other clinical stage programs were related to multiple earlier-stage development programs and were relatively consistent across 2018 and 2017.

Research and development expenses related to our pre-clinical projects increased by DKK 222.6 million, or 122%, in 2018 as compared to 2017, driven by the expansion and continued advancement of our pre-clinical programs.

Unallocated costs and overhead increased by DKK 135.0 million, or 36%, in 2018 as compared to 2017, primarily due to an increase in staffing levels and the expansion of our facilities to accommodate our growth.

General and Administrative Expenses

General and administrative expenses for the year ended December 31, 2018 were DKK 213.7 million, or 13% of our total operating expenses for 2018, as compared to DKK 147.0 million for the year ended December 31, 2017, or 14% of our total operating expenses for 2017. The increase of DKK 66.7 million, or 45%, was driven by higher general consultancy expenses and an increase in administrative employees to support the expansion of our operations. DKK 121.9 million, or 57% of general and administrative expenses in 2018, was related to remuneration of employees and senior management involved in general and administrative activities, as compared to DKK 94.2 million, or 64% of general and administrative expenses in 2017.

Net Financial Items

Financial income for the year ended December 31, 2018 was DKK 243.0 million, reflecting interest and other financial income of DKK 62.9 million, net realized and unrealized gains on fair value hedges of DKK 2.3 million and net realized and unrealized exchange rate gains of DKK 177.8 million, as compared to DKK 71.7 million for the year ended December 31, 2017, reflecting interest and other financial income of DKK 41.4 million and net realized and unrealized gains on fair value hedges of DKK 30.3 million.

Financial expenses for the year ended December 31, 2018 were DKK 11.3 million, of which DKK 10.9 million was related to realized and unrealized losses on marketable securities, as compared to DKK 352.2 million for the year ended December 31, 2017, of which DKK 329.7 million was related to net realized and unrealized exchange rate losses, DKK 19.6 million was related to net realized and unrealized losses on marketable securities and DKK 2.8 million was related to interest and other financial expenses.

As a result of the above, net financial items for the year ended December 31, 2018 were a net gain of DKK 231.7 million, as compared to a net loss of DKK 280.5 million for the year ended December 31, 2017. The variance in net financial items was driven primarily by net realized and unrealized exchange rate gains of DKK 177.8 million in 2018, as compared to net realized and unrealized exchange rate losses of DKK 329.7 million in 2017. Net realized and unrealized exchange rate gains were driven by foreign exchange movements which positively impacted our U.S. dollar denominated portfolio and cash holdings in 2018, as compared to 2017. The U.S. dollar strengthened significantly against the Danish krone during 2018, increasing from 6.2067 at December 31, 2017 to 6.5194 at December 31, 2018.

Income Tax Benefit

Corporate tax for the year ended December 31, 2018 was an expense of DKK 139.8 million, as compared to an income of DKK 39.8 million for the year ended December 31, 2017. The corporate tax expense in 2018 was due to current and deferred tax expenses of DKK 407.4 million, partially offset by the reversal of valuation allowances on deferred tax assets related to future taxable income, which resulted in a discrete tax benefit of DKK 267.6 million. The corporate tax income in 2017 was due to the partial reversal of valuation allowances on deferred tax assets related to future taxable income, resulting in a discrete tax benefit of DKK 285.7 million in 2017, which more than offset current and deferred tax expenses of DKK 245.9 million.

The partial reversal of the valuation allowance was recorded in 2018 because, based upon the weight of available evidence at December 31, 2018, we determined that it was more likely than not that a portion of our deferred tax assets would be realizable as a result of probable future taxable income and fully released the remaining valuation allowance on deferred tax assets for our parent entity, Genmab A/S. We intend to continue to maintain a valuation allowance against a significant portion of

our deferred tax assets related to our subsidiaries, until there is sufficient evidence to support the reversal of all or some additional portion of these allowances.

In 2018, a deferred tax asset of DKK 386.4 million was recognized on the balance sheet, as compared to DKK 296.9 million in 2017. In 2018, a current tax benefit of DKK 23.8 million and a deferred tax benefit of DKK 66.1 million, each related to excess tax benefits for share-based instruments, was recorded directly in shareholders' equity, as compared to a current tax benefit of DKK 71.9 million which was recorded directly in shareholders' equity in 2017.

As of December 31, 2018, we had gross tax loss carry-forwards of DKK 2.6 billion for income tax purposes, as compared to DKK 4.4 billion in 2017. The reduction was driven primarily by the expiration of DKK 1.0 billion of gross tax loss carry-forwards related to a capital loss at our U.S. subsidiary in 2018. This capital loss was (i) related to the sale of our former manufacturing facility in 2013, (ii) was limited to a 5 year carry-forward period and (iii) could only be utilized to offset specific types of capital income.

Of DKK 2.6 billion in gross tax loss carry-forwards as of December 31, 2018, DKK 1.2 billion consists of net operating losses that can be carried forward without limitation. The remaining DKK 1.4 billion can be carried forward through various periods through 2028.

Liquidity and Capital Resources

As of March 31, 2019, we had cash, cash equivalents and marketable securities (cash position) of DKK 6,830.3 million, as compared to DKK 6,106.1 million as of December 31, 2018. This represents a net increase of DKK 724.2 million, or 12%, from December 31, 2018, which was mainly driven by positive working capital adjustments of DKK 732.8 million related to milestones achieved in the fourth quarter of 2018, which were received in the three months ended March 31, 2019, and net exchange rate gains of DKK 84.5 million driven by the strengthening of the U.S. dollar, which were partly offset by corporate taxes of DKK 140.3 million paid during the three months ended March 31, 2019.

As of March 31, 2019, DKK 1,176.8 million, as compared to DKK 532.9 million as of December 31, 2018, was held as cash and cash equivalents, and DKK 5,653.5 million, as compared to DKK 5,573.2 million as of December 31, 2018, was held as liquid investments in short-term government and other debt instruments.

We require cash to meet our operating expenses and capital expenditures. We have funded our cash requirements since our inception, including through March 31, 2019, primarily with equity financing, upfront payments and royalty and milestone payments from our partners.

We expect to continue to fund a significant portion of our development costs for our proprietary product candidates as well as our planned commercialization activities with funds received from royalties and milestone payments from our partners as well as the net proceeds of this offering. However, because our product candidates are in various stages of development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and to obtain regulatory approval of, and ultimately commercialize, our product candidates.

Our expenditures on our current and future pre-clinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion. In order to advance our product candidates toward commercialization, the product candidates are tested in numerous pre-clinical safety, toxicology and efficacy studies. We then conduct clinical trials for those product candidates that take several years or more to complete. The length of time varies substantially based upon the type, complexity, novelty and intended use of a product candidate. The cost of clinical trials may vary significantly over the life of a project as a result of a variety of factors, including: the number of patients required in our clinical trials; the length of time required to enroll trial participants; the

number and location of sites included in the trials; the costs of producing supplies of the product candidates needed for clinical trials and regulatory submissions; the safety and efficacy profile of the product candidate; the use of CROs to assist with the management of the trials; and the costs and timing of, and the ability to secure, regulatory approvals.

Our expenses also fluctuate from period to period based on the degree of collaborative activities, timing of manufacturing campaigns, numbers of patients enrolled in our clinical trials and the outcome of each clinical trial event. As a result, we are unable to determine with any degree of certainty the anticipated completion dates, duration and completion costs of our research and development projects, or when and to what extent we will receive cash inflows from the commercialization and sale of any of our product candidates. We also cannot predict the actual amount or timing of future royalties and milestone payments to us, and these may differ from our estimates.

We expect to make additional capital outlays and to increase operating expenditures over the next several years as we hire additional employees, support our pre-clinical development, manufacturing and clinical trial activities for tisotumab vedotin and our other proprietary product candidates, and expand internationally, as well as commercialize tisotumab vedotin, if we receive regulatory approval. As we increase our spending on research and development related to our product collaborations, we may be required to make certain capital outlays against which we expect to receive reimbursement income to the extent the outlay exceeds our share under the applicable collaboration agreement. We expect that the time-lag between the expenditure by us, on the one hand, and the reimbursement by our partner of its relevant share, on the other hand, will increase our working capital needs. To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our operating requirements and cash needs through public or private equity offerings, debt financings, or additional corporate collaboration and licensing arrangements.

Cash Flows

The following table provides information regarding our cash flows for the three months ended March 31, 2019 and March 31, 2018, as well as the years ended December 31, 2018 and December 31, 2017.

(in millions of DKK)	Year Ended December 31,		Three Months Ended December 31,	
	2018	2017	2019	2018
Cash inflow / (outflow) from operating activities	1,014.8	1,589.0	647.2	464.1
Cash (outflow) from investing activities	(1,777.6)	(667.6)	(13.5)	(682.8)
Cash (outflow) / inflow from financing activities	(70.9)	214.9	(10.5)	(127.8)
Increase (decrease) in cash and cash equivalents	(833.7)	1,136.3	623.2	(346.5)

Cash inflow from operating activities for the three months ended March 31, 2019 was DKK 647.2 million, as compared to DKK 464.1 million for the three months ended March 31, 2018. The increase of DKK 183.1 million, or 40%, was primarily associated with our operating result, working capital fluctuations, reversal of net financial items, and adjustments related to non-cash expenses, all of which may be highly variable period to period.

Cash outflow from investing activities for the three months ended March 31, 2019 was DKK 13.5 million, as compared to an outflow of DKK 682.8 million for the three months ended March 31, 2018. The decrease of DKK 669.3 million, or 98%, primarily reflects differences between the proceeds

received from sale and maturity of our investments and amounts invested. Purchases of marketable securities exceeded sales and maturities in the three months ended March 31, 2018 but remained flat in the three months ended March 31, 2019.

Cash outflow from financing activities for the three months ended March 31, 2019 was DKK 10.5 million, as compared to an outflow of DKK 127.8 million for the three months ended March 31, 2018. In the three months ended March 31, 2019, the primary driver of the lower cash used in financing activities was related to the purchase of treasury shares during the three months ended March 31, 2018 of DKK 146.2 million. There were no purchases of treasury shares during the three months ended March 31, 2019.

The total cash at March 31, 2019 was DKK 1,176.8 million, as compared to DKK 956.8 million at March 31, 2018.

Cash inflow from operating activities for the year ended December 31, 2018 was DKK 1,014.8 million, as compared to DKK 1,589.0 million for the year ended December 31, 2017. The decrease of DKK 574.2 million, or 36%, was primarily associated with higher positive working capital adjustments in 2017 as compared to 2018, which were related to milestones achieved in the fourth quarter of 2016, the payments for which were received in 2017. Working capital fluctuations, reversal of net financial items and adjustments related to non-cash expenses, all of which may be highly variable period to period, also contributed to the variation.

Cash outflow from investing activities for the year ended December 31, 2018 was DKK 1,777.6 million, as compared to DKK 667.6 million for the year ended December 31, 2017. The increase of DKK 1,110.0 million, or 166%, primarily reflects differences between the proceeds received from sale and maturity of our investments and amounts invested, and investments in intangible assets. During 2018, investments in intangible assets were DKK 405.7 million, primarily related to the DKK 345.4 million upfront fee paid to Immatics in connection with our collaboration agreement to discover and develop next-generation bispecific cancer immunotherapies and the DKK 44.6 million milestone payment to Seattle Genetics, triggered by the initiation of expansion cohorts in the ongoing Phase I/II trial of enapotamab vedotin in solid tumors. There were no investments in intangible assets during 2017.

Cash outflow from financing activities for the year ended December 31, 2018 was DKK 70.9 million, as compared to a cash inflow of DKK 214.9 million for the year ended December 31, 2017. In 2018, cash outflow from financing activities was primarily related to the purchase of treasury shares for DKK 146.2 million, partly offset by the proceeds from the exercise of warrants of DKK 75.3 million. During 2017, we did not purchase any treasury shares and the proceeds from the exercise of warrants were DKK 214.9 million, or DKK 139.6 million higher than during 2018.

The total cash at year end December 31, 2018 was DKK 532.9 million, as compared to DKK 1,347.5 million at year end December 31, 2017.

Contractual Obligations

The following table summarizes our operating lease obligations as of December 31, 2018.

(in millions of DKK)	Less than 1 year	1 to 3 years	More than 3 years but less than 5 years	More than 5 years	Total
Operating lease obligations	34.7	63.4	44.6	41.0	183.7

Our operating lease obligations in the table above relate to operating leases for office space, which are non-cancelable for various periods up to 2027. In addition to our operating leases, we have also

entered into a number of agreements primarily related to research and development activities. These short term contractual obligations amounted to DKK 786.9 million as of December 31, 2018, all of which is due in less than one year.

We also have certain contingent commitments under our license and collaboration agreements that may become due for future payments. As of December 31, 2018, these contingent commitments amounted to approximately \$857.6 million in potential future development, regulatory and commercial milestone payments to third parties under license and collaboration agreements for our pre-clinical and clinical-stage development programs. These milestone payments generally become due and payable only upon the achievement of certain development, clinical, regulatory or commercial milestones. The events triggering such payments or obligations have not yet occurred.

In addition to the above obligations, we enter into a variety of agreements and financial commitments in the normal course of business. The terms generally allow us the option to cancel, reschedule and adjust our requirements based on our business needs prior to the delivery of goods or performance of services. It is not possible to predict the maximum potential amount of future payments under these agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements.

Quantitative and Qualitative Disclosures about Market Risk

Our activities primarily expose us to the financial risks of changes in foreign currency exchange rates. Increases or decreases in the exchange rate of foreign currencies against the Danish krone can affect our results and cash position negatively or positively.

Exchange Rate Risk

Most of our financial transactions are made in Danish kroner, U.S. dollars, Euros and British pounds sterling, or GBP. As our reporting currency is Danish kroner, we experience exchange rate risk with respect to our holdings and transactions denominated in currencies other than Danish kroner. Our U.S. dollar currency exposure is mainly related to cash deposits, marketable securities and receivables related to our collaborations with Janssen and Novartis. Our Euro currency exposure is mainly related to our marketable securities, contracts and other costs denominated in Euros. Our GBP currency exposure is mainly related to contracts and marketable securities denominated in GBP.

Our royalties and milestone payments are largely paid in U.S. dollars and Euros. We entered into derivative contracts during the fourth quarter of 2016 to hedge a portion of the associated currency exposure of royalty payments from net sales of DARZALEX by Janssen. The foreign exchange forward contracts were purchased to match the anticipated timing of quarterly royalty payments from Janssen in May 2017, August 2017, November 2017, and February 2018. The total notional amount of the forward contracts was \$42.0 million with the U.S. dollar/€ forward contract rate ranging from 1.0469 to 1.0640. Due to their lower cost and Denmark's fixed exchange rate policy against the Euro, U.S. dollar/€ forward contracts were utilized instead of U.S. dollar/DKK forward contracts. The total notional amount of foreign exchange forward contracts that matured in 2018 was \$15.0 million, as compared to \$27.0 million in 2017. There were no gains or losses recognized as part of financial income related to these contracts in the three months ended March 31, 2019, as compared to a gain of DKK 2.3 million in the three months ended March 31, 2018. As of March 31, 2019 and December 31, 2018, there were no derivatives outstanding, as compared to one forward exchange contract with a notional amount of \$15.0 million and a fair value of DKK 12.2 million which was outstanding as of December 31, 2017.

While we may enter into derivative contracts in the future, we do not generally hedge our currency exposure on our royalties and milestone payments or other income and expense items in the ordinary course.

Due to the long-standing policy of Danmarks Nationalbank with respect to the €/DKK exchange rate, we believe that there are currently no material transaction exposure or exchange rate risks regarding transactions in Euros. Since the introduction of the Euro in 1999, Denmark has committed to maintaining a central rate of 7.46 DKK to €1. This rate may fluctuate within a +/- 2.25% band. Although there has been some pressure on the Danish krone, we do not expect the €/DKK exchange rate to move outside of the current limits. However, should Denmark's policy towards the Euro change, the Danish krone values of our Euro-denominated assets and costs could be materially different compared to what is calculated and reported under the existing Danish policy towards the €/DKK exchange rate.

Interest Rate Risk

Our exposure to interest rate risks is primarily related to marketable securities, as we currently do not have significant interest-bearing debts. To control and minimize interest rate risk, we maintain an investment portfolio in a variety of securities with a relatively short effective duration. As of December 31, 2018, the portfolio had a weighted average effective duration of approximately 1.4 years, with no securities that had an effective duration of more than 8 years, which means that a change in the interest rates of one percentage point will cause the fair value of the securities to change by approximately 1.4%.

Due to the short-term nature of the current investments and to the extent that we are able to hold the investments to maturity, we consider our current exposure to changes in fair value due to interest rate changes to be insignificant compared to the fair value of the portfolio.

Credit Risks

We are exposed to credit risks in respect of our marketable securities and bank deposits. To manage and reduce credit risks on our marketable securities, only securities from investment grade issuers are eligible for our portfolios (*i.e.*, A-1 or A- or higher in the short-term and long-term, respectively, by Standard & Poor's). As of December 31, 2018, 90% of our marketable securities had a triple A-rating. To reduce the credit risks on our bank deposits, we only invest cash deposits with highly rated financial institutions (*i.e.*, A-1 or higher short-term rating by Standard & Poor's). The maximum credit risk related to financial assets corresponds to the carrying amounts recognized in the balance sheet.

We are also exposed to the credit risk of our partners. As of December 31, 2018, 95% of our receivables were related to our collaboration agreements with our partners. The credit risk on these receivables is considered to be limited and the provision for expected credit losses as of December 31, 2018 was not significant, given that there have been no credit losses on receivables from our partners over the last three years and that our partners are top tier life science companies. However, if any of our partners become unable to meet their obligations under one or more of our collaboration agreements, this may negatively impact our ability to receive income to which we are entitled.

Significant Accounting Policies

Our consolidated financial statements have been prepared in accordance with IFRS, as issued by the IASB. A description of our significant accounting policies is provided in Note 1.1 to our audited consolidated financial statements as of, and for the years ended, December 31, 2018 and December 31, 2017 included elsewhere in this prospectus.

Implementation of New and Revised Standards and Interpretations

Effective January 1, 2018, we adopted IFRS 15, which requires us to apply a five step model to determine when, how and in which amount revenue is to be recognized depending on whether certain criteria are met. This is different from the prior accounting standards, under which revenue recognition was based on the transfer of risks and rewards.

We adopted IFRS 15 using the modified retrospective transition method. Under this method, the cumulative effect of initially applying the new revenue standard was recognized as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. IFRS 15 applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, and financial instruments.

Under IFRS 15, we recognize revenue when our customer obtains control of promised goods or services, in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. To determine revenue recognition for arrangements that we determine are within the scope of IFRS 15, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy a performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Changes in revenue recognition for licenses of functional intellectual property resulted in a timing difference of revenue recognition between prior accounting standards and IFRS 15. For certain of our agreements, the value associated with the licenses and certain other deliverables had been assessed as one unit of accounting and recognized over a period of time pursuant to revenue recognition guidance in effect at the time of such agreements. Under IFRS 15, the licenses of functional intellectual property were determined to be distinct from other deliverables and the customers obtained the right to use the functional intellectual property on the effective date of the agreements when control transferred. This timing difference of revenue recognition resulted in the full deferred revenue balance of DKK 150.6 million as of December 31, 2017 being reclassified to accumulated deficit in the first quarter of 2018.

IFRS 15 may have an impact on the timing of recognition of milestone payments which are not related to achievement of certain sales levels. Under prior accounting standards, we recognized such payments as revenue in the period that the payment-triggering event occurred or was achieved. IFRS 15 requires us to recognize such payments as revenue before the payment-triggering event is completely achieved, subject to management's assessment of whether it is highly probable that the triggering event will be achieved and that a significant reversal in the amount of cumulative revenue recognized will not occur.

IFRS 15 will not have an impact on revenue recognition for sales-based royalties and commercial sales-based milestone payments and they will continue to be recognized in the period to which the sales relate based on estimates provided by collaboration partners.

We have also adopted IFRS 9 effective January 1, 2018, which replaced the provisions of IAS 39 that relate to the classification, measurement and derecognition of financial assets and financial liabilities, hedge accounting, and impairment of financial assets. The adoption of IFRS 9 resulted in

changes in accounting policies, but did not result in material adjustments to amounts recognized in the consolidated financial statements. In accordance with the transitional provisions of IFRS 9, comparative figures have not been restated. We have also implemented IFRIC 22, amendments to IAS 40, IFRS 2, IFRS 4 and annual improvements to IFRSs 2014-2016 with effect from January 1, 2018, which did not impact the recognition and measurement of our assets and liabilities.

Please refer to Note 1.2 to our audited consolidated financial statements included elsewhere in this prospectus for further description of new standards adopted effective January 1, 2018 and the impact of their adoption on our consolidated financial statements.

Effective January 1, 2019, we adopted IFRS 16 using the modified retrospective transition method. Under this method, all leases are recognized in the balance sheet as a right-of-use, or ROU, asset with a corresponding lease liability, except for short term assets in which the lease term is 12 months or less, or low value assets. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. The ROU asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis over the lease term. In the income statement, the lease costs are replaced by depreciation of the ROU asset recognized over the lease term in operating expenses, and interest expenses related to the lease liability are classified in financial items. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

Genmab determines if an arrangement is a lease at inception. Genmab leases various properties and information technology, or IT, equipment. Rental contracts are typically made for fixed periods. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of fixed payments, less any lease incentives. As our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

ROU assets are measured at cost and include the amount of the initial measurement of lease liability, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs, and restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term of 12 months or less and low-value assets comprise IT equipment and small items of office furniture.

On adoption of IFRS 16, the group recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 3.7%.

The impact of the adoption of IFRS 16 on the financial statements as of January 1, 2019 is shown in the table and further described below:

<u>(in millions of DKK)</u>	<u>January 1,</u> <u>2019</u>
Operating lease commitments disclosed as at December 31, 2018	183.7
Discounted using the group's incremental borrowing rate of 3.7%	(42.4)
(Less): short-term leases recognized on a straight-line basis as expense	(2.9)
Add/(less): adjustments as a result of a different treatment of extension and termination options	66.4
Lease liability recognized at January 1, 2019	204.8

The ROU assets established on the balance sheet at January 1, 2019 were DKK 204.8 million. As a result of adopting IFRS 16 in the three months ended March 31, 2019, the net result decreased by DKK 1.5 million, cash flows from operating activities increased by DKK 8.7 million and cash flows from financing activities decreased by DKK 7.2 million.

For purposes of applying the modified retrospective approach in adoption of IFRS 16, we used the following practical expedients permitted by the standard:

- applied the exemption not to recognize ROU assets and liabilities for leases with less than 12 months of lease term from January 1, 2019; and
- excluded initial direct costs for the measurement of the ROU assets at the date of initial application.

There are no ROU assets that meet the definition of investment property.

Standards and Interpretations Not Yet in Effect

At the date of the approval of the unaudited consolidated interim financial statements for the three months ended March 31, 2019, there were no new and revised standards and interpretations issued and not yet effective.

Significant Accounting Estimates, Assumptions and Uncertainties

In the preparation of the consolidated financial statements, we make a number of accounting estimates which form the basis for the presentation, recognition and measurement of our assets and liabilities.

In the application of our accounting policies, we are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The used estimates are based on assumptions assessed to be reasonable by management. However, estimates are inherently uncertain and unpredictable. The assumptions can be incomplete or inaccurate and unexpected events or circumstances might occur. Furthermore, we are subject to risks and uncertainties that might result in deviations in actual results compared to estimates.

In connection with the preparation of the consolidated financial statements, we have made a number of estimates and assumptions concerning carrying amounts.

Revenue recognition is one of the most significant accounting estimates and assessments applied by us in our consolidated financial statements. Royalty income under license and collaboration agreements includes sales-based royalties and is recognized when the related sales occur. Milestone payments related to the achievement of certain sales levels are recognized when such sales levels are achieved. The estimated value of milestone payments not related to achievement of sales levels is included in the transaction price of each arrangement that includes such payments if (i) the achievement of the milestones is within our control or the control of our partner, (ii) the achievement of the milestones is considered highly probable at the inception of the arrangement, and (iii) it is highly probable that a significant revenue reversal would not occur. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achievement of such development milestones and any related constraints and, if necessary, adjust the estimate of the overall transaction price. Revenue from non-refundable upfront fees allocated to a license to our functional intellectual property is recognized as license fees revenue at the point in time the license is transferred to the licensee and the licensee is able to use and benefit from the license, if the license is determined to be distinct from the other performance obligations identified in the arrangement. If the license is bundled with other promises, we utilize judgment to assess the nature of the combined performance obligation to determine whether it is satisfied over time or at a point in time. If the performance obligation is satisfied over time, we utilize judgment to determine the appropriate method of measuring progress for purposes of recognizing revenue. Under all of our existing license and collaboration agreements, the license to functional intellectual property has been determined to be distinct from other performance obligations identified in the agreement.

Evaluating the criteria for revenue recognition requires management's judgment to assess and determine: (i) the nature of performance obligations and whether they are distinct or should be combined with other performance obligations to determine whether the performance obligations are satisfied over time or at a point in time, (ii) an assessment of whether the achievement of milestone payments is highly probable, and (iii) the stand-alone selling price of each performance obligation identified in the contract using key assumptions which may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

Realization of our deferred tax assets is dependent upon the generation of future taxable income, the amount and timing of which are uncertain. We recognize deferred tax assets only to the extent that it is probable that future taxable profit will be available against which the deferred tax assets can be utilized. Such assessment is required on a jurisdiction by jurisdiction basis. Changes in future taxable income impact the utilization of recognized as well as unrecognized deferred tax assets. The recognition of deferred tax assets requires judgment and estimation by us and involves estimates based on certain assumptions in relation to future taxable income.

Please refer to the notes to our audited consolidated financial statements as of, and for the years ended, December 31, 2018 and December 31, 2017 included elsewhere in this prospectus for a further description of other significant accounting estimates and assumptions used with respect to share-based compensation and research and development costs.

Implications of Being an Emerging Growth Company and a Foreign Private Issuer

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company," as defined in the JOBS Act. An emerging growth company may take

advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to include only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure; and
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act.

We may choose to take advantage of some but not all of these reduced burdens, and therefore the information that we provide holders of shares and ADSs may be different than the information you might receive from other public companies in which you hold equity. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards applicable to public companies. We currently prepare our consolidated financial statements in accordance with IFRS as issued by the IASB, so we are unable to make use of the extended transition period. However, in the event that we convert to accounting principles generally accepted in the United States (which we do not currently intend to do) while we remain an emerging growth company, we have irrevocably elected to opt out of such extended transition period.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We will cease to be an emerging growth company upon the earliest of the following:

- the last day of the first fiscal year in which our annual revenues were at least \$1.07 billion;
- the last day of the fiscal year following the fifth anniversary of this offering;
- the date on which we have issued more than \$1 billion of non-convertible debt securities over a three-year period; and
- the last day of the fiscal year during which we meet the following conditions: (i) the worldwide market value of our common equity securities held by non-affiliates as of our most recently completed second fiscal quarter is at least \$700 million, (ii) we have been subject to U.S. public company reporting requirements for at least 12 months and (iii) we have filed at least one annual report as a U.S. public company.

Upon the effectiveness of the registration statement of which this prospectus forms a part, we will report under the Exchange Act as a non-U.S. company with foreign private issuer status. Even after we no longer qualify as an emerging growth company, as long as we continue to qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events.

In addition, we will not be required to file annual reports and financial statements with the SEC as promptly as U.S. domestic companies whose securities are registered under the Exchange Act, and are

not required to comply with Regulation FD, which restricts the selective disclosure of material information.

Both foreign private issuers and emerging growth companies are also exempt from certain more stringent executive compensation disclosure rules for U.S. public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Even if we no longer qualify as an emerging growth company, so long as we remain a foreign private issuer, we will continue to be exempt from such compensation disclosures.

Internal Control Over Financial Reporting

As we will become a public company listed on the Nasdaq Global Select Market in connection with this offering, the Sarbanes-Oxley Act will require, among other things, that we assess the effectiveness of our internal control over financial reporting at the end of each fiscal year. We anticipate being required to issue management's assessment of internal control over financial reporting pursuant to Section 404(a) of the Sarbanes-Oxley Act for the first time in connection with issuing our consolidated financial statements as of and for the year ending December 31, 2020.

In connection with our financial statement preparation process for the year ended December 31, 2018, we have not identified material weaknesses in the design and operating effectiveness of our internal controls over financial reporting.

We may, however, discover future deficiencies in our internal controls over financial reporting, including those identified through testing conducted by us pursuant to Section 404(a) of the Sarbanes-Oxley Act or subsequent testing by our independent registered public accounting firm. Such deficiencies may be deemed to be significant deficiencies or material weaknesses and may require changes to our consolidated financial statements or identify other areas for further attention or improvement.

BUSINESS

Our Company

We are an international biotechnology company specializing in antibody therapeutics for the treatment of cancer and other diseases. Our core purpose is to improve the lives of patients by creating and developing innovative antibody products. Our vision is to transform cancer treatment by launching our own proprietary product by 2025 and advancing our pipeline of differentiated and well-tolerated antibodies. We are building and expanding our late-stage development and commercial capabilities to allow us to bring our proprietary products to market in the future. Today, we have a well-diversified portfolio of products, product candidates and technologies. Our portfolio includes two marketed partnered products, daratumumab, marketed as DARZALEX for the treatment of certain indications of multiple myeloma, or MM, and ofatumumab, marketed as Arzerra for the treatment of certain indications of chronic lymphocytic leukemia, or CLL, in addition to a broad pipeline of differentiated product candidates. Our pipeline includes five proprietary product candidates in clinical development and approximately 20 proprietary and partnered pre-clinical programs, including two proprietary product candidates for which we have submitted or intend to submit an IND to the FDA and/or a CTA to the EMA in 2019. In addition to our proprietary clinical product candidates and our partners' ongoing label expansion studies for daratumumab and ofatumumab, our partners have eight additional product candidates in clinical development through collaboration agreements with us. Our portfolio also includes four proprietary antibody technologies that play a key role in building our product pipeline, enhancing our partnerships and generating revenue. We selectively enter into strategic alliances with other biotechnology and pharmaceutical companies that build our network in the biotechnology space and give us access to complementary novel technologies or products that move us closer to achieving our vision and fulfilling our core purpose.

Our Portfolio

The following chart summarizes the disease indications and most advanced development status of our marketed products, each of the proprietary product candidates in our clinical pipeline and the most advanced product candidates in our pre-clinical pipeline.

Product	Target	Rights	Disease Indications	Most Advanced Development Phase						Anticipated 2019 Milestones
				Pre-Clinical	I	I/II	II	III	Launched	
Marketed Products and Proposed Label Expansion										
Daratumumab (DARZALEX)	CD38	Janssen (Tiered royalties to Genmab on net global sales) ⁽¹⁾	Multiple myeloma: Frontline and relapsed/refractory ⁽²⁾							
			Multiple myeloma: Frontline ⁽³⁾							FDA and EMA feedback on MAIA and CASSIOPEIA submissions; GRIFFIN efficacy data
			Multiple myeloma: Subcutaneous formulation ⁽⁴⁾							Regulatory submissions based on COLUMBA
			Multiple myeloma: Other							Trials ongoing
			Amyloidosis							Trial ongoing
			Other non-MM blood cancers							Trials ongoing
Ofatumumab (Arzerra)	CD20	Novartis (Royalties to Genmab on net global sales) ⁽⁵⁾	Chronic lymphocytic leukemia ⁽⁶⁾							
			Relapsing multiple sclerosis							ASCLEPIOS I and II study completion

Product	Target	Rights	Disease Indications	Most Advanced Development Phase						Anticipated 2019 Milestones
				Pre-Clinical	I	I/II	II	III	Launched	
Proprietary Product Candidates										
Tisotumab vedotin	TF	50:50 Genmab / Seattle Genetics	Cervical cancer							Trials ongoing
			Ovarian cancer							Trial ongoing
			Solid tumors							Trials ongoing
Enapotamab vedotin (HuMax-AXL-ADC)	AXL	Genmab	Solid tumors							Efficacy analysis from expansion cohort phase
HexaBody-DR5/DR5 (GEN1029)	DR5	Genmab	Solid tumors							Initial data
DuoBody-CD3xCD20 (GEN3013)	CD3, CD20	Genmab	Hematological malignancies							Initial data for dose escalation cohorts
DuoBody-PD-L1x4-1BB (GEN1046)	PD-L1, 4-1BB	50:50 Genmab / BioNTech	Solid tumors							Recruiting ongoing
DuoBody-CD40x4-1BB (GEN1042)	CD40, 4-1BB	50:50 Genmab / BioNTech	Solid tumors							Initiate Phase I/II trial
DuoHexaBody-CD37	CD37	Genmab	B-cell malignancies							Submit IND and/or CTA

- (1) Pursuant to our development, manufacturing and commercialization agreement with Janssen, we receive tiered royalty payments of 12% to 20% based on Janssen's annual net product sales of daratumumab. See "—Our Products and Product Candidates—Daratumumab (DARZALEX)—Collaboration with Janssen" for more information about our agreement with Janssen.
- (2) DARZALEX has received marketing approval in combination with certain treatment regimens for frontline and relapsed/refractory, or R/R, MM, and as a monotherapy for heavily pre-treated MM, in a number of countries, including the United States and the European Union. See "—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma—Existing Marketing Approvals and Pending Regulatory Applications" for more information about existing marketing approvals for DARZALEX.
- (3) In addition to existing approvals for frontline MM in certain jurisdictions, Janssen is conducting studies of daratumumab for additional frontline MM indications, which differ from existing frontline approvals based on the combination treatment regimen, transplant-eligibility of patients and/or jurisdiction(s) of the study. See "—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma—Key Ongoing Trials for Additional MM Indications" for more information about these ongoing trials.
- (4) In addition to certain clinical studies specifically assessing the safety and efficacy of a subQ formulation of daratumumab for the treatment of certain MM indications, a subQ formulation of daratumumab is being used in a number of other studies of daratumumab for the treatment of frontline MM, R/R MM and other disease indications.
- (5) Pursuant to our agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments. See "—Our Products and Product Candidates—Ofatumumab—Collaboration with Novartis" for more information about our agreement with Novartis.
- (6) Ofatumumab, marketed as Arzerra, has been approved for certain CLL indications in the United States, the European Union and a number of other countries. Due to low and decreasing global demand for Arzerra primarily related to increased competition in the CLL treatment space, on January 22, 2018, Novartis announced that it intends to transition Arzerra in non-U.S. markets from commercial availability to limited availability through managed access programs or alternative solutions for approved CLL indications where applicable and allowed by local regulators. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan.

Marketed Products and Proposed Label Expansion

Our lead product, daratumumab, marketed as DARZALEX for the treatment of certain multiple myeloma indications, is a human IgG1k monoclonal antibody, or mAb, that binds with high affinity to the CD38 molecule, which is highly expressed on the surface of MM cells. When first approved by the FDA in 2015, it was the first human CD38-targeting mAb to reach the market and the first mAb to receive FDA approval to treat multiple myeloma. DARZALEX is commercialized by Janssen, under an

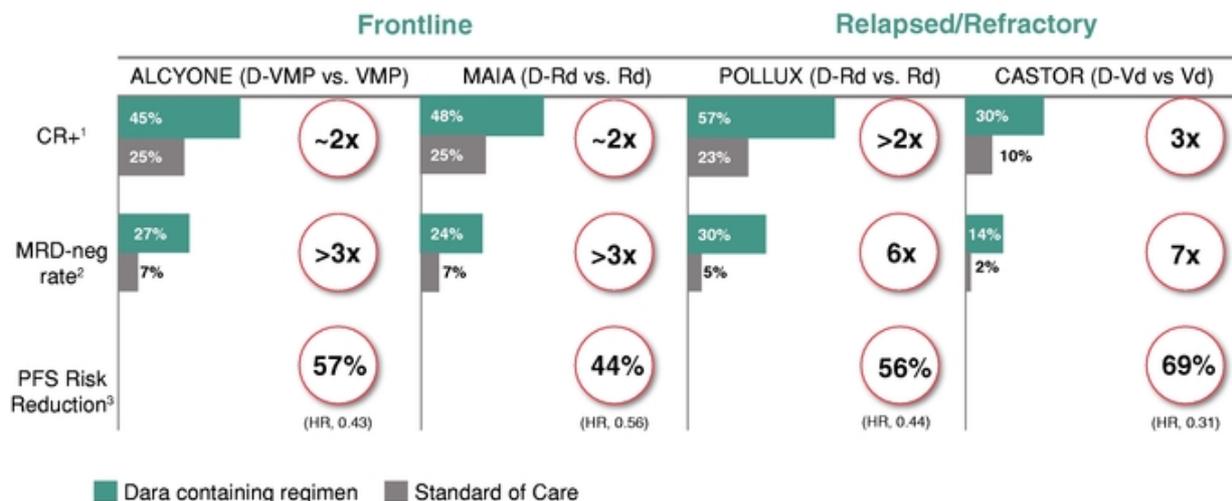
exclusive development, manufacturing and commercialization agreement we entered into in 2012. Pursuant to this agreement, we receive tiered royalty payments of 12% to 20% based on Janssen's annual net product sales and are eligible for certain additional payments in connection with development, regulatory and sales milestones. Janssen is fully responsible for developing and commercializing daratumumab and all costs associated therewith. Janssen has obtained regulatory approvals for DARZALEX for certain multiple myeloma indications in a number of countries, including the United States, the European Union and Japan. In addition, applications for label expansion in the United States, the European Union and Japan and for initial approval in China are currently pending with applicable regulators. Following the U.S. commercial launch of DARZALEX in 2015, DARZALEX achieved blockbuster sales status by reaching \$1.2 billion of annual net sales in 2017, with Janssen's net sales of DARZALEX increasing to \$2.0 billion in 2018. We recorded \$90.0 million in milestone payments for daratumumab and DKK 1,708.1 million (\$262.0 million) in royalties related to DARZALEX sales in 2018.

The chart below illustrates daratumumab's significant impact and versatility as a combination treatment for certain indications of frontline multiple myeloma and relapsed/refractory multiple myeloma in four pivotal Phase III studies. Each study was a head-to-head study comparing daratumumab, or D, in combination with a standard MM treatment regimen versus the standard treatment alone.

- For frontline treatment of transplant-ineligible MM patients, the ALCYONE and MAIA studies compared daratumumab in combination with (i) bortezomib, melphalan and prednisone, or VMP, versus VMP alone in the ALCYONE study and (ii) lenalidomide and dexamethasone, or Rd, versus Rd alone in the MAIA study. The ALCYONE study supported the U.S. and EU regulatory approvals of DARZALEX in combination with VMP for frontline treatment of transplant-ineligible MM patients. In March 2019, Janssen completed a supplemental Biologics License Application, or sBLA, submission to the FDA and submitted a MAA to the EMA for DARZALEX in combination with Rd for frontline treatment of transplant-ineligible MM patients based on the MAIA study. The FDA plans to review the sBLA under its Real-Time Oncology Review, or RTOR, Pilot Program.
- In the relapsed/refractory setting, the POLLUX and CASTOR studies compared daratumumab in combination with (i) Rd, versus Rd alone in the POLLUX study and (ii) bortezomib and dexamethasone, or Vd, versus Vd alone in the CASTOR study. The POLLUX and CASTOR studies supported the U.S., EU and Japanese regulatory approvals of DARZALEX in combination with Rd and Vd, respectively, for the treatment of relapsed/refractory MM.

Data for each of these studies was presented at the American Society for Hematology's Annual Meeting, or ASH, in December 2018. Safety data and other details regarding each of these studies is

outlined in "—Our Products and Product Candidates—Daratumumab (DARZALEX)—Daratumumab for the Treatment of Multiple Myeloma" below.



- (1) Includes CR + sCR in daratumumab arm versus control arm. CR = complete response, which refers to patients who achieve negative immunofixation on the serum and urine and disappearance of any soft tissue plasmacytomas and achieve less than or equal to 5% plasma cells in the bone marrow; sCR = stringent complete response, which is tested using more sensitive methods to detect monoclonal plasma cells, and is defined as patients who achieve CR and exhibit a normal free light chain ratio in the serum and absence of clonal cells in the bone marrow determined by either immunofluorescence or immunohistochemistry; in each case as defined by the International Myeloma Working Group, or IMWG.
- (2) MRD = minimal residual disease, which refers to the persistence of small numbers of myeloma cells that remain after therapy and contribute to relapse and disease progression; MRD negativity is defined as the absence of aberrant clonal plasma cells on bone marrow aspirate, ruled out by an assay with a minimum sensitivity of one in 10⁵ nucleated cells or higher; MRD-neg rate refers to the proportion of patients with negative MRD test results, tested at 10⁻⁵ sensitivity, or one in 10⁵ cells, from the time of suspected CR or sCR, in the case of the MAIA, POLLUX and CASTOR studies and confirmed CR/sCR in the case of the ALCYONE study, and tested periodically for a certain period after dosing. See study descriptions below for more details about MRD assessments in these studies.
- (3) Risk reduction in disease progression or death versus control arm. PFS = progression free survival

Beyond the current labeled indications, Janssen is conducting a comprehensive clinical development program for daratumumab. This program includes multiple Phase III studies for the treatment of smoldering MM, or SMM, frontline MM, and relapsed/refractory, or R/R, MM, as well as key clinical studies for a subcutaneous, or subQ, formulation. In October 2018, we reported that Janssen's pivotal Phase III MAIA study of daratumumab in combination with Rd for frontline treatment of transplant-ineligible MM patients reached its primary endpoint of improving progression free survival, or PFS, at a pre-specified interim analysis, with a 44% reduction in the risk of progression or death in patients treated with daratumumab in combination with Rd compared to treatment with Rd alone and with a safety profile consistent with known safety profiles for daratumumab and Rd. In October 2018, we also reported topline results that the first part of Janssen's pivotal Phase III CASSIOPEIA study of daratumumab in combination with bortezomib, thalidomide and dexamethasone, or VTd, for frontline treatment of transplant-eligible MM patients met the primary endpoint of number of patients that achieved a stringent complete response, or sCR. Topline results for the first part of the CASSIOPEIA study showed that 28.9% of patients treated with daratumumab in combination with VTd achieved sCR, compared to 20.3% of patients who received VTd alone, with an odds ratio of 1.60 and with a safety profile consistent with known safety profiles for daratumumab and VTd. In March 2019, Janssen submitted an sBLA to the FDA and an MAA to the EMA based on the CASSIOPEIA study. In addition, in February 2019, we reported that Janssen's Phase III COLUMBA study comparing the subQ formulation of daratumumab to the IV formulation in patients with R/R MM met both co-primary endpoints of ORR and maximum trough concentration, or Ctough, of daratumumab on

day 1 of the third treatment cycle. Topline results showed ORR of 41.1% and Ctrough of 499 mg/mL for patients treated with subQ daratumumab compared with 37.1% and 463 mg/mL, respectively, in patients treated with IV daratumumab, in each case with a confidence interval of 95% and with no new safety signals compared with known daratumumab safety profiles. We expect Janssen to submit regulatory applications based on the COLUMBA study in 2019 and to release efficacy data for the Phase II GRIFFIN study for daratumumab in combination with bortezomib, lenalidomide and dexamethasone, or VRd, for frontline treatment of transplant-eligible MM patients. In addition to the ongoing studies of daratumumab for the treatment of MM, Janssen is conducting a number of studies to assess the use of daratumumab in the treatment of other malignant and pre-malignant diseases in which CD38 is expressed, including amyloidosis, acute lymphocytic leukemia and NKT-cell lymphoma.

Ofatumumab is a human IgG1k mAb that targets an epitope on the CD20 molecule, which is found on the surface of B-cells, the type of cell which is believed to trigger the inflammatory process that leads to multiple sclerosis, or MS. Novartis is currently investigating a subQ formulation of ofatumumab for the treatment of relapsing MS, or RMS, in the Phase III ASCLEPIOS I and II clinical studies with over 1,800 patients in total, and has reported that it expects to complete these studies during 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to current B-cell therapies. In particular, if its efficacy and safety can be demonstrated in clinical trials, the low-dose subQ administration of ofatumumab currently in clinical testing could allow for more convenient and less disruptive dosing options for MS patients compared to IV-administered therapies. In addition, the Phase II MIRROR study assessing dose-response effects of ofatumumab on efficacy and safety outcomes in patients with RMS, published in May 2018, showed that treatment with ofatumumab resulted in rapid dose-dependent B-cell depletion, which correlated with efficacy outcomes observed in the study, with no new or unexpected safety findings. Ofatumumab has already been approved for the treatment of certain CLL indications in the United States and certain other countries and is currently commercialized by Novartis for such CLL indications under the name Arzerra. Due to low and decreasing global demand for Arzerra primarily related to increased competition from new entrants to the CLL treatment space over the past few years, Novartis announced in January 2018 that it intends to transition Arzerra from commercial availability to limited availability in non-U.S. markets through managed access programs or alternative solutions for approved CLL indications where applicable and allowed by local regulations. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan. Pursuant to our agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab.

Our Proprietary Product Candidates

We also have a strong pipeline of novel antibody-based product candidates for the treatment of solid tumors and hematological cancers, which are designed to address unmet medical needs and improve treatment outcomes for cancer patients. Our goal in building our pipeline is to retain at least 50% of product rights in selected programs for indications and in geographic areas where we believe we will be able to maximize their value; we consider such products to be "our own" proprietary products. We currently have five proprietary product candidates in clinical development:

- *Tisotumab vedotin*: an antibody-drug conjugate, or ADC, created to target tissue factor, or TF, a protein involved in tumor signaling and angiogenesis. Tisotumab vedotin is in clinical development for the treatment of cervical cancer and certain other solid tumors. In March 2019, we presented data from a 55-patient expansion cohort of the innovaTV 201 Phase I/II trial at the SGO Annual Meeting, which indicated that treatment with tisotumab vedotin resulted in encouraging activity in patients with relapsed, recurrent and/or metastatic cervical cancer. Data

assessed by an independent review committee showed a confirmed ORR of 22%, with 35% of patients having a confirmed or unconfirmed complete or PR. Median DoR, was 6.0 months and median PFS was 4.1 months. We are also evaluating tisotumab vedotin in four additional clinical studies, including the potentially registrational innovaTV 204 Phase II trial for the treatment of patients with recurrent or metastatic cervical cancer, Phase II trials for the treatment of patients with ovarian cancer and solid tumors and a Phase I/II combination trial for the treatment of patients with cervical cancer. Patient enrollment for the innovaTV 204 study was completed in March 2019. We are developing tisotumab vedotin in collaboration with Seattle Genetics under an agreement in which the companies share all future costs and profits for the product on a 50:50 basis.

- *Enapotamab vedotin (HuMax-AXL-ADC)*: an ADC created to target AXL, a unique tyrosine kinase receptor that is implicated in tumor cell proliferation, migration and invasion. Over-expression has been described in solid cancers, including lung, esophageal, ovarian, breast, cervical, thyroid, endometrial and pancreatic cancers. AXL is emerging as a marker in tumors with resistance to therapy (e.g., tyrosine kinase inhibitors, chemotherapy). In addition, over-expression of AXL is observed in advanced tumors with epithelial-mesenchymal transition, or EMT-like features. In May 2018, we launched a Phase I/II clinical trial of enapotamab vedotin for the treatment of multiple types of solid tumors, with several expansion cohorts currently ongoing. We expect to report initial efficacy analysis from the expansion cohort phase of this study in 2019. We have full development and commercialization rights for enapotamab vedotin.
- *HexaBody-DR5/DR5*: an antibody therapeutic candidate created with our proprietary HexaBody technology that is composed of two non-competing HexaBody antibody molecules that are designed to target two distinct epitopes on death receptor 5, or DR5, a cell surface receptor that mediates a process called programmed cell death. In May 2018, we dosed the first patient in our Phase I/II clinical trial of HexaBody-DR5/DR5 for the treatment of solid tumors. We expect to report initial clinical data from this study in 2019. We have full development and commercialization rights for HexaBody-DR5/DR5.
- *DuoBody-CD3xCD20*: a bispecific antibody created using our proprietary DuoBody technology that is designed to target CD3, which is expressed on all T-cell subtypes and CD20, a well-validated therapeutic target expressed in a majority of B-cell malignancies. In July 2018, we dosed the first patient in our Phase I/II clinical trial of a subQ formulation of DuoBody-CD3xCD20 for the treatment of B-cell malignancies. We expect to report initial clinical data from this study in 2019. We have full development and commercialization rights for DuoBody-CD3xCD20.
- *DuoBody-PD-L1x4-1BB*: a bispecific antibody created using our proprietary DuoBody technology that is designed to target PD-L1 and 4-1BB to block the inhibitory PD-1/PD-L1 axis and simultaneously activate essential co-stimulatory activity via 4-1BB using an inert DuoBody antibody format. PD-L1 is a validated target that is expressed on tumor cells. 4-1BB is a trans-membrane receptor belonging to the TNF super-family, and is expressed predominantly on activated T-cells. We submitted a CTA to regulatory authorities in Spain in January 2019 to test DuoBody-PD-L1x4-1BB in a Phase I/II clinical study and are currently recruiting patients for this study. We are developing DuoBody-PD-L1x4-1BB in collaboration with BioNTech under an agreement in which the companies share all future costs and profits for the product on a 50:50 basis.

Our Partnered Product Candidates

In addition to our proprietary product candidates and our two partnered marketed products in ongoing label expansion studies, our partners have eight additional product candidates in clinical

development through collaboration agreements with us. These include several antibodies being developed by Janssen using our proprietary DuoBody technology, which are being tested to treat NSCLC, R/R acute myeloid leukemia and certain MM indications. Additional products are being developed in partnership with Roche through a sublicense with Horizon Pharma, BMS, ADC Therapeutics, Lundbeck and Amgen. Other than daratumumab and ofatumumab, our most advanced partnered clinical product candidate is teprotumumab, which is currently in Phase III clinical development by Horizon Pharma for the treatment of Graves' orbitopathy. In February 2019, Horizon Pharma reported positive topline results in this study and announced that it expects to submit a BLA for teprotumumab to the FDA in 2019.

Our Proprietary Technology Platforms

In addition to our proprietary and partnered products and product candidates, our portfolio includes four proprietary antibody technology platforms, which include (i) our DuoBody platform, which can be used for the creation and development of bispecific antibodies; (ii) our HexaBody platform, which can be used to increase the potential potency of antibodies through hexamerization; (iii) our DuoHexaBody platform, which enhances the potential potency of bispecific antibodies through hexamerization; and (iv) our HexElect platform, which combines two HexaBody molecules to maximize potential potency while minimizing potential toxicity by more selective binding to desired target cells. Antibody products created with these technologies may be used in a wide variety of indications including cancer and autoimmune, central nervous system and infectious diseases. We believe these technologies may be the next step towards the development of effective treatments in the already successful field of antibody therapeutics. We currently have four commercial partners for the DuoBody technology, Janssen, BioNTech, Novo Nordisk and Gilead Sciences and we actively seek partners interested in developing potential antibody therapeutics using our technologies.

Our Core Purpose and Vision

Our core purpose is to improve the lives of patients by creating and developing innovative antibody products. Our vision is to transform cancer treatment by launching our own proprietary product by 2025 and advancing our pipeline of differentiated and well-tolerated antibodies.

Our Strengths

We believe that our strengths that will enable us to achieve our vision and fulfill our core purpose include:

- ***DARZALEX, a blockbuster antibody in multiple myeloma, with opportunity for significant upside through potential label expansion.*** DARZALEX is a proven commercial success in its approved MM indications, achieving blockbuster status by reaching \$1.2 billion of net sales in 2017, with net sales by Janssen increasing to \$2.0 billion in 2018, resulting in royalties to us of DKK 1,708.1 million (\$262.0 million) in 2018. In addition to daratumumab's approved indications, Janssen is currently investigating daratumumab for additional indications in MM and beyond, including key studies in frontline MM and a subQ formulation of daratumumab. If successful, these proposed label expansions could result in milestone payments and additional royalties to us.
- ***Royalty potential from ongoing pivotal Phase III trials of ofatumumab in MS.*** Ofatumumab, previously approved for certain CLL indications, is in pivotal Phase III testing by Novartis for the treatment of RMS, with the Phase III ASCLEPIOS I and II studies expected to be completed in 2019. Subject to successful completion of these studies and Novartis' ability to obtain approval for and successfully commercialize ofatumumab for the treatment of RMS, we may receive a meaningful royalty stream. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to other B-cell

therapies, including more convenient and less disruptive dosing options through a low-dose subQ formulation.

- **Broad and differentiated proprietary pipeline.** We believe that our clinical and pre-clinical pipeline of proprietary product candidates positions us well to achieve our vision. Our five product candidates at various stages of clinical development offer multiple opportunities to transform cancer treatment by launching our own proprietary product by 2025. In addition, we have multiple differentiated antibody product candidates in pre-clinical development that we believe may have the potential to transform cancer treatment, including two product candidates for which we have submitted or expect to submit INDs and/or CTAs in 2019.
- **Strong product generation capabilities.** Our research and development team has a proven track record of creating and developing product candidates and progressing them through clinical development. We created daratumumab and ofatumumab and conducted early clinical studies before partnering with Janssen and GSK, respectively, to continue late-stage development and commercialization. In addition, since 1999, we or our partners have submitted 33 INDs or CTAs for product candidates created by us or using our proprietary technologies, 19 of which are currently in development by us or our partners.
- **Novel proprietary, next-generation antibody technologies.** Our proprietary antibody technology platforms provide the foundation for our research, a resource for the development of new product candidates, an income stream from technology licensing and an opportunity to contribute to the development of new antibody therapies through our licensing partners.
- **Strategic alliances.** We have an active portfolio of strategic collaborations with a large number of pharmaceutical and biotechnology companies, including clinical and pre-clinical product candidates currently being developed by our partners, as well as a number of technology collaborations. In the past, these collaborations have provided us with a capital-efficient model to finance development costs and advance our product candidates through clinical development while also funding the further growth of our pipeline through milestone payments and royalties. Today, we focus on strategic alliances that build our network in the biotechnology space and give us access to complementary novel technologies or products that move us closer to achieving our vision and fulfilling our core purpose.
- **World-class team.** We have a world-class team of highly skilled and educated scientific, development and other industry professionals with extensive experience in the pharmaceutical and biotechnology fields. Our employees are our most important asset and we strive to attract and retain the most qualified people to fulfill our core purpose. We are currently recruiting a team of seasoned professionals to build and expand our commercialization capabilities.

Our Business Strategy

Key elements of our strategy to achieve our vision and fulfill our core purpose include:

- **Collaborate with Janssen to advance daratumumab.** Janssen is seeking to extend the commercial reach of daratumumab through label expansion. In March 2019, Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA for daratumumab as a combination treatment for frontline MM based on positive topline results from the pivotal Phase III MAIA study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In March 2019, Janssen also submitted an sBLA to the FDA and an MAA to the EMA for daratumumab as a combination treatment for frontline MM based on positive topline results from the pivotal Phase III CASSIOPEIA study. In addition, we expect Janssen to submit regulatory applications for a subQ formulation of daratumumab based on the Phase III COLUMBA study in 2019 and to release efficacy data for the Phase II GRIFFIN study of daratumumab as a combination treatment for frontline MM. We will continue to contribute to the development strategy for daratumumab through a joint development and steering committee with Janssen.

- **Collaborate with Novartis to advance ofatumumab.** Novartis is investigating the use of ofatumumab for the treatment of RMS in the Phase III ASCLEPIOS I and II studies, which are expected to be completed in 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter.
- **Actively advance and expand our proprietary product pipeline.** We are actively advancing our promising proprietary product candidates through development and seek to expand our proprietary product pipeline by developing new products in-house and by partnering selectively. We have identified several key clinical milestones for our proprietary product candidates in 2019 that, if met, will continue to advance our pipeline and validate our technology platforms, including: (i) completion of enrollment in a potentially registrational Phase II study of tisotumab vedotin in recurrent and metastatic cervical cancer, which was completed in March 2019; (ii) reporting initial results from our ongoing Phase I/II studies for enapotamab vedotin for the treatment of solid tumors, HexaBody-DR5/DR5 for the treatment of solid tumors and DuoBody-CD3xCD20 for the treatment of B-cell malignancies; and (iii) submission of INDs and/or CTAs for our proprietary DuoBody-PD-L1x4-1BB, DuoBody-CD40x4-1BB and DuoHexaBody-CD37 pre-clinical product candidates, with CTAs submitted for DuoBody-PD-L1x4-1BB and DuoBody-CD40x4-1BB to date.
- **Strengthen our product portfolio with strategic collaborations.** We enter into strategic product and technology alliances to build our network in the biotechnology space and to strengthen our portfolio with complementary novel technologies or products. Key partnerships include our DuoBody collaborations with Janssen, BioNTech, Novo Nordisk and Gilead Sciences, our product collaboration with Seattle Genetics for tisotumab vedotin and our strategic collaboration with Immatics to discover and develop potential next-generation bispecific cancer immunotherapies. Our partners are also developing a number of product candidates in our pipeline, including eight product candidates currently in clinical development, in addition to ongoing label expansion studies for daratumumab and ofatumumab by Janssen and Novartis, respectively.
- **Leverage our proprietary technology platforms.** Our leading proprietary antibody technology platforms play a key role in building our product pipeline, enhancing our partnerships and generating revenue. Multiple new product candidates are currently being developed by us and our partners using our technology platforms, including two proprietary product candidates created with our DuoBody and DuoHexaBody technologies for which we have submitted or plan to submit INDs and/or CTAs in 2019. We actively seek partners interested in developing potential antibody therapeutics using our technologies.
- **Build our translational research capabilities.** Leveraging our expertise in antibody technologies and product development, we are expanding our translational research capabilities with the goal of building a library of antibody therapeutics that can be tailored to patients. Our translational research capabilities will be designed to profile and catalog patient tumor and immune genotype/phenotype and match our antibody therapies with appropriate patient populations. In addition, we intend to expand our data science capabilities with the aim to probe our clinical and translational data.
- **Build our commercial capabilities to market select products.** We are currently in the early stages of building and expanding our commercial capabilities to allow us to market our own products in the future for the indications and in the geographies we determine would be most effective to create value for our shareholders. Our goal is to become a commercial-stage company with oncology products in the United States, Europe and Japan. Our initial focus will be on achieving commercial launch readiness in Western Europe and Japan to support the potential launch of

tisotumab vedotin for the treatment of cervical cancer, subject to obtaining regulatory approval and, where applicable, reimbursement approval.

Antibodies for the Treatment of Cancer and Other Diseases

Antibodies, also known as immunoglobulins, or IgGs, are Y-shaped proteins which play a pivotal role in our immunity against pathogens. As we develop immunity, our bodies, mainly through plasma cells, generate antibodies that specifically bind to particular structures called antigens present on these pathogens. The binding process involves a lock-and-key mechanism in which the paratope region of the antibody, analogous to a lock, binds to one particular epitope of a specific antigen, analogous to a key. This allows the antibody to bind to a specific antigen with precision, thereby attacking only its intended target. Once bound, the antibodies attract other parts of the immune system to eliminate the pathogen.

Certain antigens can also be identified on diseased human cells, allowing antibodies to be used to treat diseases, such as cancer or inflammation. Antibodies may function through multiple mechanisms simultaneously, including binding to cancer cells and flagging for B-cells and T-cells to more easily detect the target, or delivering radiation treatment by acting as a vehicle to transfer small radioactive particles directly to the cancer cells and to minimize the effect of radiation on normal cells. Other mechanisms include triggering cell-membrane destruction, preventing cell growth or blood vessel growth, blocking immune system inhibitors, directly attacking cancer cells and delivering chemotherapy or binding cancer cells and immune cells simultaneously. Advances in understanding the immune system's role in treating cancer have established immunotherapy, or the practice of harnessing immune system functions to combat malignant cell growth, an important treatment approach. As a drug class, antibodies have transformed oncology treatment and include some of the best-selling therapies on the biopharmaceutical market. Although initial, or frontline, treatment for newly diagnosed cancer patients traditionally was limited to one or a combination of chemotherapy, radiation therapy or surgery, with more targeted therapies approved for second- or third-line treatment, antibody therapies are increasingly being approved for frontline treatment of certain cancers, often in combination with other therapies.

Different types of antibodies include:

- *Monoclonal Antibodies, or mAbs*—laboratory-made antibodies typically derived from immune cells of mammals that have been immunized with a desired antigen and have identical specificity with respect to the target molecule and are produced from a single antibody-producing cell; mAbs may be: (a) *Human mAbs, or HuMabs*—mAbs that are either naturally obtained, recombinantly expressed, or collected from transgenic mice, in which the immune repertoire has been replaced by human genes; or (b) *Humanized/Chimeric mAbs*—antibodies with both mouse and human antibody proteins that are humanized (i.e., engineered to replace mouse components with more human components) to reduce the immune system response against antibodies identified as foreign (i.e., from a different species) in nature;
- *Bispecific Antibodies*—comprised of two different mAb constructs, which allows the antibody to bind to two specific therapeutic targets at the same time (or two different epitopes on the same target);
- *Enhanced Antibodies*—engineered therapeutic antibodies with enhanced immune effector functions; and
- *Antibody-Drug Conjugates, or ADCs*—mAbs that are joined to a chemotherapy drug, a radioactive particle or cancer cell killing agent, optionally via a linker, in which the mAb is used as a targeting device to deliver these substances directly to the cancer cell.

Our Products and Product Candidates

Our proprietary and partnered product pipeline includes two marketed products, daratumumab, marketed as DARZALEX for the treatment of certain MM indications, and ofatumumab, marketed as Arzerra for the treatment of certain CLL indications, five proprietary product candidates in clinical development (tisotumab vedotin, enapotamab vedotin, HexaBody-DR5/DR5, DuoBody-CD3xCD20 and DuoBody-PD-L1x4-1BB) and approximately 20 proprietary and partnered pre-clinical programs, including two proprietary product candidates for which we have submitted or intend to submit an IND and/or a CTA in 2019. In addition to our proprietary clinical product candidates and our partners' ongoing label expansion studies for daratumumab and ofatumumab, our partners have eight additional product candidates in clinical development through collaboration agreements with us. An overview of the development status of each of our products is provided in the following sections.

Daratumumab (DARZALEX)

Daratumumab, marketed as DARZALEX for the treatment of certain MM indications, is the first human CD38 mAb to reach the market and the first mAb to receive FDA approval for the treatment of MM. In 2005, we selected daratumumab as a new product candidate based on pre-clinical studies demonstrating its ability to bind to and to kill MM tumor cells. Daratumumab is a human IgG1k mAb that binds with high affinity to the CD38 molecule. It triggers a person's own immune system to attack cancer cells, resulting in rapid tumor cell death through multiple immune-mediated mechanisms of action and through immunomodulatory effects, in addition to direct tumor cell death via apoptosis, or programmed cell death. From 2005 to 2012, we developed daratumumab in-house, commencing our first Phase I/II study for daratumumab in relapsed/refractory, or R/R, MM in December 2007.

In August 2012, we entered into a worldwide license and development agreement for daratumumab with Janssen, granting Janssen exclusive rights to develop, manufacture and commercialize daratumumab. Although Janssen is fully responsible for developing and commercializing daratumumab under this agreement, and all costs associated therewith, we participate in the development strategy for daratumumab through regular meetings of the joint development and steering committee. Pursuant to this agreement, we receive tiered royalty payments of 12% to 20% based on Janssen's annual net product sales and are eligible for certain additional payments in connection with development, regulatory and sales milestones. Janssen has obtained regulatory approvals for DARZALEX for certain MM indications in a number of countries, including the United States, the European Union and Japan. In addition, applications for label expansion in the United States, the European Union and Japan and for initial approval in China are currently pending with applicable regulators. Following the commercial launch of DARZALEX in the United States in 2015, DARZALEX achieved blockbuster status by reaching \$1.2 billion of annual net sales in 2017, with Janssen's net sales of DARZALEX increasing to \$2.0 billion in 2018 and \$629 million in the three months ended March 31, 2019. We recorded \$90.0 million in milestone payments for daratumumab and DKK 1,708.1 million (\$262.0 million) in royalty payments related to DARZALEX sales in 2018 and DKK 502.2 million (\$75.4 million) in royalties in the three months ended March 31, 2019. No milestone payments were recorded in the three months ended March 31, 2019. According to Janssen, more than 60,000 MM patients had been treated with DARZALEX by the end of 2018.

Beyond the current labeled indications, Janssen is conducting a comprehensive clinical development program for daratumumab. This program includes multiple Phase III studies in SMM, frontline MM, and R/R MM, as well as key clinical studies for a subQ formulation. In October 2018, we reported that the pivotal Phase III MAIA study of daratumumab in combination with lenalidomide and dexamethasone, or Rd, for frontline treatment of transplant-ineligible MM patients had met its primary endpoint at a pre-specified interim analysis. In March 2019, Janssen completed an sBLA submission to the FDA and submitted a MAA to the EMA based on the MAIA study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In October 2018, we also reported topline

results that the first part of Janssen's pivotal Phase III CASSIOPEIA study of daratumumab in combination with bortezomib, thalidomide and dexamethasone, or VTD, for frontline treatment of transplant-eligible MM patients met its primary endpoint. In March 2019, Janssen submitted an sBLA to the FDA and an MAA to the EMA based on the CASSIOPEIA study. In addition, in February 2019, we reported topline results that Janssen's Phase III COLUMBA study comparing the subQ formulation of daratumumab with IV administration met its two primary endpoints. We expect Janssen to submit regulatory applications based on the COLUMBA study in 2019 and to release efficacy data for the Phase II GRIFFIN study for daratumumab in combination with bortezomib, lenalidomide and dexamethasone, or VRd, for frontline treatment of transplant-eligible MM patients.

In addition to the ongoing studies of daratumumab for the treatment of MM, Janssen is conducting a number of studies to assess the use of daratumumab for the treatment of other malignant and pre-malignant diseases in which CD38 is expressed, including amyloidosis, acute lymphocytic leukemia and NKT-cell lymphoma.

Unless otherwise indicated, data for all daratumumab clinical studies presented are based on reports we have received from Janssen, reports Janssen has published or presented regarding these studies or information published on clinicaltrials.gov. In addition, our expectations regarding timelines for clinical trial progression or regulatory developments for daratumumab are generally based on information we have received from Janssen through our collaboration.

Daratumumab for the Treatment of Multiple Myeloma

Multiple Myeloma

Multiple myeloma, or MM, is an incurable blood cancer that starts in the bone marrow and is characterized by an excess proliferation of plasma cells. Plasma cells are a type of white blood cell responsible for producing antibodies, or immunoglobulins, which are critical for maintaining the body's immune system. Through a complex, multi-step process, healthy plasma cells transform into malignant myeloma cells. Myeloma cells produce abnormal antibodies, called monoclonal immunoglobulin, monoclonal protein, M-spike, or paraprotein. These abnormal antibodies offer no benefit to the body, and as the number of abnormal antibodies increases, it crowds out normally functioning immunoglobulins, which ultimately causes MM symptoms. While some patients with MM have no symptoms at all, others are diagnosed due to symptoms, which can include bone problems, low blood counts, calcium elevation, nervous system symptoms, kidney problems or infections. MM symptoms are often identified by the acronym CRAB, which refers to high **C**alcium, **R**enal dysfunction, **A**nemia, and **B**one lytic lesions.

The 5-year survival rate for MM patients is estimated at 50.7% in the United States, based on 2008-2014 data from the National Cancer Institute Surveillance, Epidemiology, and End Results, or SEER. SEER estimated that 124,733 people were living with MM in the United States in 2015. The World Health Organization, or WHO, estimated that approximately 26,000 people in the United States and 160,000 people worldwide would be newly diagnosed with MM in 2018 and approximately 13,650 people in the United States and 106,000 people globally would die from the disease.

Daratumumab and the Treatment of Multiple Myeloma

Treatment of MM depends on the type or stage of development of MM:

- *Smoldering Multiple Myeloma.* Smoldering MM, or SMM, is an early or asymptomatic myeloma that is not causing any symptoms. People with SMM have some signs of MM, such as a large amount of plasma cells in the bone marrow, high levels of monoclonal immunoglobulin in the blood or high levels of light chains in the urine, but they do not exhibit CRAB symptoms. SMM can take anywhere from many months to years to become active, or symptomatic, MM.

For some people, SMM may progress very slowly and never become active MM. Others, however, have high risk features that increase the likelihood of SMM progressing to active MM. Currently, there are no approved therapies for SMM, and guidelines recommend close monitoring of SMM patients and initiating treatment only upon progression to MM. However, studies are being undertaken to assess whether therapeutic intervention at the SMM stage, especially in patients at higher risk of progression to active MM, may yield clinical benefit and prevent the development of MM-associated complications. A 2014 study set out a new standard—the SLiM CRAB criteria—for SMM patients who are so likely to progress from SMM to active MM that early treatment for such patients might be considered. The SLiM CRAB criteria are assessed based on the patient's clonal plasma cells in the bone marrow, light chains and focal lesions shown on MRI. Janssen is currently assessing daratumumab for the treatment of high risk SMM in the Phase III AQUILA study for a subQ formulation of daratumumab and the Phase II CENTAURUS study of daratumumab as a monotherapy. Initial results for the CENTAURUS study were reported in December 2018.

- *Active (Symptomatic) Multiple Myeloma.* Typically, patients are considered to transition from SMM to active MM when they have one of the CRAB symptoms. Standard treatment for active MM is largely dependent on the patient's fitness and underlying health status. For those in good health and younger than 70 to 75 years, the preferred frontline treatment for newly diagnosed patients with MM comprises a triplet novel agent regimen, typically including an immunomodulatory agent (such as thalidomide or lenalidomide) and a proteasome inhibitor, or PI, (such as bortezomib) in combination with glucocorticoids, followed by stem cell transplants to replace diseased bone marrow with healthy bone marrow, followed by maintenance therapy with low-dose immunomodulatory agents or PI. Stem cell transplants may be autologous, or ASCT, in which a patient's own stem cells are removed from his or her bone marrow or peripheral blood then replaced after chemotherapy or radiation treatment, or allogeneic, in which the patient receives blood-forming stem cells from a donor, typically a family member. However, many MM patients are determined not to be suitable candidates for stem cell transplants for various reasons, including weakness and age, although others are able to undergo multiple transplants. For those unable to undergo a stem cell transplant, standard therapies commonly consist of a multi-drug regimen combining different mechanisms of action, including DARZALEX in jurisdictions where it has been approved. Patients with MM also receive supportive treatments, such as transfusions to treat low blood cell counts, antibiotics and sometimes IV immunoglobulin for infections. After successful stem cell transplants, immunomodulatory agents and PIs are used to control the relapse of symptoms. DARZALEX has been approved in the United States and in the European Union as a frontline treatment for active MM in combination with certain other therapies for the treatment of patients who are ineligible for ASCT. Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA in March 2019, and submitted a supplemental new drug application to the Ministry of Health, Labor and Welfare in Japan in April 2019, for daratumumab in combination with Rd as a frontline treatment of transplant-ineligible patients with MM based on the MAIA study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In addition, in March 2019, Janssen submitted an sBLA to the FDA and an MAA to the EMA for daratumumab in combination with VTd as a frontline treatment of transplant-eligible patients with MM based on the CASSIOPEIA study.
- *Relapsed/Refractory, or R/R, Multiple Myeloma.* Despite the recent progress in treatment of MM and overall survival rates, MM remains an incurable disease and the majority of patients will relapse and will require additional treatment. Relapsed MM is defined as a recurrence of MM after prior response to treatment. Refractory MM is defined as MM which fails to respond or progresses while the patient is on therapy. The goal of treatment for R/R MM patients is to relieve symptoms and/or prevent the development of symptoms. Treatment at this stage may

range from monotherapy to intensive combination regimens, which may include one or more immunomodulatory agents, PIs or novel agents, including DARZALEX for certain lines of treatment in approved jurisdictions. Selection of treatment depends on the patient's gene expression profile, prior therapy and response, as well as personal characteristics of the patient, including age, strength and family considerations. DARZALEX has been approved as a monotherapy in the United States and the European Union as a treatment for R/R MM, in most cases subject to the patient being double-refractory to a PI and an immunomodulatory agent. It has also been approved in the United States and the European Union in combination with certain other therapies after one or two prior lines of treatment and in Japan for the treatment of adults with R/R MM in combination with certain other treatments.

Existing Marketing Approvals and Pending Regulatory Applications

To date, Janssen has obtained regulatory approvals for DARZALEX in the jurisdictions set forth in the table below, as well as in certain other countries. In addition, a number of applications for marketing approval of DARZALEX for certain frontline and R/R MM indications are currently pending with applicable regulators. Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA in March 2019, and submitted a supplemental new drug application to the Ministry of Health, Labor and Welfare in Japan in April 2019, for DARZALEX as a frontline treatment for transplant-ineligible MM patients in combination with lenalidomide and dexamethasone, or Rd, based on the pivotal Phase III MAIA study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In March 2019, Janssen also submitted an sBLA to the FDA and an MAA to the EMA for DARZALEX as a frontline treatment for transplant-eligible MM patients in combination with bortezomib, thalidomide and dexamethasone, or VTd, based on the pivotal Phase III CASSIOPEIA study. Janssen has also advised us that it submitted an application to the Chinese regulatory authorities in September 2018 for approval of DARZALEX as monotherapy for the treatment of adult patients with R/R MM whose prior therapy included a PI and an immunomodulatory agent and who have demonstrated disease progression on the last therapy and that it submitted an application to the Japanese Ministry of Health, Labor and Welfare in December 2018 for approval of DARZALEX in combination with VMP for the treatment of adult patients with newly diagnosed MM who are ineligible for ASCT. DARZALEX has also been given Orphan Drug Designation, or ODD, in the United States and the European Union for the treatment of MM and certain other indications. See "— Government Regulation" below for a description of ODD.

<u>Jurisdiction</u>	<u>Approval</u>	<u>Key Underlying Clinical Trial(s)</u>
United States		
<i>Relapsed/Refractory</i>		
November 2015	FDA approval of DARZALEX as a monotherapy for patients with MM who have received at least three prior lines of therapy, including a PI and an immunomodulatory agent, or who are double refractory to a PI and an immunomodulatory agent ⁽¹⁾	SIRIUS
November 2016	FDA approval of DARZALEX in combination with Rd or bortezomib and dexamethasone, or Vd, for the treatment of patients with MM who have received at least one prior therapy ⁽²⁾	CASTOR; POLLUX
June 2017	FDA approval of DARZALEX in combination with pomalidomide and dexamethasone, or Pom-d, for the treatment of patients with MM who have received at least two prior therapies, including lenalidomide and a PI	EQUULEUS
<i>Frontline</i>		
May 2018	FDA approval of DARZALEX in combination with VMP for the treatment of patients with newly diagnosed MM who are ineligible for ASCT	ALCYONE
<i>Split Dosing Regimen</i>		
February 2019	FDA approval of DARZALEX split dosing regimen	EQUULEUS
European Union		
<i>Relapsed/Refractory</i>		
April 2016	EU approval of DARZALEX as a monotherapy for the treatment of adult patients with R/R MM, whose prior therapy included a PI and an immunomodulatory agent and who have demonstrated disease progression on the last therapy	SIRIUS
February 2017	EU approval of DARZALEX in combination with Rd or Vd for the treatment of adult patients with MM who have received at least one prior therapy	CASTOR; POLLUX
<i>Frontline</i>		
July 2018	EU approval of DARZALEX in combination with VMP for the treatment of adult patients with newly diagnosed MM who are ineligible for ASCT	ALCYONE
<i>Split Dosing Regimen</i>		
December 2018	EU approval of DARZALEX split dosing regimen	EQUULEUS
Japan		
<i>Relapsed/Refractory</i>		
September 2017	Japanese Ministry of Health, Labor and Welfare approval of DARZALEX in combination with Rd or Vd for the treatment of adults with R/R MM	CASTOR; POLLUX

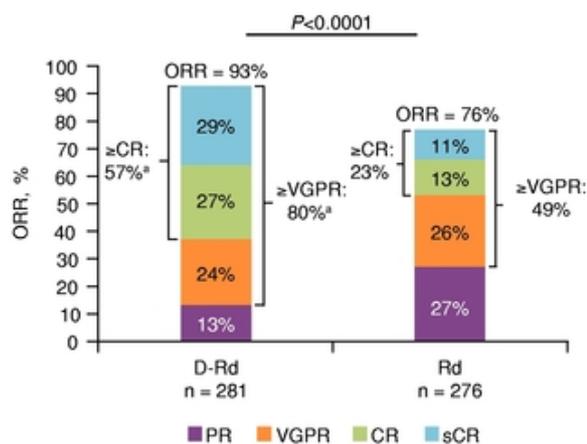
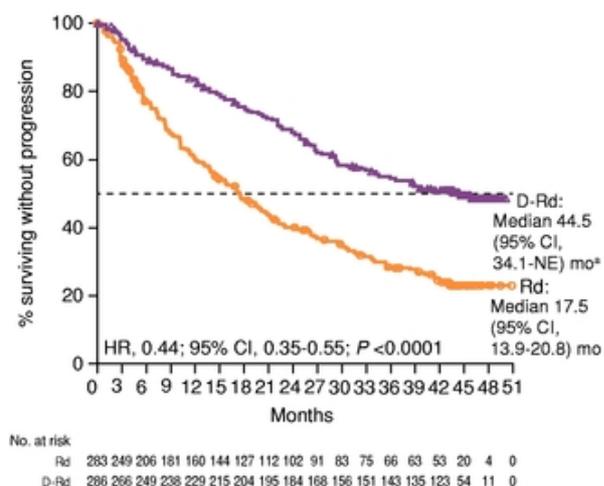
(1) Fast Track Designation, or FTD, and Break through Designation, or BTB, granted by the FDA for this indication in April and May 2013, respectively. See "—Government Regulation" below for a description of FTD and BTB.
(2) BTB granted by the FDA for these indications in July 2016. See "—Government Regulation" below for a description of BTB.

The existing approvals of DARZALEX were based on five key clinical studies conducted by Janssen, each of which is described below.

SIRIUS (MMY2002)

<i>Study Design</i>	124-patient, randomized, open-label, multicenter, Phase II trial investigating the efficacy and safety of daratumumab in subjects with MM who had received at least three prior lines of therapy, including a PI and immunomodulatory agent, or were double refractory to a PI and an immunomodulatory agent. Patients were randomized to receive intravenous, or IV, daratumumab 8 mg/kg or 16 mg/kg in part 1 stage 1 of the study, to decide the dose for further assessment in part 2. Patients received 8 mg/kg every 4 weeks, or 16 mg/kg per week for 8 weeks (cycles 1 and 2), then every 2 weeks for 16 weeks (cycles 3-6), and then every 4 weeks thereafter (cycle 7 and higher). In part 1 stage 2 and part 2, patients received 16 mg/kg dosed as in part 1 stage 1.
<i>Efficacy Data</i> (Published in The Lancet, January 2017; data cutoff, January 9, 2015)	After a median follow-up period of 9.3 months, results showed that treatment with single-agent daratumumab resulted in an ORR of 29.2% (95% CI: 20.8-38.9) in patients who had received a median of 5 prior lines of therapy, including a PI and an immunomodulatory agent. sCR was reported in 2.8% of patients, very good partial response, or VGPR, was reported in 9.4% of patients, and PR was reported in 17% of patients. For responders, the median DoR was 7.4 months. At baseline, 97% of patients were refractory to their last line of therapy, 95% were refractory to both a PI and an immunomodulatory agent, and 77% were refractory to alkylating agents. 63% were refractory to pomalidomide, and 48% were refractory to carfilzomib.
<i>Safety Data</i> (Data cutoff, June 30, 2015)	The most commonly occurring treatment-emergent adverse events, or TEAEs, (in 320% of patients) were fatigue (40%), anaemia (33%), nausea (29%), thrombocytopenia (25%), neutropenia (23%), back pain (22%) and cough (21%). Of these, the study reported Grade 3/4 TEAEs of fatigue (3%), anaemia (24%), thrombocytopenia (19%), neutropenia (12%) and back pain (3%).

POLLUX (MMY3003)



^aThe upper bound of the 95% CI is currently NE; median PFS may change with additional follow-up once the upper bound of the 95% CI estimate is reached.

^a $p < 0.0001$.

Source: Janssen presentation at ASH, December 2018

Study Design

569-patient randomized open-label, multicenter, active-controlled, Phase III trial of daratumumab in combination with lenalidomide and dexamethasone, or Rd, versus Rd alone in patients with R/R MM. Patients were randomized to receive either daratumumab combined with Rd, or D-Rd, or Rd alone.

Initial Results

(Published in the New England Journal of Medicine, or NEJM, October 2016)

As of March 7, 2016, at a median follow-up of 13.5 months, the study met the primary endpoint of improving PFS (Hazard Ratio, or HR = 0.37; 95% CI: 0.27-0.52; $p < 0.001$) for patients treated with D-Rd versus Rd.

Efficacy Data
(Presented at ASH,
December 2018)

D-Rd continued to demonstrate a significant PFS benefit and higher rates of deeper responses versus Rd alone in R/R MM patients. The follow up report concluded that the higher rate of sustained minimal residual disease, or MRD, negativity with D-Rd compared with Rd suggests that continued D-Rd treatment drives these deep responses and delays disease progression. At a median follow-up of 44.5 months, D-Rd significantly prolonged PFS versus Rd (median 44.5 vs 17.5 months; HR = 0.44; 95% CI: 0.35-0.55; $p < 0.0001$). D-Rd also prolonged PFS versus Rd among patients with 1 prior line of therapy and patients with 1-3 prior lines of therapy. A PFS benefit for D-Rd versus Rd was also observed regardless of cytogenetic risk status. D-Rd was associated with a significantly higher ORR versus Rd (93% vs 76%), including higher rates of ³VGPR (80% vs 49%) and ³CR (57% vs 23%) (all $p < 0.0001$). At the 10^{-5} sensitivity threshold, MRD-negativity was achieved by 87 (30%) D-Rd pts versus 15 (5%) Rd patients ($p < 0.000001$). Among the intent-to-treat, or ITT, population, sustained MRD negativity was achieved by 47 (16%) D-Rd patients versus 2 (0.7%) Rd patients for ³6 months and 37 (13%) D-Rd patients versus 1 (0.4%) Rd patient for ³12 months (both $p < 0.0001$). MRD-negativity was assessed at time of suspected CR or sCR blinded to treatment group and, if CR/sCR was maintained, at 3 and 6 months, and every 12 months after confirmation of CR/sCR. Median time to next therapy for D-Rd versus Rd was not reached in the D-Rd group versus 23.1 months in the Rd group (HR = 0.39; 95% CI: 0.31-0.50; $p < 0.0001$). In the D-Rd group, 104 (36%) OS events were observed versus 121 (43%) OS events in the Rd group; OS follow-up is ongoing. The median DoR was 34.3 months in the D-Rd arm versus 16.0 months in the Rd arm.

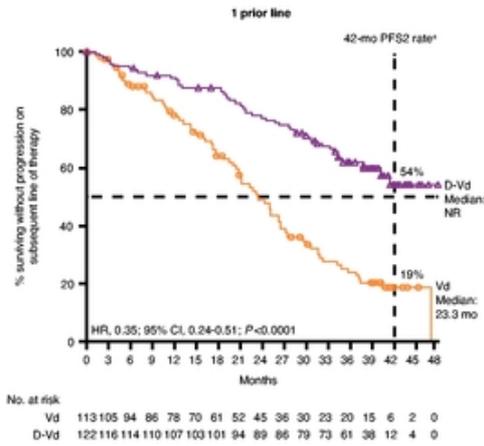
Safety Data

The most common (in ³10% of patients) Grade 3/4 TEAEs, observed with D-Rd versus Rd were neutropenia (56% vs 42%), anemia (18% vs 21%), thrombocytopenia (15% vs 16%), pneumonia (15% vs 10%) and diarrhea (10% vs 4%). No differences were observed for D-Rd versus Rd in discontinuations due to TEAEs (15% of patients in each treatment group) or incidences of second primary malignancies (9% of patients in each treatment group).

Study Status

Updated subgroup analysis expected to be presented at ASCO, June 2019.

CASTOR (MMY3004)



Response,* n (%)	ITT/Response-evaluable			1PL		
	D-Vd (n = 240)	Vd (n = 234)	P value	D-Vd (n = 119)	Vd (n = 109)	P value
ORR	203 (85)	148 (63)	<0.0001	109 (92)	81 (74)	0.0007
≥CR	72 (30)	23 (10)	<0.0001	51 (43)	16 (15)	<0.0001
sCR	23 (10)	6 (3)		17 (14)	5 (5)	
CR	49 (20)	17 (7)		34 (29)	11 (10)	
≥VGPR	151 (63)	68 (29)	<0.0001	91 (77)	46 (42)	<0.0001
VGPR	79 (33)	45 (19)		40 (34)	30 (28)	
PR	52 (22)	80 (34)		18 (15)	35 (32)	
MRD negativity (10⁻³)^b	(n = 251)	(n = 247)		(n = 122)	(n = 113)	
n (%)	35 (14)	4 (2)	<0.000001	24 (20)	3 (3)	0.000025
Sustained MRD negativity (10 ⁻³), n (%) ^c	8 (3)	0		7 (6)	0	

^aKaplan-Meier estimate

PFS2, PFS on second line of therapy; NR, not reached

Source: Janssen Poster Presentation at ASH, December 2018

^aResponse-evaluable population

^bITT population

^cSustained MRD negativity for ³12 months

Study Design

498-patient randomized, open-label, multicenter, active-controlled, Phase III trial of daratumumab in combination with bortezomib and dexamethasone, or Vd, versus Vd alone in patients with R/R MM. Patients were randomized to receive either daratumumab combined with subQ Vd, or D-Vd, or Vd alone.

Interim Results

(Published in NEJM, August 2016)

A pre-specified interim analysis showed that PFS was significantly higher for patients treated with D-Vd than patients treated with Vd alone, with 12-month PFS of 60.7% in the D-Vd arm compared to 26.9% in the Vd arm. As of January 11, 2016, after a median follow-up of 7.4 months, the median PFS was not reached in the D-Vd group and was 7.2 months in the Vd control group (HR = 0.39; 95% CI: 0.28-0.53; p<0.001).

Efficacy Data

(Presented at ASH, December 2018; clinical cutoff October 2, 2018)

At the clinical cutoff date, 498 patients were included in the ITT population (D-Vd, n = 251; Vd, n = 247). Demographic, baseline disease, and clinical characteristics were balanced between treatment arms. Patients received a median of 2 (range: 1-10) prior lines of therapy, including 235 patients that had received 1 prior line, or PL, of therapy (D-Vd, n = 122; Vd, n = 113).

After 40.0 months of median follow-up, D-Vd maintained significant PFS and ORR benefit in R/R MM patients, with the greatest benefit observed in patients with 1PL. PFS was significantly prolonged with D-Vd compared with Vd in the ITT population (median: 16.7 vs 7.1 months; HR = 0.31; 95% CI: 0.25-0.40; $p < 0.0001$). PFS benefit for D-Vd compared to Vd was maintained in patients with high cytogenetic risk (median: 13.4 vs 7.2 months; HR = 0.40; 95% CI: 0.24-0.65; $p < 0.001$) and standard cytogenetic risk (median: 18.4 vs 6.8 months; HR = 0.28; 95% CI: 0.20-0.37; $p < 0.0001$). A higher ORR was observed with D-Vd compared to Vd (85% vs 63%), with significantly higher rates of VGPR or better (63% vs 29%) and CR or better (30% vs 10%) respectively, in the response-evaluable population (all $p < 0.0001$). The report indicated that deeper responses with D-Vd translated to higher MRD-negative rates at 10^{-5} sensitivity threshold for the ITT population (14% vs 2%; $p < 0.000001$) and in both cytogenetic risk groups (high risk: 18% vs 0%; $p < 0.001$; standard risk: 13% vs 2%; $p < 0.001$). Sustained MRD negativity was maintained in 22 (9%) D-Vd patients compared with 3 (1%) Vd patients for 36 months, and 8 (3%) D-Vd patients compared with 0 Vd patients for 312 months. MRD negativity was assessed at time of suspected CR (blinded to treatment group) and at 6 months and every 12 months after the first dose (at the end of Vd background therapy and 6 months later, respectively). Additional MRD evaluation was required every 12 months post-CR. Median OS had not yet been reached at the clinical cutoff date; at the time of analysis, 102 deaths in the D-Vd group and 119 deaths in the Vd group were observed, and follow-up is ongoing.

Among patients with 1PL, median PFS was 27.0 months (HR = 0.22; 95% CI: 0.15-0.32; $p < 0.0001$) for D-Vd compared to 7.9 months with Vd. PFS benefit for D-Vd versus Vd was maintained for patients whose prior line of therapy included bortezomib (median: 20.4 vs 8.0 months; HR = 0.22; 95% CI: 0.13-0.37; $p < 0.0001$) or lenalidomide (median: 21.2 vs 7.0 months; HR = 0.30; 95% CI: 0.11-0.82; $p = 0.0140$). Among patients with 1PL, ORR (92% vs 74%), VGPR or better (77% vs 42%), and CR+ (43% vs 15%) rates were significantly higher (all $p < 0.001$) with D-Vd versus Vd. MRD-negative rates at 10^{-5} sensitivity among the 1PL population were also significantly higher for D-Vd compared to Vd (20% vs 3%; $p < 0.0001$), and sustained MRD negativity was observed in 8 (7%) vs 1 (0.9%) patients at 36 month cutoff and 7 (6%) vs 0 patients at 312 months cutoff. For 1PL patients, 35 deaths were observed with D-Vd versus 51 deaths with Vd.

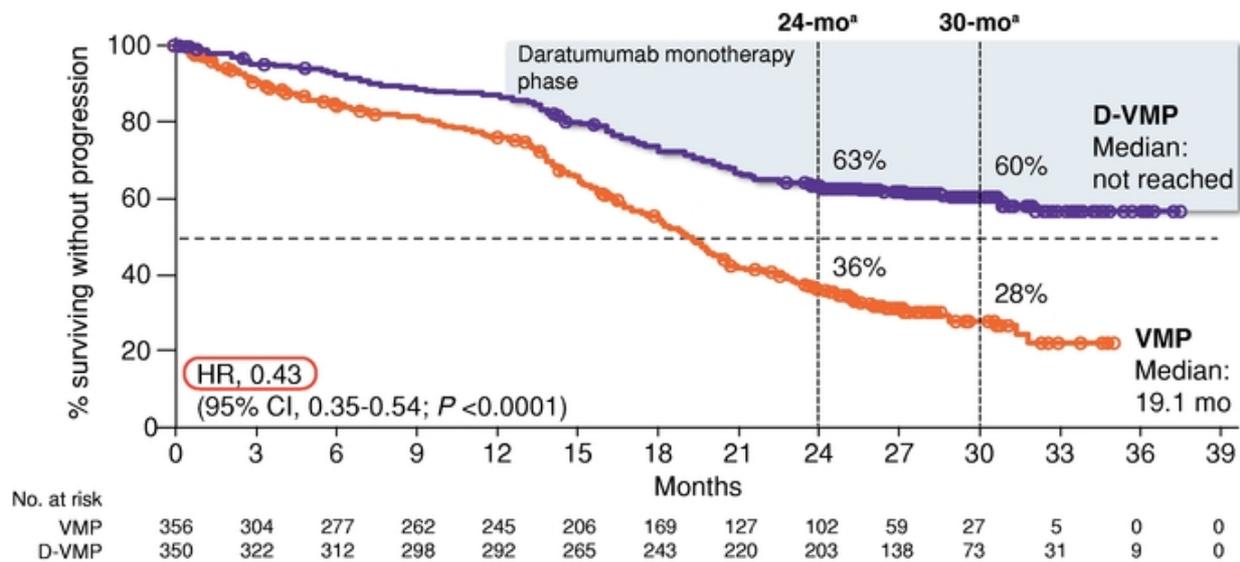
Safety Data
(Clinical cutoff
October 2, 2018)

The most common (in $^35\%$ of patients) Grade 3/4 TEAEs were thrombocytopenia (46% vs 33%), anemia (16% vs 16%), neutropenia (14% vs 5%), pneumonia (10% in both), lymphopenia (10% vs 3%), hypertension (7% vs 0.8%) and peripheral sensory neuropathy (5% vs 7%). Discontinuation rates due to TEAEs were similar for D-Vd vs Vd (10% vs 9%). With longer follow-up, secondary primary malignancies were reported in 14 (6%) patients who received D-Vd versus 5 (2%) patients who received Vd. No new safety signals were reported with D-Vd with longer follow-up.

Study Status

Updated subgroup analysis expected to be presented at ASCO, June 2019.

ALCYONE (MMY3007)



^aKaplan-Meier estimate
 Source: Janssen Presentation at ASH, December 2018

Study Design

706-patient randomized, open-label, multicenter, Phase III trial of daratumumab for the treatment of newly diagnosed patients with MM who were ineligible for ASCT. Patients were randomized to receive nine cycles of either bortezomib, melphalan and prednisone, or VMP, combined with daratumumab, or D-VMP, or VMP alone. At the end of these nine cycles, patients in the D-VMP arm were given daratumumab as a monotherapy until disease progression, or PD.

Interim Results

(Published in NEJM, December 2017; data cutoff June 12, 2017)

As of June 12, 2017, the study met the primary endpoint of improving PFS at a pre-planned interim analysis (HR = 0.50; 95% CI: 0.38-0.65; $p < 0.0001$) in patients with frontline MM ineligible for ASCT when daratumumab is combined with VMP versus VMP alone.

Efficacy Data (Presented at ASH, December 2018; data cutoff June 12, 2018) After a median follow-up of 27.8 months, study results showed the addition of daratumumab to VMP reduced the risk of disease progression or death by 57% compared to VMP alone (HR = 0.43; 95% CI: 0.35-0.54; $p < 0.0001$). D-VMP resulted in a 24-month PFS rate of 63% compared to 36% with VMP alone. The median PFS for D-VMP had not yet been reached at the time of the report, whereas the control arm of VMP alone had a median PFS of 19.1 months. In addition, a significantly higher ORR (91% vs. 74%, respectively) was observed with D-VMP compared to VMP alone. D-VMP resulted in deeper responses, significantly improving the rate of VGPR or better (73% vs. 50%) and more than doubling the rate of sCR (22% vs. 8%) compared to VMP alone. Combined CR and sCR, or CR+, rates were 45% with D-VMP compared to 25% with VMP alone. D-VMP showed a deepening MRD-negative rate with longer follow-up for D-VMP compared to VMP alone (27% vs. 7%, respectively). MRD negativity was assessed at time of confirmation of CR or sCR and, if confirmed, at 12, 18, 24 and 30 months after the first dose.

Safety Data (Data cutoff June 12, 2018) The most common Grade 3/4 TEAEs during Cycle 10 and onward for D-VMP included anemia (4%), neutropenia (2%) and bronchitis (1%).

EQUULEUS (MMY1001)

Study Design 103-patient open-label, nonrandomized, multicenter, multiarm, phase 1b study evaluating daratumumab in combination with pomalidomide and dexamethasone, or Pom-d, in patients with MM who had received prior treatment with a PI and an immunomodulatory agent.

Efficacy Data (Published in the Blood Journal, August 2017) The ORR in the study was 60% (95% CI: 50.1% - 69.7%), with VGPR achieved in 25% of patients. CR was achieved in 9% of patients and sCR was achieved in 8% of patients. The median time to response was 1 month (range: 0.9-2.9). The median DoR was not estimable, or NE (95% CI: 13.6-NE months).

The median age of patients in the study was 64 years with 8% of patients older than 75. Patients in the study had received a median of four prior lines of therapy, and 74% of patients had received prior ASCT. 89% of patients were refractory to lenalidomide and 71% were refractory to bortezomib; 71% of patients were double refractory to a PI and an immunomodulatory agent.

Safety Data The most common TEAEs (in >25% of patients) in the study were: neutropenia (80%), anemia (54%), fatigue (52%), infusion reactions (50%), diarrhea (43%), thrombocytopenia (42%), cough (38%), leukopenia (37%), constipation (34%), dyspnea (32%), nausea (31%), pyrexia (30%), upper respiratory tract infection (28%), and muscle spasms (27%). The most common Grade 3/4 TEAEs (in ³10% of patients) in the study were: neutropenia (77%), anemia (28%), leukopenia (24%), thrombocytopenia (19%), lymphopenia (14%), fatigue (12%) and pneumonia (10%). The overall incidence of serious TEAEs was 53%. Serious TEAEs (Grade 3/4) reported in 2 or more patients included pneumonia (9%), sepsis (5%), neutropenia (5%), falls (4%), anemia (3%) and dyspnea (3%).

Key Ongoing Trials for Additional MM Indications

Disease Stage	Therapy	Development Phase				
		Pre-Clinical	I	I/II	II	III
High Risk Smoldering	Subcutaneous	AQUILA				
	Monotherapy	✓	CENTAURUS			
Front line (transplant & non-transplant)	Dara + VMP (Asia Pacific)	OCTANS				
	Dara + Rd	✓	MAIA			
	Dara + VRd	CEPHEUS				
	Dara + R	AURIGA				
	Dara + VTd	✓	CASSIOPEIA			
	Dara + VRd	PERSEUS				
	Dara + VRd	✓	GRIFFIN			
Relapsed or Refractory	Dara + Vd (China)	CANDOR				
	Dara + Kd	✓	APOLLO			
	Dara + Pom + d	COLUMBA ⁽¹⁾				
	Subcutaneous vs IV	NINLARO® (Ph II), Venclexta™ (Ph II), Selinexor (Ph I/II)				
	Dara + combinations	Keytruda® (Ph II), Opdivo® (Ph I/II), Tecentriq® (Ph I)				
	Dara + I.O. (PD1 & PDL1)					

V = Velcade®, MP = melphalan-prednisone, T = thalidomide d= dexamethasone, R = Revlimid®, K = Kyprolis®, Pom = Pomalyst® XFully recruited

- (1) In addition to the Phase III COLUMBA study comparing subQ with IV administration of daratumumab, Janssen is conducting the Phase II PLEIADES study to evaluate the clinical benefit of subQ daratumumab administered in combination with standard MM treatment regimens, VRd, VMP, Rd and Kd.

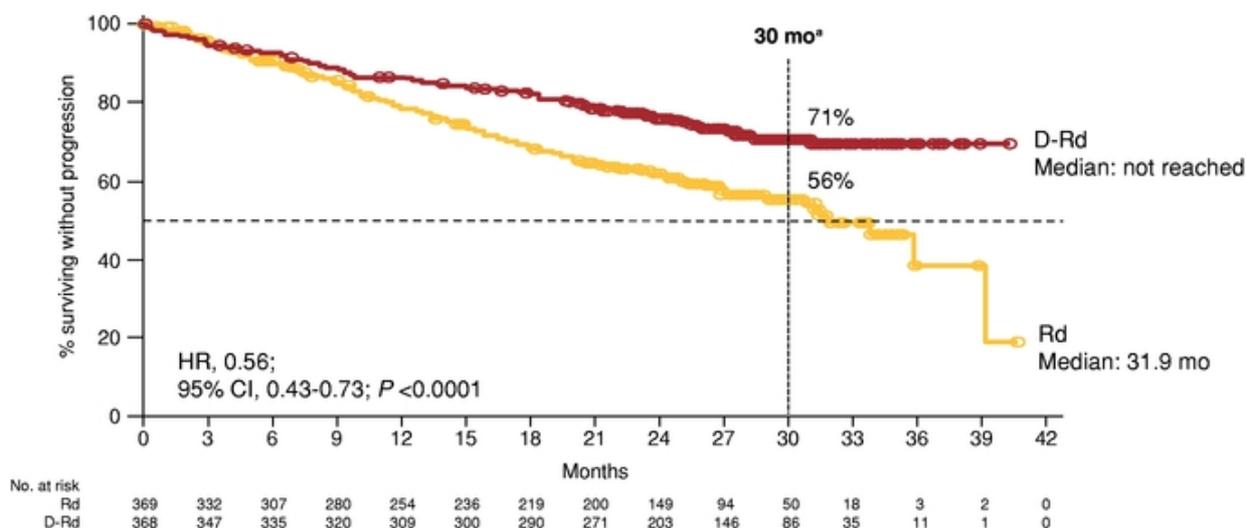
Janssen is conducting a comprehensive clinical development program for daratumumab, including multiple Phase III studies for the treatment of SMM, frontline MM and R/R MM. Janssen is also conducting Phase I and Phase II studies for use of daratumumab for the treatment of MM in other settings, including as a monotherapy for SMM and in combination with other therapies for the treatment of frontline MM and R/R MM. In addition, Janssen is currently testing a subQ formulation of daratumumab compared with IV administration in the PAVO and COLUMBA studies for the treatment of R/R MM and in combination with a number of standard MM treatments in the PLEIADES study. Janssen is using a subQ formulation of daratumumab in the AQUILA study for the treatment of high risk SMM, the PERSEUS and AURIGA studies for the treatment of transplant-eligible frontline MM, the CEPHEUS study for the treatment of transplant-ineligible frontline MM and the APOLLO study for the treatment of R/R MM. In March 2019, Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA for daratumumab as a frontline treatment for transplant-ineligible MM patients in combination with lenalidomide and dexamethasone, or Rd, based on the pivotal Phase III MAIA study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In March 2019, Janssen also submitted an sBLA to the FDA and an MAA to the EMA for daratumumab as a frontline treatment for transplant-eligible MM patients in combination with bortezomib, thalidomide and dexamethasone, or VTd, based on the pivotal Phase III CASSIOPEIA study. In addition, we expect Janssen to submit regulatory applications for a subQ formulation of daratumumab based on the COLUMBA study in 2019 and to release efficacy data for the GRIFFIN study.

The following sections describe the key ongoing trials of daratumumab for the treatment of various MM indications. The first section highlights the key recent studies in frontline MM, MAIA and CASSIOPEIA and the COLUMBA study for subQ formulation of daratumumab. The subsequent

sections describe the key ongoing or anticipated clinical studies of daratumumab for the treatment of high risk SMM, for frontline treatment of transplant-eligible and transplant-ineligible patients with MM and for ongoing treatment of patients with R/R MM. Many additional studies of daratumumab are also being conducted by Janssen and other parties, including investigator-initiated studies.

Key Recent Studies. In October 2018, we reported that the pivotal Phase III MAIA study of daratumumab in combination with lenalidomide and dexamethasone, or Rd, for frontline treatment of transplant-ineligible MM patients had met its primary endpoint at a pre-specified interim analysis. Janssen completed an sBLA submission to the FDA and submitted an MAA to the EMA in March 2019, and submitted a supplemental new drug application to the Ministry of Health, Labor and Welfare in Japan in April 2019, based on this study. The FDA plans to review the MAIA sBLA under its RTOR Pilot Program. In October 2018, we also reported topline results that the first part of Janssen's pivotal Phase III CASSIOPEIA study of daratumumab in combination with bortezomib, thalidomide and dexamethasone, or VTd, for frontline treatment of transplant-eligible MM patients met its primary endpoint. In March 2019, Janssen submitted an sBLA to the FDA and an MAA to the EMA based on the CASSIOPEIA study. In addition, in February 2019, we reported positive topline results in Janssen's Phase III COLUMBA study for the subQ formulation of daratumumab. We expect Janssen to submit regulatory applications based on the COLUMBA study in 2019. Each of these studies is described in more detail below.

MAIA (MMY3008)



^aKaplan-Meier estimate

<i>Study Design</i>	737-patient, randomized, open-label, multicenter Phase III trial of daratumumab in combination with lenalidomide and dexamethasone, or D-Rd, or lenalidomide and dexamethasone, or Rd, alone in patients newly diagnosed with MM who are not candidates for high dose chemotherapy and ASCT. Patients were randomized to receive either D-Rd or Rd alone. In the D-Rd treatment arm, patients are receiving 16 milligrams per kilogram (mg/kg) weekly for the first 8 weeks (Cycles 1 and 2), every other week for 16 weeks (Cycles 3 to 6) and then every 4 weeks (Cycle 7 and beyond) until progression of disease or unacceptable toxicity. Lenalidomide is administered at 25 mg orally on days 1 through 21 of each 28-day cycle, and dexamethasone is administered at 40 mg once a week for both treatment arms. Participants in both treatment arms will continue Rd until disease progression or unacceptable toxicity. The primary endpoint of the study is PFS.
<i>Initial Results</i> (Presented at ASH, December 2018)	In October 2018, the study met the primary endpoint of improving PFS at a pre-planned interim analysis (HR = 0.56; 95% CI: 0.43 - 0.73; $p < 0.0001$) resulting in a 44% reduction in the risk of progression or death in patients treated with D-Rd. The median PFS for patients treated with D-Rd had not been reached at the cutoff date for the report, compared to an estimated median PFS of 31.9 months for patients who received Rd alone. ORR for D-Rd was 93% compared to 81% with Rd alone. The CR+ rate for D-Rd was 48% compared to 25% with Rd alone. The MRD-negative rate at 10^{-5} sensitivity was 24% in the D-Rd arm compared to 7% with Rd alone. MRD negativity was assessed at time of suspected CR or sCR and, if confirmed, at 12, 18, 24 and 30 months after the first dose.
<i>Safety Data</i>	Overall, the safety profile of D-Rd was consistent with the known safety profiles of the Rd regimen and daratumumab.
<i>Study Status</i>	Ongoing. Data expected to be presented at ASCO, June 2019.

CASSIOPEIA (MMY3006)

<i>Study Design</i>	Randomized, open-label, multicenter, Phase III study run by the French Intergroupe Francophone du Myelome, or IFM, in collaboration with the Dutch-Belgian Cooperative Trial Group for Hematology Oncology, or HOVON, and Janssen, including 1,085 newly diagnosed subjects with previously untreated MM who are eligible for high dose chemotherapy and stem cell transplant. In the first part of the study, patients were randomized to receive induction and consolidation treatment with daratumumab combined with bortezomib, thalidomide and dexamethasone, or VTd, or VTd alone. The primary endpoint of this part of the study is sCR. In the second part of the study, patients that achieved a response in the first part undergo a second randomization to either receive maintenance treatment of daratumumab 16 mg/kg every 8 weeks for up to 2 years versus no further treatment (observation). The primary endpoint of this part of the study is PFS after maintenance therapy. Secondary endpoints include PFS, time to progression, MRD and OS.
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<i>Initial Results</i> (Reported October 2018)	In October 2018, we reported topline results that the first part of the study met the primary endpoint of number of patients that achieved sCR, which was reported in 28.9% of patients treated with daratumumab in combination with VTd, compared to 20.3% of patients who received VTd alone, with an odds ratio of 1.60 (95% CI: 1.21 - 2.12; p £ 0.001).
<i>Safety Data</i>	Overall, the safety profile of daratumumab in combination with VTd in this study was consistent with the known safety profile of the VTd regimen used in patients receiving ASCT and the known safety profile for daratumumab.
<i>Study Status</i>	In the ongoing second part of the study, all responders have been re-randomized to receive either maintenance treatment with daratumumab monotherapy or observation (no treatment). Part I results expected to be presented at ASCO, June 2019.

COLUMBA (MMY3012)

<i>Study Design</i>	522-patient randomized, open-label, multicenter, non-inferiority, Phase III study intended to compare the efficacy, pharmacokinetics, and IRRs of daratumumab in subQ form versus IV-administered daratumumab in patients with R/R MM. Eligible patients with R/R MM must have received at least 3 prior lines of therapy, including a PI and an immunomodulatory agent, or must be double refractory to both a PI and an immunomodulatory agent. The co-primary endpoints are ORR at 6 months after randomization and maximum trough concentration of daratumumab on Cycle 3 Day 1 (each cycle 28 days), or Ctough. Secondary endpoints include IRR rates, PFS, VGPR and CR (including sCR), time to next therapy, OS, time to response, and DoR. Patients were randomly assigned (1:1) to the 2 treatment groups.
<i>Initial Results</i> (Reported February 2019)	In February 2019, we reported topline results that subQ administration of daratumumab co-formulated with rHuPH20 was observed to be non-inferior to IV administration of daratumumab with regard to the co-primary endpoints of ORR and Ctough. The ORR for patients treated with subQ daratumumab was 41.1% (n=263) versus 37.1% in patients treated with IV daratumumab (n=259). The geometric mean of Ctough for patients treated with subQ daratumumab was 499 mg/mL (n=149) versus 463 mg/mL in patients treated with IV daratumumab (n=146). The lower limit of the 95% CI for the ratios of the two arms of the study met the specified non-inferiority criterion for both co-primary endpoints.
<i>Safety Data</i>	No new safety signals were detected compared with known daratumumab safety profiles.
<i>Study Status</i>	Ongoing. Data expected to be presented at ASCO, June 2019.

High Risk SMM. Janssen is currently conducting several clinical trials to assess whether earlier treatment with daratumumab could be used for patients with high-risk SMM to delay progression to MM, compared with active monitoring. The Phase II CENTAURUS study is assessing three dose schedules of daratumumab for the treatment of patients with high-risk or intermediate-risk SMM and determined that dose intensity was associated with efficacy. Janssen used this data to set the dose schedule for the Phase III AQUILA study, which is designed to assess the efficacy of daratumumab by subQ injection in delaying the progression from SMM to MM in high-risk SMM patients. Both studies are described below.

CENTAURUS (SMM2001)

<i>Study Design</i>	<p>123-patient randomized, multicenter, open-label Phase II trial to evaluate three daratumumab dose schedules, or Arms, in SMM in patients that had a confirmed diagnosis of high-risk or intermediate-risk SMM for <5 years. Patients were randomized (1:1:1) to receive 8-week cycles of daratumumab 16 mg/kg intravenously on 1 of 3 treatment Arms (Short, Intermediate and Intense). Patients in the Intense Arm received IV doses once weekly, or QW, in Cycle 1, every two weeks, or Q2W, in Cycles 2-3, every 4 weeks, or Q4W in Cycles 4-7, and every 8 weeks, or Q8W, in Cycles 8-20. Patients in the Intermediate Arm received IV doses QW in Cycle 1 and Q8W in Cycles 2-20. Patients in the Short Arm received IV doses QW for 1 Cycle only.</p>
<i>Initial Efficacy Data</i> (Presented at ASH, December 2018; data cutoff June 29, 2018)	<p>A total of 123 patients were randomized in three Arms (41 patients per Arm). The median age was 61 years (range: 31-81), and the median time from initial SMM diagnosis to randomization was 6.83 months (range: 0.40-56.0). In total, 73% of patients were of IgG subtype. Median treatment duration was 25.8 months (range: 1.0-33.1) in the Intense Arm, 25.8 months (range: 1.9-33.1) in the Intermediate Arm and 1.6 months (range: 0.1-1.9) in the Short Arm. In the Intense, Intermediate, and Short Arms, 7%, 2%, and 5% of patients, respectively, discontinued treatment due to adverse events, or AEs.</p> <p>At a median follow-up of 25.9 months (range: 0-33.2), ORR and ³CR rates were higher in the Intense and Intermediate Arms than in the Short arm; in the combined Intense and Intermediate Arms, the ³CR rate was 7%. A more pronounced biochemical/diagnostic, or BOD, PFS benefit was observed in the Intense and Intermediate Arms compared with the Short Arm. Median PFS based on SLiM-CRAB criteria was not reached in any Arm; 24-month PFS rates were 90% (Intense), 82% (Intermediate), and 75% (Short). PD/death rates indicate a median PFS of ³24 months in all arms. Median PFS based on BOD criteria was reached in the Short Arm only (14.8 months); 24-month PFS rates were 78% (Intense), 70% (Intermediate), and 27% (Short).</p>
<i>Safety Data</i>	<p>The most common (in >1% of patient/Arm) Grade 3/4 TEAE were hypertension and hyperglycemia. In all Arms, no hematologic TEAE was observed in ³10% of patients, and the rates of Grade 3/4 infections were £5%. Deaths occurred in 1 patient (2%) in the Intermediate Arm (due to heart failure not related to daratumumab) and 1 patient (2%) in the Short Arm (due to PD); no deaths were observed in the Intense Arm. No deaths occurred within 30 days of the last daratumumab dose. The safety profile of daratumumab monotherapy in SMM remained consistent with other single-agent daratumumab studies, and no new safety signals were observed with longer follow-up.</p>
<i>Study Status</i>	Ongoing.

AQUILA (SMM3001)

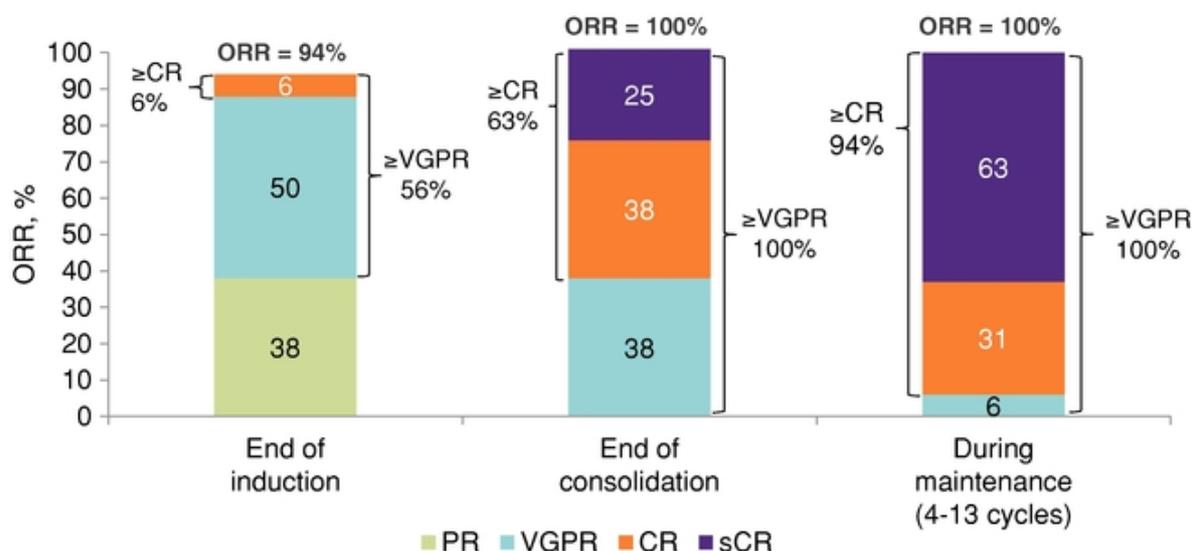
Study Design (Published in the Journal of Clinical Oncology, June 2018)

A randomized, open-label, multicenter study of daratumumab subQ versus active monitoring (no study medication) in patients with high-risk SMM. Eligible patients (≥ 18 y) have had a confirmed diagnosis of SMM for ≤ 5 years, have factors indicating a high risk of progression, and have an Eastern Cooperative Oncology Group, or ECOG, performance status of ≤ 1 , which refers to impact of the disease on the patient's daily living abilities. The primary endpoint is PFS as assessed by an independent review committee. Secondary endpoints include time to biochemical or diagnostic (SLiM-CRAB) progression, ORR, CRR, duration of and time to response, time to first-line treatment for MM, PFS on first-line treatment for MM, incidence of MM with adverse prognostic features and OS. Disease will be evaluated per IMWG response criteria. Up to approximately 360 patients are expected to be randomized (1:1) to the 2 arms.

Study Status Recruiting.

Frontline Treatment for Transplant Eligible Patients. In addition to the Phase III CASSIOPEIA study of daratumumab in combination with VTd described above, Janssen is currently conducting the Phase II GRIFFIN and Phase III PERSEUS trials to study daratumumab as a frontline treatment, in combination with VRd, for patients with MM who are eligible for high dose chemotherapy and stem cell transplant, compared with treatment by VRd alone and recently announced the Phase III AURIGA trial, which will compare subQ daratumumab in combination with lenalidomide as maintenance treatment in patients with newly diagnosed MM who are MRD positive after frontline ASCT, compared with maintenance treatment by lenalidomide alone. In December 2018, Janssen reported preliminary results of the GRIFFIN study at ASH. The second phase of the study is currently ongoing and we expect Janssen to release efficacy data for the GRIFFIN study in 2019. In addition, the PERSEUS study comparing daratumumab in combination with VRd versus VRd alone as a frontline treatment for newly diagnosed patients with MM is currently ongoing. The GRIFFIN, PERSEUS and AURIGA studies are described below.

GRIFFIN (MMY2004)



Investigator-assessed response rate at median follow-up of 16.8 months for safety run-in of 16 patients receiving D-VRd.

Source: Janssen Presentation at ASH, December 2018

<i>Study Design</i>	222-patient ongoing multicenter, randomized, open-label, active-controlled Phase II study comparing daratumumab combined with bortezomib, lenalidomide and dexamethasone, or D-VRd, versus bortezomib, lenalidomide and dexamethasone, or VRd, alone in subjects with frontline MM eligible for high-dose chemotherapy and ASCT. A 16-patient safety run-in phase was performed to assess potential dose limiting toxicities during Cycle 1 of D-VRd.
<i>Safety Run-in Results</i> (Presented at ASH, December 2018; data cutoff October 24, 2018)	<p>All 16 patients in the safety run-in phase had completed ³⁹ cycles of D-VRd, including ³³ cycles of maintenance as of the data cutoff. By the end of consolidation, all patients reached VGPR or better and 63% achieved CR or sCR per investigator assessments. MRD negativity (10^{-5} using Clonoseq2) was seen in 8 (50%) patients. Responses continued to deepen during maintenance. All 16 patients underwent successful mobilization with subsequent transplant.</p> <p>After a median follow-up time of 16.8 months, 15 (94%) patients remained progression free on study treatment. D-VRd was active with an investigator-assessed VGPR+ rate of 100% and a sCR+CR rate of 63% after consolidation therapy. MRD negativity was seen in a subset of patients, and further analysis is underway.</p>
<i>Safety Data</i>	<p>The overall safety profile of D-VRd was consistent with those previously reported for daratumumab and VRd, with manageable toxicity and no new safety findings with longer therapy. All 16 patients experienced ³¹ TEAE, with 11 (69%) patients having ³¹ serious AEs, or SAE, including 3 (19%) patients with ³¹ SAE related to daratumumab.</p> <p>The most commonly reported (in >25% of patients) hematologic TEAEs of all grades included neutropenia (75%), lymphopenia (75%), thrombocytopenia (50%), leukopenia (50%) and anemia (44%) and non-hematologic TEAEs of all grades included diarrhea (56%), fatigue (56%), hypocalcemia (50%), constipation (50%), nausea (38%), vomiting (38%), peripheral edema (38%), pyrexia (38%), upper respiratory tract infection (38%), hypokalemia (38%), cough (31%), hypoalbuminemia (31%), hypomagnesemia (31%), insomnia (31%), pain in extremity (31%), peripheral sensory neuropathy (31%), pneumonia (25%), hypophosphatemia (25%) and rash (25%). Fourteen (88%) patients had Grade 3-4 TEAEs, with 10 (63%) related to daratumumab. The most commonly reported (in ^{310%} of patients) Grade 3-4 TEAEs included neutropenia (31%), pneumonia (25%), thrombocytopenia (25%), lymphopenia (19%), febrile neutropenia (13%), leukopenia (13%), rash (13%), and hypophosphatemia (13%). Thirteen (81%) patients experienced infections, including upper respiratory tract infection (6), pneumonia (4), bronchitis (2), otitis (2) and viral gastroenteritis (2). No deaths due to SAEs were reported, and no patient discontinued treatment due to an AE. Daratumumab infusion reactions were reported in 4 (25%) patients.</p>
<i>Study Status</i>	Janssen has reported that enrollment to the 222-patient main phase of the randomized study is now complete, and data regarding the primary endpoint (sCR after consolidation) is expected to be available in 2019.

PERSEUS (MMY3014)

Study Design Phase III study expected to evaluate the subQ formulation of daratumumab in combination with VRd compared to VRd alone in approximately 690 participants with previously untreated MM. The primary endpoint of the study is PFS from randomization to the date of disease progression or death.

Study Status Recruiting. Trial-in-progress poster presentation expected at ASCO, June 2019.

AURIGA (MMY3021)

Study Design Phase III, randomized, open-label study expected to evaluate the subQ formulation of daratumumab in combination with lenalidomide versus lenalidomide alone as maintenance treatment in approximately 214 patients with newly diagnosed MM who are MRD positive after frontline ASCT and have no prior anti-CD38 exposure. Patients will be randomized to receive either subQ daratumumab in combination with lenalidomide or lenalidomide alone. In the daratumumab treatment arm, patients will receive 1,800 mg of subQ daratumumab QW for Cycles 1-2, Q2W for Cycles 3-6 and Q4W thereafter. Lenalidomide will be administered at 10 mg orally on days 1-28 with 15 mg given daily if it is well tolerated after three cycles. Both arms will continue until PD, unacceptable toxicity or for a maximum of 36 cycles. The primary endpoint is the percentage of patients with MRD negative status at 12 months. Secondary endpoints include PFS, overall and durable MRD, CR, sCR, OS, health-related quality of life and number of participants with AEs.

Study Status Not yet recruiting.

Frontline Treatment for Non-Transplant Eligible Patients. In addition to the ALCYONE study of daratumumab in combination with VMP and the MAIA study of daratumumab in combination with Rd described above, Janssen is studying daratumumab for the treatment of transplant-ineligible patients in combination with other treatments, including VRd in the Phase III CEPHEUS study and VMP in the Phase III OCTANS follow on to the ALCYONE study in the Asia Pacific region. The CEPHEUS and OCTANS studies are described below.

CEPHEUS (MMY3019)

Study Design Phase III study to evaluate the subQ formulation of daratumumab in combination with bortezomib, lenalidomide and dexamethasone, or VRd, compared to VRd alone in approximately 360 participants with frontline MM for whom hematopoietic stem cell transplant is not planned as initial therapy. The primary endpoint of the study is the percentage of participants with negative MRD status, measured after randomization and prior to PD or subsequent anti-MM therapy. Secondary endpoints include PFS, CR and OS.

Study Status Recruiting. Trial-in-progress poster presentation expected at ASCO, June 2019.

OCTANS (MMY3011)

Study Design 210-patient randomized, open-label, multicenter, controlled, Phase III study of bortezomib, melphalan and prednisone, or VMP, compared to daratumumab in combination with VMP, in subjects in the Asia Pacific region with previously untreated MM who are ineligible for high-dose therapy. Patients are expected to be recruited from China, Hong Kong, South Korea and Taiwan. The primary endpoint of the study is VGPR or better rate, defined as the proportion of participants achieving VGPR and CR (including sCR) criteria during or after the study treatment, at 6 months and at 3 years after the last participant first dose.

Study Status Recruiting.

Relapsed or Refractory Multiple Myeloma. Building on the success of the POLLUX and CASTOR studies demonstrating the efficacy of daratumumab for the treatment of patients with R/R MM, several additional studies are ongoing to assess the efficacy of daratumumab for other applications in the treatment of R/R MM. Amgen is currently conducting the Phase III CANDOR study through a master clinical trial collaboration and supply agreement with Janssen to evaluate the efficacy and safety of daratumumab in combination with Amgen's carfilzomib. The CANDOR study is assessing daratumumab in combination with carfilzomib and dexamethasone, or Kd, versus Kd alone. The Phase III APOLLO study will assess daratumumab in combination with pomalidomide and dexamethasone, or Pom-d, versus Pom-d alone. A Chinese study assessing daratumumab in combination with bortezomib and dexamethasone, or Vd, versus Vd alone is also ongoing. Each of these studies is described below. In addition, Janssen is conducting other Phase I and Phase II studies assessing daratumumab in combination with other regimens for the treatment of R/R MM.

CANDOR (NCT03158688)

Study Design 466-patient randomized, open-label, Phase III study comparing daratumumab in combination with carfilzomib and dexamethasone, or Kd, to Kd alone in patients with R/R MM. CANDOR is co-sponsored by Amgen and Janssen and is being conducted by Amgen. The primary endpoint of the study is PFS.

Study Status Ongoing. We expect Amgen to release data for this study in 2019.

APOLLO (MMY3013)

Study Design (Presented at ASH, December 2018) Randomized, open-label, multicenter, Phase III study expected to include approximately 302 patients with R/R MM who have previously been treated with both lenalidomide and a PI. Patients will be randomized 1:1 to either receive the subQ formulation of daratumumab in combination with pomalidomide and dexamethasone, or Pom-d, or Pom-d alone. The primary endpoint of the study is PFS. The study is being conducted in Europe by the European Myeloma Network in collaboration with Janssen.

Study Status Recruiting.

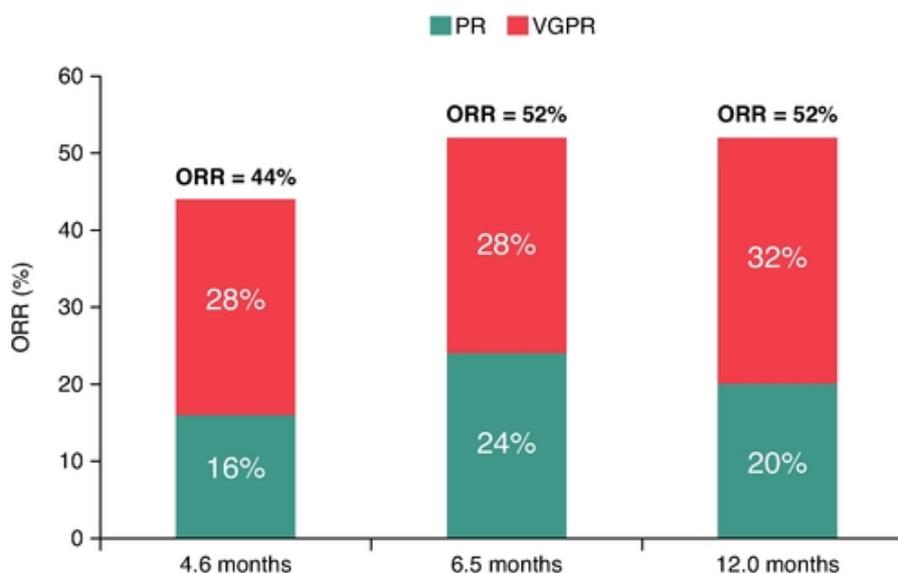
China Study (MMY3009)

Study Design Approximately 210-patient randomized, open-label, multicenter, Phase III study of bortezomib and dexamethasone, or Vd, compared to Vd in combination with daratumumab in Chinese subjects with R/R MM. The primary endpoint of the study is PFS from the date of randomization to either PD or death, whichever occurs first.

Study Status Recruiting.

Subcutaneous Formulation of Daratumumab. In addition to subQ administration of daratumumab in the AQUILA, PERSEUS, CEPHEUS, AURIGA and APOLLO studies outlined above, Janssen is currently conducting two studies specifically to assess the safety, efficacy and pharmacokinetics of subQ administration of daratumumab as compared with IV administration. Janssen presented interim results for Part 2 of the Phase Ib PAVO study at ASH in December 2018 and we reported positive topline results from the Phase III COLUMBA study in February 2019, as described above. In addition, Janssen is conducting the Phase II PLEIADES study to evaluate the potential clinical benefit of subQ daratumumab administered in combination with standard MM treatment regimens, including VRd, VMP, Rd and Kd. The PAVO and PLEIADES studies are described below.

PAVO (MMY1004)



Overall response rate at median follow-up of 4.6, 6.5 and 12.0 months for 25 patients receiving daratumumab subQ 1,800 mg.

Study Design Ongoing non-randomized, open-label, multicenter Phase Ib, parallel assignment dose escalation/expansion study to assess the safety, pharmacokinetics and antitumor activity of subQ delivery of daratumumab to patients with R/R MM. Primary endpoints were Ctrough of daratumumab at the end of weekly dosing on Cycle 3 Day 1, or C3D1, and safety. Secondary endpoints included ORR, rate of CR, and immunogenicity measures.

*Initial Results for
Parts 1 and 2
(Presented at ASH,
December 2018)*

The reported modeling of data from Part 1 showed that the fixed daratumumab subQ 1,800 mg dose provided a similar or higher C3D1 Ctrough when compared to historical data with 16 mg/kg IV. Immunogenicity of daratumumab and recombinant human hyaluronidase enzyme, or rHuPH20, was similar to previous experience. The report also concluded that these data validated the dose selection of 1,800 mg for ongoing Phase III clinical trials of daratumumab subQ in MM, SMM, and amyloidosis.

Based on these data, the 1,800 mg dose was selected for further evaluation in Part 2. At the clinical cutoff date, 25 patients were enrolled in Part 2 of the study. Patients received a median of 3 (range: 2-9) prior lines of therapy, with 56% double refractory to both PI and immunomodulatory agent. Part 2 results indicated that daratumumab subQ enabled dosing in 3-5 minutes and improved patient convenience. Daratumumab subQ was well-tolerated in patients with R/R MM with low rates of infusion-related reactions, or IRRs, and no new safety signals compared with daratumumab IV. Over 50% of patients responded to treatment in Part 2 of the study. At the data cutoff date, median duration of response was not reached (95% CI: 4.6-NE). Median PFS was 12.3 months (95% CI, 5.6-NE) in all treated patients and 11.7 months (95% CI, 2.8-NE) in patients refractory to both a PI and an immunomodulatory agent. At a median follow up of 4.6, 6.5, and 12.0 months, ORR was 44% (28% VGPR; 24% PR), 52% (28% VGPR; 24% PR) and 52% (32% VGPR; 20% PR), respectively.

Safety Data

The most common (≥20%) TEAEs included lymphopenia (32%), thrombocytopenia (24%), back pain (24%), diarrhea (24%), fatigue (20%), asthenia (20%), nausea (20%), headache (20%), nasopharyngitis (20%), pyrexia (20%), arthralgia (20%), cough (20%), and upper respiratory tract infection (20%). The incidence (16%) and severity of IRRs (mostly Grade 1-2) with daratumumab subQ was low, the majority of which occurred on Cycle 1 Day 1, and no discontinuations due to IRRs were observed. Grade 3 hypertension was reported as an IRR in 2 patients. Grade 1 injection-site TEAEs were reported with daratumumab subQ in 3 patients (induration, erythema, injection-site discoloration, and hematoma (n = 1 each)). No treatment discontinuations occurred due to TEAEs.

Study Status

Recruiting.

PLEIADES (MMY2040)

Study Design

Non-randomized, multicenter, parallel assignment, open label, Phase II study intended to evaluate the clinical benefit of subQ daratumumab administered in combination with standard MM treatment regimens in 199 participants with MM. SubQ daratumumab is being tested in combination with four MM treatment regimens: VRd and VMP in patients with newly diagnosed MM; Rd in patients with R/R MM; and Kd in patients with R/R MM who have received only 1 prior line of therapy for MM which included at least 2 consecutive cycles of lenalidomide therapy. Primary endpoints are ORR and VGPR or better rate 18 months after completion of enrolment. Secondary endpoints include ORR and VGPR or better rate after 18 months following completion of enrolment, IRRs, CR, DoR and MRD-negative rate.

Study Status

Ongoing.

Daratumumab for the Treatment of Non-MM Indications

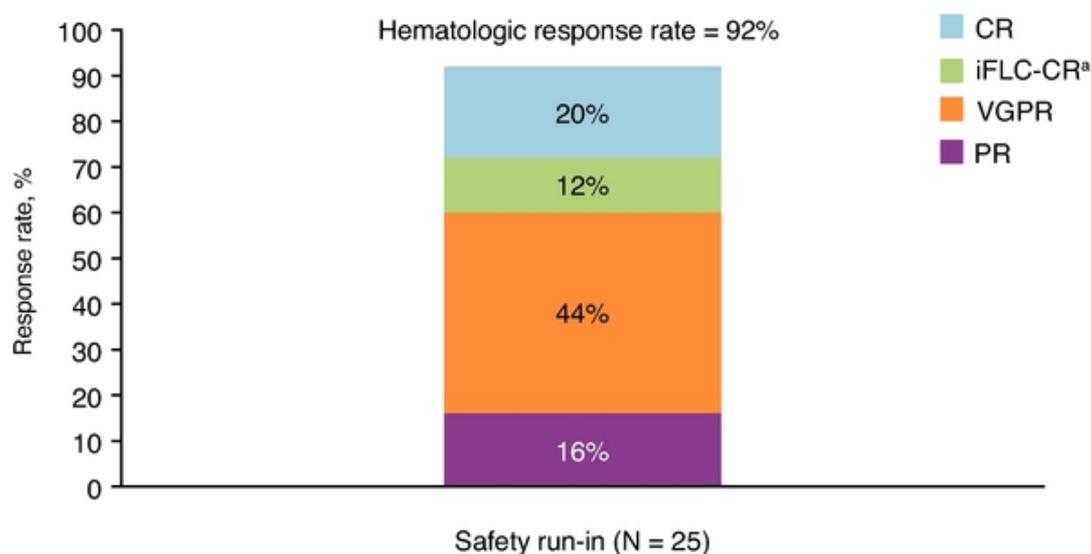
In addition to the ongoing studies of daratumumab in MM, Janssen is conducting a number of studies to assess the use of daratumumab in the treatment of other malignant and pre-malignant diseases in which CD38 is over-expressed, including amyloidosis, acute lymphocytic leukemia, or ALL, and NKT-cell lymphoma. Janssen had also started certain studies of daratumumab in solid tumors, but terminated the ongoing studies in May 2018 after a planned review by a data monitoring committee. The data monitoring committee in a head-to-head study of daratumumab for the treatment of NSCLC observed no benefit and a numerical increase in mortality-related events, which were subsequently determined to be primarily due to disease progression, in the combination treatment arm of the study. Janssen is also exploring other possible indications of daratumumab.

Amyloidosis

Amyloidosis is a disease that occurs when amyloid proteins, which are abnormal proteins, accumulate in tissues and organs via clonal expansion of CD38+ plasma cells. When the amyloid proteins cluster together they form deposits which damage the tissues and organs. Amyloidosis most frequently affects the kidneys, heart, nervous system, liver and digestive tract. Amyloidosis can be treated with chemotherapy, dexamethasone, stem cell transplants and supportive therapies, but there is currently no cure. An estimated 16,000 people in the United States suffer from amyloidosis. Approximately 12-15% of MM patients will develop light chain amyloidosis, or AL amyloidosis. AL amyloidosis is the most common type of amyloidosis in United States, with approximately 3,000 to 4,000 new cases diagnosed annually.

Janssen is currently conducting the Phase III ANDROMEDA study of daratumumab in combination with certain other therapies for the treatment of frontline AL amyloidosis. Based on the safety run-in of this study, Janssen reported that daratumumab in combination with CyBord was observed to be tolerable in patients with AL amyloidosis with a low IRR rate and no new safety signals were observed.

ANDROMEDA (AMY3001)



Except for two patients, all remaining patients demonstrated hematologic responses based on IACC Guidelines; IACC, International Amyloidosis Consensus Criteria; LLN, lower limit of normal; iFLC, involved free light chain. ^aPatients with negative serum and urine immunofixation and normalization of involved FLC level; if uninvolved FLC level is below LLN and FLC ratio is abnormal or normal, patient will be assigned to iFLC-CR (involved FLC CR) response category.

Source: Janssen Presentation at ASCO, June 2018

<i>Study Design</i>	Randomized, open-label Phase III study intended to evaluate the efficacy and safety of daratumumab, or D, in combination with cyclophosphamide, or Cy, bortezomib, or Bor, and dexamethasone, or d, or together CyBord and, together with daratumumab, D-CyBord, compared to CyBord alone in the treatment of frontline AL amyloidosis. Approximately 360 patients are expected to be enrolled in the study. The primary endpoint of the study is overall Complete Hematologic Response, or CHR, according to the International Amyloidosis Consensus Criteria, which refers to the normalization of free light chain levels and ratio, negative serum and urine immunofixation, after approximately three years. Secondary endpoints include PFS, Major Organ Deterioration PFS, or MOD-PFS, ORR, OS, VGPR and time to next treatment.
<i>Safety Run-in Results</i> (Presented at American Society of Clinical Oncology, or ASCO, Annual Meeting, June 2018)	The safety run-in of D-CyBord included 25 eligible patients with 1 or more involved organs and ECOG score lower than or equal to 2. Patients received a concentrated co-formulation of daratumumab (1,800 mg in 15 mL) and rHuPH20 (30,000 U) in a single, pre-mixed vial, given by manual subQ injection QW, in Cycles 1-2, Q2W in Cycles 3-6, and Q4W thereafter up to 2 years. Cy 300 mg/m ² PO or IV and Bor 1.3 mg/m ² subQ were given on Days 1, 8, 15, 22 of each 28-day cycle for up to 6 cycles and d 40 mg was given QW. Dosing was staggered more than or equal to 48 hours between patients to assess IRRs. Safety was evaluated after 10 or more patients received 1 or more treatment cycles. The 25 patients participating in the safety run-in had a median age of 68 (range: 35-83) years and a median of 61 (range: 16-157) days from diagnosis. Patients had a median of 2 (range: 1-3) involved organ, with kidney involvement affecting 60% of patients and 60% of patients with 2 or more organs involved. At baseline, 24% and 56% of patients were grouped into Mayo Clinic cardiac stage I and II, respectively, and 88% of patients had an ECOG score of less than or equal to 1. Patients received a median of 4 (range: 1-7) treatment cycles with a median duration of 3.1 (range: 0.2-5.8) months of treatment.
<i>Safety Data</i>	In the safety run, the most common (≥20%) TEAEs were diarrhea (48%), peripheral edema (36%), nausea (32%), anemia (32%), lymphopenia (28%), fatigue (28%), constipation (28%), coughing (24%), upper respiratory tract infection (24%), injection site erythema (20%), hyperglycemia (20%) and hypokalemia (20%). Dyspnea and peripheral edema were reported in 3 (12%), and 9 (36%), respectively. Grade 3/4 TEAEs of hypertension, diarrhea and anemia occurred in 2 (8%) patients each and serious TEAEs of anemia, peripheral swelling, cellulitis, myopathy and acute kidney injury occurred in 1 (4%) patient each. Grade 1 IRRs occurred in 1 (4%) patient.
<i>Study Status</i>	Janssen announced in June 2018 that randomization had begun.

Acute Lymphocytic Leukemia

Acute lymphocytic leukemia, or ALL, is a type of blood cancer and is also known as acute lymphoblastic leukemia or acute lymphoid leukemia. The risk for developing ALL is highest in children younger than 5 years of age. The risk then declines slowly until the mid-20s, and begins to rise again slowly after age 50. Overall, about 4 of every 10 cases of ALL are in adults. Although most cases of ALL occur in children, most deaths from ALL (about 4 out of 5) occur in adults. According to the American Cancer Society, about 5,930 people are expected to be diagnosed with ALL and 1,500 people are expected to die from ALL in the United States in 2019. ALL starts from white blood cells in the

bone marrow. The bone marrow produces immature cells that develop into leukemic white blood cells called lymphoblasts. These abnormal cells are unable to function properly, and they can build up and crowd out healthy cells. ALL invades the blood and can spread throughout the body to other organs, such as the liver, spleen, and lymph nodes, but it does not normally produce tumors. As an acute type of leukemia, it can progress quickly and, without treatment, can be fatal within a few months. Standard treatment for ALL can include one or more of chemotherapy, targeted therapy to attack specific abnormalities of the cells, radiation therapy and stem cell transplant. In addition, clinical studies for new treatments for ALL are ongoing, including Janssen's Phase II DELPHINUS study for daratumumab in the treatment of ALL.

DELPHINUS (ALL2005)

Study Design

A non-randomized, open-label, multicenter, Phase II, parallel assignment study to evaluate the efficacy and safety of daratumumab in pediatric and young adult subjects with R/R Precursor B-cell or T-cell ALL or Lymphoblastic Lymphoma, or LL. Approximately 69 patients are expected to be enrolled in the study. Participants will be treated in one of two cohorts: Cohort 1 will include participants with B-cell ALL/LL in second or greater R/R to at least 2 prior induction regimens; Cohort 2 will include participants with T-cell ALL/LL in first R/R to at least 1 prior induction/consolidation regimen. Participants in Cohort 1 will receive daratumumab in combination with vincristine and prednisone. Participants in Cohort 2 will receive daratumumab in combination with vincristine, prednisone, doxorubicin and peg-asparaginase in Cycle 1 and daratumumab in combination with cyclophosphamide, cytarabine, 6-mercaptopurine and methotrexate in Cycle 2. Each Cycle is 28 days.

The primary endpoints of the study are CR for B-cell ALL within 2 Cycles and CR for T-cell ALL at the end of Cycle 1. In each case, CR is defined as less than 5% blasts in the bone marrow; no evidence of circulating blasts or extramedullary disease; full recovery of peripheral blood counts (platelets greater than $100 \times 10^9/L$ and absolute neutrophil count, or ANC, greater than $1.0 \times 10^9/L$). Secondary endpoints include ORR, event-free survival, relapse-free survival, OS, percentage of patients MRD negative, percentage of patients to receive an allogeneic hematopoietic stem cell transplant, maximum and minimum observed plasma concentration of daratumumab, number of patients with anti-daratumumab antibodies and concentration of daratumumab in cerebrospinal fluid.

Study Status

Recruiting.

Natural Killer / T-cell Lymphoma, Nasal Type

Natural killer / T-cell lymphoma, or NKTCL, Nasal Type is a non-Hodgkin lymphoma, or NHL, that is almost always associated with Epstein-Barr virus. Early-stage, localized nasal disease is highly curable with combination therapy. However, for disseminated and refractory cases, the 5-year survival rate is below 10%. Clinical data from NKTCL patients suggest CD38 as a new prognostic biomarker and novel target for therapy. Janssen is currently conducting a Phase II study of daratumumab for the treatment of patients with R/R NKTCL.

NKT2001

<i>Study Design</i>	An open-label, Phase II, single group assignment study to assess the clinical efficacy and safety of daratumumab in patients with R/R extranodal NKTCL, nasal type. Approximately 32 patients are expected to participate in the study. Stage 1 enrolled 16 patients and stage 2 will enroll another 16. The primary endpoint of the study is ORR from the date of the first daratumumab dose to the date of any response. Secondary endpoints include CR, PFS, DoR, time to response, OS and number of participants with AEs.
<i>Initial Stage 1 Results</i> (Presented at ASH, December 2018; data cutoff March 1, 2018)	<p>The primary endpoint of stage 1 was ORR based on blinded independent central review, or BICR. Secondary endpoints included PFS and DoR based on BICR. A protocol-specified interim futility analysis was planned after approximately 15 patients received 1 or more dose of daratumumab and had 1 or more post-baseline disease evaluation. Futility criterion for ORR was defined as at least 1 of 15 patients with CR/PR, which was met at clinical cutoff. A total of 16 patients were treated at the time of clinical cutoff for the interim analysis. Data from stage 1 showed an ORR of 35.7% in patients with R/R NKTCL (95% CI: 12.8-64.9) and, at a dosage of 16 mg/kg, daratumumab was well tolerated with no new or unexpected safety signals and no treatment discontinuations due to TEAEs. Natural killer cell reductions in peripheral blood were observed in all patients after 1 cycle of daratumumab. Stage 2 of the trial is ongoing.</p> <p>At clinical cutoff, 81.3% of patients discontinued treatment (disease progression: 56.3%, physician decision: 12.5%, patient withdrawal: 12.5%). Median OS was not reached (95% CI: 65-NE), with 6-month OS rate of 58%; all 5 responders remained alive at time of the analysis. There was no clear association between CD38 expression and daratumumab response.</p>
<i>Safety Data</i>	In stage 1, 9 (56%) patients had Grade 3/4 TEAEs. The most common were neutropenia, thrombocytopenia, and hypotension (19% each). No patient discontinued treatment due to TEAEs. IRRs occurred in 69% of patients, all during the first infusion, and all patients recovered and IRRs were resolved on the same day. Three (19%) patients died within 30 days of last treatment dose, 2 of which were due to AEs (both pneumonia) unrelated to daratumumab and 1 due to PD.
<i>Study Status</i>	Recruiting.

Collaboration with Janssen

Daratumumab is being developed by Janssen under an exclusive worldwide license to develop, manufacture and commercialize daratumumab. In August 2012, we entered into a global license and development agreement for daratumumab with Janssen, one of the Janssen Pharmaceutical Companies of Johnson & Johnson. We recorded an upfront license fee of \$55.0 million and Johnson & Johnson Development Corporation, or JJDC, invested DKK 475.2 million (approximately \$80.0 million at the date of the agreement) to subscribe for 5.4 million newly issued shares of Genmab at a price of DKK 88 per share. Under this agreement, we could be entitled to up to approximately \$1.0 billion in development, regulatory and sales milestones, in addition to tiered royalties between 12% and 20% based on Janssen's annual net product sales. The next sales milestones are payable upon net sales reaching \$2.5 billion and \$3.0 billion in a calendar year. The following royalty tiers apply for net sales in a calendar year: 12% on net sales up to \$750 million; 13% on net sales between \$750 million and \$1.5 billion; 16% on net sales between \$1.5 billion and \$2.0 billion; 18% on net sales between \$2.0

billion and \$3.0 billion; and 20% on net sales exceeding \$3.0 billion. The royalties payable by Janssen are limited in time and subject to reduction on a country-by-country basis for customary reduction events, including upon patent expiration or invalidation in the relevant country and upon the first commercial sale of a biosimilar product in the relevant country (for as long as the biosimilar product remains for sale in that country). Pursuant to the terms of the agreement, Janssen's obligation to pay royalties under this agreement will expire on a country-by-country basis on the later of the date that is 13 years after the first sale of daratumumab in such country or upon the expiration of the last-to-expire product patent (as defined in the agreement) covering daratumumab in such country. Although Janssen is fully responsible for developing and commercializing daratumumab under this agreement, and all costs associated therewith, we participate in the development strategy for daratumumab through regular meetings of the joint development and steering committee. See "—Product and Technology Collaborations—Collaborations for our Marketed Products—Janssen Daratumumab License and Development Agreement" for more information regarding our agreement with Janssen.

Since 2012, we have recorded \$105.0 million in development milestone payments, \$70.0 million in regulatory submission milestone payments, \$246.0 million in first commercial sales milestone payments and \$150.0 million in sales milestone payments from Janssen under this agreement. We have also reported \$565.9 million in royalties from Janssen since the commercial launch of DARZALEX in 2015. In 2018, we recorded \$90.0 million in milestone payments and \$262.0 million in royalties, and in the three months ended March 31, 2019, we recorded no milestone payments and \$75.4 million in royalties.

Intellectual Property

We have issued patents and pending patent applications for daratumumab in numerous jurisdictions, including patents issued in the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter do not begin to expire until March 2026. In addition to our key composition of matter patents, we and Janssen have issued patents and pending patent applications in numerous jurisdictions and for specific formulations, indications and combination therapies that may offer additional protection. See "—Intellectual Property" for more information about our patents and other intellectual property.

Ofatumumab

Ofatumumab is a human IgG1k mAb that targets an epitope on the CD20 molecule encompassing parts of the small and large extracellular loops. Ofatumumab directs the body's immune system to fight normal and cancerous B-cells. The CD20 molecule is found on the surface of B-cells, the type of cell which is believed to trigger the inflammatory process that leads to MS. The CD20 molecule is not shed from the cell surface and is not internalized following antibody binding. The Fab domain of ofatumumab binds to the CD20 molecule and the Fc domain mediates immune effector functions to result in B-cell lysis *in vitro*. Data suggest that possible mechanisms of cell lysis include complement-dependent cytotoxicity, or CDC, and antibody-dependent, cell-mediated cytotoxicity, or ADCC.

In November 2002, we announced the launch of our ofatumumab program. From 2002 to 2006, we developed ofatumumab in-house, including obtaining FTD from the FDA in December 2004 and initiating a pivotal Phase III study of ofatumumab in July 2006 for the treatment of patients with CLL who had failed treatment with fludarabine and alemtuzumab or who had failed fludarabine and were intolerant to or ineligible for alemtuzumab. In December 2006, we entered into a co-development and collaboration agreement with GSK, pursuant to which GSK obtained exclusive worldwide rights to develop and commercialize ofatumumab. In 2015, GSK transferred the ofatumumab collaboration for oncology and autoimmune diseases to Novartis. Novartis is now responsible for the development and commercialization of ofatumumab in all potential indications. Under this agreement, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments, as well as certain potential regulatory and sales milestones, of which only certain sales milestones remain. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab.

GSK and Novartis have obtained marketing approvals for ofatumumab, marketed as Arzerra, for the treatment of certain CLL indications in the United States, the European Union and a number of other countries. Due to low and decreasing global demand for Arzerra primarily related to increased competition from new entrants to the CLL treatment space over the past few years, on January 22, 2018, Novartis announced that it intends to transition Arzerra from commercial availability to limited availability in non-U.S. markets through managed access programs or alternative solutions for approved CLL indications where applicable and allowed by local regulations. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan.

Novartis is currently investigating a subQ formulation of ofatumumab for the treatment of relapsing MS, or RMS, in the Phase III ASCLEPIOS I and II clinical studies. Novartis reported that it completed recruitment for these studies in May 2018 and expects to complete the studies during 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to current B-cell therapies. In particular, if its efficacy and safety can be demonstrated in clinical trials, the low-dose subQ administration of ofatumumab currently in clinical testing would allow for more convenient and less disruptive dosing options for MS patients compared to IV-administered therapies. In addition, the Phase II MIRROR study assessing dose-response effects of ofatumumab on efficacy and safety outcomes in patients with RMS, published in May 2018, showed that treatment with ofatumumab resulted in rapid dose-dependent B-cell depletion, which correlated with efficacy outcomes, with no new or unexpected safety findings.

Unless otherwise indicated, data for all ofatumumab clinical studies presented are based on reports we have received from Novartis, reports Novartis has published or presented regarding these studies or information published on clinicaltrials.gov. In addition, our expectations regarding timelines for clinical trial progression or regulatory developments for ofatumumab are generally based on information we have received from Novartis through our collaboration.

Arzerra for the Treatment of Chronic Lymphocytic Leukemia

Ofatumumab, marketed as Arzerra, has been approved for the treatment of certain CLL indications in the United States, the European Union and a number of other countries. In the United States, Arzerra solution for infusion is approved for use in combination with chlorambucil for the treatment of previously untreated patients with CLL for whom fludarabine-based therapy is considered inappropriate, for use in combination with fludarabine and cyclophosphamide for the treatment of patients with relapsed CLL, and for extended treatment of patients who are in complete or partial response after at least two lines of therapy for recurrent or progressive CLL. In the United States, Arzerra is also indicated as a monotherapy for the treatment of patients with CLL who are refractory to fludarabine and alemtuzumab. In January 2018, Novartis announced that it intends to transition the commercial availability of Arzerra to limited availability through managed access programs or alternative solutions for the treatment of approved CLL indications in non-U.S. markets where applicable and allowed by local regulations. Novartis announced that it will work with regulatory authorities to establish managed access programs or alternative solutions so that patients benefiting from Arzerra can remain on treatment. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan.

The overall safety profile of Arzerra in CLL is based on exposure in clinical trials and the post-marketing setting. The most common side effects for Arzerra include AEs associated with IRRs, cytopenias (neutropenia, anemia, thrombocytopenia), and infections (lower respiratory tract infection, including pneumonia, upper respiratory tract infection, sepsis, including neutropenic sepsis and septic

shock, herpes viral infection and urinary tract infection). In addition, the prescribing information for Arzerra includes a warning that Arzerra may cause HBV infection to reoccur, which may cause serious liver problems and death, and may cause PML, a rare brain infection that causes severe disability and can lead to death.

Ofatumumab for the Treatment of Relapsing Multiple Sclerosis

Multiple Sclerosis

Multiple sclerosis, or MS, is a chronic inflammatory, demyelinating and neurodegenerative disorder of the central nervous system that affects the white and grey matter of the brain and spinal cord. MS is one of the most common causes of non-traumatic disability among young and middle-aged adults. There are several different forms of MS. Approximately 85% of patients present with a relapsing-remitting MS disease course at onset, which is characterized by unpredictable recurrent attacks where the symptoms usually evolve over days and are followed by either complete, partial or no neurological recovery. After tissue damage accumulates over many years and reaches a critical threshold, about two-thirds of patients transition to secondary progressive MS, or SPMS, where pre-existing neurologic deficits gradually worsen over time. Relapses can be seen during the early stages of SPMS, but are uncommon as the disease progresses further. About 10% to 15% of patients have gradually worsening manifestations from the onset without clinical relapses, known as primary progressive MS, or PPMS. Patients with PPMS tend to be older, have fewer abnormalities on brain MRI, and generally respond less effectively to standard MS therapies. In 2016, it was estimated that MS affects approximately 400,000 individuals in the United States and 2.5 million worldwide. Initial symptoms typically occur between 20 and 50 years of age, and women are three times more likely to develop MS than men.

Ofatumumab and the Treatment of Multiple Sclerosis

There is currently no cure for MS. Treatment typically focuses on speeding recovery from attacks, slowing the progression of the disease and managing MS symptoms. As noted above, approximately 85% of MS patients initially present with RMS before progressing to SPMS in certain cases. Acute treatment of MS attacks typically includes corticosteroids, such as prednisone and methylprednisolone, and plasmapheresis, in which plasma is removed and separated from blood cells, which are mixed with a protein solution and reinjected into the body. Patients rely on a number of disease-modifying therapies, or DMTs, to modify the progression of MS, including beta interferons and B-cell therapies. The FDA has approved more than a dozen DMTs for the treatment of RMS. The only FDA approved DMT for PPMS is ocrelizumab. Treatment to manage MS symptoms also include physical therapy, muscle relaxants and medications to reduce fatigue, depression, pain or other symptoms.

Novartis is currently assessing the efficacy and safety of a subQ formulation of ofatumumab for the treatment of patients with RMS in the Phase III ASCLEPIOS I and II clinical studies. We believe that ofatumumab may potentially offer a number of competitive advantages in the MS treatment market compared to current B-cell therapies. In particular, if its efficacy and safety can be demonstrated in clinical trials, the low-dose subQ administration of ofatumumab currently in clinical testing would allow for more convenient and less disruptive dosing options for MS patients compared to IV-administered therapies. In addition, the Phase II MIRROR study assessing dose-response effects of ofatumumab on efficacy and safety outcomes for the treatment of patients with RMS, published in May 2018, showed that treatment with ofatumumab resulted in rapid dose-dependent B-cell depletion, which correlated with efficacy outcomes. The MIRROR study also showed manageable safety for the low-dose subQ formulation, with the most common AEs being IRRs, mostly of mild to moderate severity, and the only SAEs to occur during the treatment phase were IRRs occurring in three patients. The majority of SAEs occurred in patients receiving the highest dose of 60 mg of ofatumumab every 12 weeks or every 4 weeks, with fewer SAEs occurring in patients receiving smaller doses of ofatumumab or at lower frequency. The ongoing Phase III ASCLEPIOS I and II trials are testing these efficacy and safety findings in over 1,800 RMS patients receiving 20 mg of ofatumumab every 4 weeks. Novartis reported that it expects to complete the studies during 2019.

Clinical Trials

Novartis is currently conducting two Phase III clinical studies to test the efficacy and safety of a subQ formulation of ofatumumab for the treatment of patients with RMS, ASCLEPIOS I and II. The results of the Phase II MIRROR safety and efficacy study of ofatumumab in patients with MS supported Novartis' decision to proceed with the ASCLEPIOS I and II studies. Novartis reported that it completed recruitment for the ASCLEPIOS I and II studies in May 2018 and expects to complete the studies during 2019. Subject to study completion and achievement of positive results, Novartis has indicated that it plans to evaluate the potential for a regulatory filing soon thereafter. Each of these studies is described below.

MIRROR

<i>Study Design</i>	232-patient Phase IIb double-blind study assessing dose-response effects of ofatumumab on efficacy and safety outcomes in patients with RMS. The primary endpoint of the study was the cumulative number of new gadolinium-enhancing lesions (per brain MRI) at week 12. Patients were randomized to receive 3, 30 or 60 mg of ofatumumab every 12 weeks, 60 mg of ofatumumab every 4 weeks or placebo, in each case for a 24-week period. Safety monitoring continued weeks 24 to 48 with subsequent follow-up evaluating B-cell repletion.
<i>Results</i> (Published in Neurology, May 2018)	Imaging showed that all subQ ofatumumab doses demonstrated reduction of lesions in patients receiving ofatumumab, as compared to patients receiving placebo, with the most significant reduction in cumulative doses of 30 mg or greater every 12 weeks. The cumulative number of new lesions was reduced by 65% for all ofatumumab dose groups vs placebo between weeks 0-12 (HR=0.35; 95% CI: 0.221-0.548, $p < 0.001$). Post hoc analysis (excluding weeks 1-4) estimated a 90% suppression of new lesions vs placebo at week 12 for all cumulative ofatumumab doses of 30 mg or greater every 12 weeks (HR=0.08 (95% CI: 0.044-0.162) to 0.10 (95% CI: 0.056-0.187)). Relapses and safety/tolerability were assessed, and CD19+ peripheral blood B-lymphocyte counts measured. Dose-dependent CD19 B-cell depletion was observed, with greater depletion for the 60 mg dose every 4 weeks (to <2% of baseline levels at maximum depletion) and the 30 and 60 mg doses every 12 weeks (to ~5% of baseline) than for the 3 mg dose every 12 weeks (~25% of baseline). The results showed that complete B-cell depletion was not necessary for lesions to be reduced.
<i>Safety Data</i>	The safety profile was observed to be consistent with existing ofatumumab data. The most common AEs were IRRs that were largely mild to moderate in severity in 97% of patients, most commonly associated with the first dose and diminishing on subsequent dosing. The most common AEs in the ofatumumab groups combined (in 35% of patients in ofatumumab groups) in weeks 0-12 and weeks 12-24, respectively, were infection-related AEs (27%, 21%), IRRs (52%, 13%), nasopharyngitis (9%, 5%) and headache (5%, 5%) and in the 24-week follow-up phase were nasopharyngitis (6%) and urinary tract infection (5%). The only SAEs to occur in 31 patient during the treatment phase were IRRs, occurring in 3 patients; all continued in the study, including 1 patient who reportedly experienced a cytokine-release syndrome within hours of the first ofatumumab (60 mg) dose. Other SAEs occurring in single patients were cholelithiasis and hypokalemia (both with 60 mg ofatumumab every 4 weeks) and angioedema and urticaria (both in the same patient receiving 3 mg ofatumumab). There was no pattern of SAEs in the 24-week follow up phase. During the individualized follow up, 2 (2%) patients, both in the ofatumumab 60 mg every 4 weeks group, reported a total of 2 SAEs: head injury and malignant melanoma stage IV. The latter was considered treatment related, and the patient recovered. Safety monitoring continued weeks 24 to 48 with subsequent individualized follow-up evaluating B-cell repletion.

ASCLEPIOS I AND II

<i>Study Design</i>	Randomized, multicenter, Phase III, double-blind, double-dummy active-controlled, studies comparing the efficacy and safety of subQ ofatumumab versus teriflunomide, a standard treatment in MS, in approximately 900 patients with RMS per study. Patients will be randomized to receive either 20 mg subQ injections of ofatumumab every four weeks or 14 mg of teriflunomide orally once daily. In order to blind for the different formulations, double-dummy masking will be used (i.e. all patients will take injections (containing either active ofatumumab or placebo) and oral capsules (containing either active teriflunomide or placebo)). The primary endpoint of the studies is annualized relapse rate which is the number of confirmed relapses in a 12 month period. Key secondary endpoints include 3-and 6-month confirmed disability worsening and MRI-related outcomes.
<i>Patient Profile</i> (Reported by Novartis following completion of recruitment, May 2018)	Baseline characteristics of patients enrolled in ASCLEPIOS I and II are consistent with a typical RMS population and broadly comparable with other registration trials in RMS, with a relatively high proportion of enrolled patients being previously exposed to one or more DMTs. Patients enrolled in ASCLEPIOS I and II were aged 18-55 years with an Expanded Disability Status Scale, or EDSS, score of 0 to 5.5 at screening. In total, 1884 patients have been enrolled across 385 centers in 37 countries (ASCLEPIOS I=928 and ASCLEPIOS II=956). The enrolled patients represent a typical RMS population: mostly female (>65%), and Caucasian (90%), with more than half having received prior DMT (60%). The mean baseline age for ASCLEPIOS I and II is 38.6 and 38.1 years, the mean duration of MS since first symptom is 8.5 and 8.1 years, and the mean EDSS score is 2.9 and 2.8, respectively. Approximately 40% of patients showed gadolinium-enhancing lesions on brain MRI at screening in each trial.
<i>Study Status</i>	Expected to be completed in 2019.

Collaboration with Novartis

In December 2006, we entered into a co-development and collaboration agreement with GSK, pursuant to which GSK obtained exclusive, worldwide rights to develop and commercialize ofatumumab. This agreement was subsequently amended in 2010. In 2015, GSK transferred the ofatumumab collaboration for oncology and autoimmune diseases to Novartis. Novartis is now responsible for the development and commercialization of ofatumumab in all potential indications. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab. Under the current agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for the treatment of cancer and 10% of worldwide net sales of ofatumumab for non-cancer treatments, as well as certain potential regulatory and sales milestones, of which only certain sales milestones remain. The royalties are on a country-by-country basis subject to reduction in a specified amount based on the market share of competing products or a joint committee determination that a license of intellectual property owned by a third party is necessary for commercialization. Novartis can terminate the agreement in its entirety or on a country-by-country basis at any time on 9 months' prior written notice.

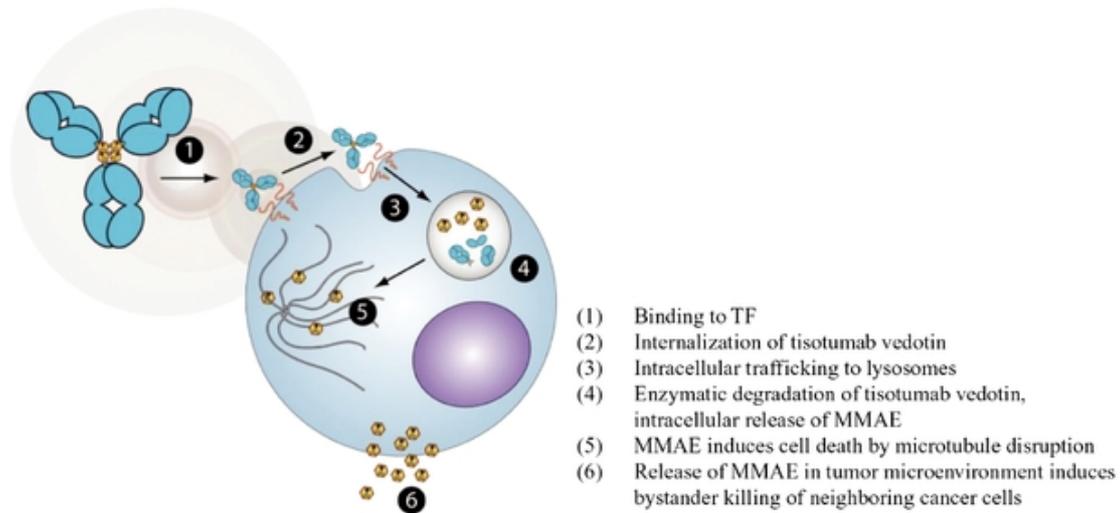
In January 2018, due to low and decreasing global demand for Arzerra primarily related to increased competition from new entrants to the CLL treatment space, Novartis announced that it intends to transition the commercial availability of Arzerra to limited availability through managed access programs or alternative solutions for the treatment of approved CLL indications in non-U.S. markets where applicable and allowed by local regulations. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan. We recorded a one-time payment of \$50.0 million from Novartis in 2018 for lost potential milestones and royalties.

Intellectual Property

We have issued patents and pending patent applications for ofatumumab in numerous jurisdictions, including in the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter do not begin to expire until October 2023, with the U.S. composition of matter patent extended to May 2031. See "—Intellectual Property" for more information about our patents and other intellectual property.

Tisotumab Vedotin

Tisotumab vedotin is an ADC created to target tissue factor, or TF, a protein involved in tumor signaling and angiogenesis. TF is a transmembrane protein that is the main physiological initiator of coagulation and is involved in angiogenesis, cell adhesion, motility and cell survival. TF is expressed on many solid tumors, including cervical, ovarian, pancreatic, prostate and bladder tumors. The presence of TF is associated with poor prognosis. Based on its high expression on many solid tumors and its rapid internalization, we believe that TF is a suitable target for an ADC approach. Tisotumab vedotin combines our human mAb that binds to TF and Seattle Genetics' ADC technology that utilizes a cleavable linker and the cytotoxic drug monomethyl auristatin E, or MMAE. ADCs are mAbs that are linked to cytotoxic or cell-killing agents. Seattle Genetics' ADC technology utilizes mAbs that internalize within target cells after binding to a specified cell-surface receptor. Enzymes present inside the cell catalyze the release of the cytotoxic agent from the mAb, which then results in the desired activity, specific killing of the target cell. The following image illustrates the intended mechanism of action of tisotumab vedotin on TF expressing cells.



We are developing tisotumab vedotin in collaboration with Seattle Genetics under an agreement in which we share all costs and profits for the product on a 50:50 basis. We and Seattle Genetics are currently evaluating tisotumab vedotin for the treatment of cervical cancer and other solid tumors in five clinical studies, including the potentially registrational innovaTV 204 Phase II trial in patients with recurrent or metastatic cervical cancer, Phase II trials for the treatment of ovarian cancer and solid tumors, the Phase I/II innovaTV 201 study of tisotumab vedotin for the treatment of selected types of solid tumors and a Phase I/II combination trial for the treatment of cervical cancer. In March 2019, we presented data at the SGO Annual Meeting from the innovaTV 201 trial indicating that treatment with tisotumab vedotin resulted in encouraging activity in relapsed, recurrent and/or metastatic cervical cancer. Patient enrollment for the innovaTV 204 study was completed in March 2019.

Tisotumab Vedotin for the Treatment of Cervical Cancer

Cervical Cancer

Cervical cancer originates in the cells lining the cervix, which connects the uterus to the birth canal. Various strains of the human papillomavirus, or HPV, play a role in causing most cervical cancer. When exposed to HPV, a woman's immune system typically prevents the virus from doing harm. In a small group of women, however, the virus survives for years, contributing to the process that causes some cells on the surface of the cervix to become cancer cells. Routine medical examinations and HPV vaccines have had a positive impact on the incidence of cervical cancer in the developed world, but have not eliminated it. SEER estimated that 13,240 women would be diagnosed with cervical cancer in the United States in 2018, and that 4,170 would die from cervical cancer. The 5-year survival rate for cervical cancer in the United States is 66.2%, based on 2008-2014 SEER data. Globally, the WHO estimated that 570,000 women would be diagnosed with cervical cancer in 2018, the vast majority of those women being in low- and middle-income countries.

Treatment of Cervical Cancer

Treatment for cervical cancer depends on the type and stage of cancer. For the earliest stages of cervical cancer, either surgery or radiation combined with chemotherapy may be used. For later stages, radiation combined with chemotherapy is usually the main treatment. Chemotherapy alone is often used to treat advanced cervical cancer. In addition to standard treatments, targeted therapies, such as mAbs, may be used in connection with chemotherapy or as a monotherapy after chemotherapy treatment. Current treatment for cervical cancer can yield cures in 80% to 90% of women with early stage I and II cervical cancer and 60% in stage II. However, the prognosis for women with advanced or recurrent cervical cancer remains poor. Standard therapies for previously treated recurrent/metastatic cervical cancer generally result in response rates of less than 15% and a median overall survival of 6 to 8 months.

Clinical Studies of Tisotumab Vedotin for the Treatment of Cervical Cancer

In June 2018, we and Seattle Genetics dosed the first patient in the potentially registrational innovaTV 204 Phase II clinical trial of tisotumab vedotin for the treatment of patients with recurrent and/or metastatic cervical cancer. Patient enrollment for this study was completed in March 2019. Data from the innovaTV 201 Phase I/II trial that evaluated tisotumab vedotin for the treatment of solid tumors, including cervical cancer, supported our decision to move forward with the potentially registrational Phase II innovaTV 204 trial. In December 2018, we and Seattle Genetics announced the innovaTV 205 Phase I/II study of tisotumab vedotin in combination with bevacizumab, pembrolizumab, or carboplatin for the treatment of recurrent or stage IVB cervical cancer. In March 2019, the first patient was dosed in the Phase I/II innovaTV 206 study of tisotumab vedotin as a monotherapy for patients in Japan with recurrent and/or metastatic cervical cancer. We are conducting the clinical studies in cervical cancer and Seattle Genetics is conducting studies in other solid tumors.

innovaTV 201*Study Design*

Two-part Phase I/II study of tisotumab vedotin in several types of solid tumors. Estimated enrollment is 170 patients. Phase I is a classical 3+3 dose escalation design testing various doses of tisotumab vedotin once every three weeks to establish the recommended Phase II dose, or RP2D, and maximum tolerated dose as well as the safety profile of tisotumab vedotin. Phase II of the study investigates seven indications in parallel expansion cohorts. The primary endpoint of the study was the safety and tolerability of tisotumab vedotin, assessed by the frequency of AEs, SAEs, IRRs, Grade 3 or worse AEs, and TEAEs related to tisotumab vedotin. Secondary endpoints include ORR, disease control rate, or DCR (defined as CR, PR or stable disease, or SD), PFS and DoR.

Phase I/II Data

(Published in *The Lancet*, February 2019; data cutoff February 1, 2018 (July 24, 2017 for cervical cancer cohort activity analysis))

In Phase I, 27 eligible patients were enrolled to determine RP2D. Due to all three dose-limiting toxicities in Phase I (including Grade 3 type 2 diabetes mellitus, mucositis, and neutropenic fever) occurring at the 2.2 mg/kg dose level, 2.0 mg/kg of tisotumab vedotin IV once every 3 weeks was established as the RP2D. As of April 26, 2018, 147 patients were enrolled in the Phase II dose-expansion phase, representing seven types of solid tumors. At data cutoff, the median follow-up time was 2.8 months (range: 1.4-4.4). Of 147 patients treated, 27 (18%) required one or more dose reductions. Across tumor types, the confirmed proportion of patients who achieved an objective response was 15.6% (95% CI: 10.2-22.5), all of which were partial responses. Among responders, the median confirmed DoR was 5.7 months (95% CI: 3.0-9.5) months and the median PFS was 3.0 months (range: 2.8-4.1) with 89 events.

Phase IIa Data for Cervical Cancer Cohort
(Presented at the SGO Annual Meeting, March 2019, data cutoff, September 30, 2018)

Initial data from Phase IIa indicated that tisotumab vedotin had encouraging activity in previously treated recurrent or metastatic cervical cancer and the protocol was amended in September 2017 to expand the cervical cancer cohort to 55 patients. As of the data cutoff, the 55-patient cervical cancer expansion cohort showed a confirmed ORR of 22% (95% CI: 12%-35%) by independent review committee, or IRC, assessment and 24% (95% CI: 13%-37%) by investigator-assessment, with 35% (95% CI: 22%-49%) of patients having a confirmed or unconfirmed complete or partial response by IRC-assessment. IRC-assessment confirmed CR in 1 (2%) patient and PR in 11 (20%) patients. IRC-assessed DCR was 56% (95% CI: 42%-70%), with 19% of patients with best response of SD. Median time to response was 2.1 months (range: 1.1-4.6). Median IRC-assessed DoR was 6.0 months (range: 1.0-9.7) and median PFS was 4.1 months (95% CI: 1.7-6.7), with a 6-month PFS rate of 40% (95% CI: 24%-55%). Median duration of follow-up at the data cutoff was 3.5 months (range: 0.6-11.8).

Safety Data for Phase I/II (data cutoff February 1, 2018)

In the 147-patient expansion phase, 67 (46%) patients experienced a TEAE and thirty-nine (27%) had a TEAE related to tisotumab vedotin, with IRRs occurring in 17 (12%) patients. The most common (in [≥]20% of patients) TEAEs of any Grade were epistaxis (69%), fatigue (56%), nausea (52%), alopecia (44%), conjunctivitis (43%), decreased appetite (36%), constipation (35%), diarrhea (30%), vomiting (29%), peripheral neuropathy (22%), dry eye (22%) and abdominal pain (20%). The most common (in >2% of patients) AEs of Grade 3 or worse were fatigue (10%), anaemia (5%), abdominal pain (4%), hypokalemia (6.4%), conjunctivitis (3%), hyponatraemia (3%) and vomiting (3%). Discontinuations related to AEs occurred in 32 (22%) patients. Sixty (41%) patients had a TEAE of at least Grade 3 that was related to tisotumab vedotin. There were nine deaths across all study phases (three in the dose-escalation phase unrelated to the drug and six in the dose-expansion phase) with one case of pneumonia in the dose-expansion phase considered possibly related to study treatment.

Safety Data for Cervical Cancer Cohort (data cutoff, September 30, 2018)

In the cervical cancer expansion cohort, the most common ([≥] 20%) TEAEs were fatigue (51%), epistaxis (51%), nausea (49%), conjunctivitis (42%), alopecia (40%), decreased appetite (38%), peripheral neuropathy (36%), constipation (36%), vomiting (35%), diarrhea (29%), abdominal pain (27%), anemia (24%), dry eye (24%) and urinary tract infection, pyrexia, pruritus and hypokalemia (each 20%). The most common ([≥] 5%) Grade 3 or 4 TEAEs were anemia (11%), fatigue (9%), vomiting (7%) and nausea, abdominal pain and hypokalemia (each 5%). Seven patients (13%) had a dose reduction due to an AE. The most common adverse events of special interest, or AESI, of any grade were bleeding-related events (73%), ocular events (65%) and neuropathies (55%). The most common Grade 3 AESIs were peripheral neuropathy (11%), vaginal hemorrhage (4%) and conjunctivitis (2%). No Grade ³ 4 AESIs were observed. Most AESIs were low grade and no treatment related deaths occurred.

innovaTV 204

Study Design

A single arm, multicenter, international Phase II trial of tisotumab vedotin in patients with cervical cancer who have relapsed or progressed on or after platinum-containing chemotherapy and who have received or are ineligible for bevacizumab. Estimated enrollment is 100 patients. The primary endpoint of the study is ORR as assessed by an independent review committee. The trial will also assess DoR, PFS, OS and safety.

Study Status

Patient enrollment for this potentially registrational study was completed in March 2019.

innovaTV 205

Study Design Phase I/II study of tisotumab vedotin in combination with bevacizumab, pembrolizumab, or carboplatin in subjects with recurrent or stage IVB cervical cancer. The trial consists of a dose escalation part and an expansion part. The expansion part of the trial will be initiated once the RP2D of the combinations have been determined in the dose escalation part. The primary endpoint of Part 1 of the study is Dose Limiting Toxicities, or DLTs, to establish the Maximum Tolerated Dose, or MTD, and RP2D of tisotumab vedotin in combination. The primary endpoint of Part 2 of this study is ORR. Secondary endpoints include AEs, ORR, DoR, time to response, PFS and OS.

Study Status Recruiting.

innovaTV 206

Study Design Phase I/II open label, single arm study of tisotumab vedotin as a monotherapy for patients in Japan with advanced solid malignancies. The trial consists of a dose escalation part and an expansion part. The dose escalation part will determine the MTD and/or the RP2D and the safety profile of tisotumab vedotin in subjects with solid malignancies. The expansion part of this trial will enroll subjects with cervical cancer to provide further data on the safety, tolerability, pharmacokinetics and anti-tumor activity of tisotumab vedotin. The primary endpoint of Part 1 of the study is to determine the MTD and RP2D. Primary endpoints of both parts of the study include AEs, SAEs, DLTs and certain pharmacokinetic measures. Secondary endpoints include ORR, DoR and time to response.

Study Status Recruiting. First patient dosed March 2019.

Tisotumab Vedotin for the Treatment of Other Solid Tumors

Beyond recurrent and/or metastatic cervical cancer, we believe there may be opportunities for tisotumab vedotin in earlier lines of cervical cancer and in other solid tumors that express TF. We and Seattle Genetics announced two key clinical trials in 2018 intended to assess the activity, safety, and tolerability of tisotumab vedotin for the treatment of selected solid tumors and to determine the safety profile and efficacy of tisotumab vedotin for the treatment of platinum-resistant ovarian cancer.

innovaTV 207

Study Design Open-label, multicenter, Phase II study of tisotumab vedotin for locally advanced or metastatic solid tumors. The primary goal of this global trial is to assess the activity, safety and tolerability of tisotumab vedotin for the treatment of selected solid tumors. Patients who meet eligibility criteria will be enrolled into one of several cohorts of tumor types known to express TF. We expect to enroll up to approximately 200 patients for this study. Patients will be treated with single agent tisotumab vedotin every three weeks. The primary endpoint of this study is ORR, based on the proportion of patients who achieve a confirmed CR or PR as assessed by the investigator.

Study Status Recruiting. Data expected to be presented at ASCO, June 2019.

innovaTV 208*Study Design*

Randomized, open-label, Phase II study to determine the safety of tisotumab vedotin and to assess its efficacy for platinum-resistant ovarian cancer. In this study, we will be testing different doses of tisotumab vedotin administered at different times. We will compare the safety profiles and ability to treat tumors of these different doses and schedules. This study will include safety run-in group of up to 12 patients with a dose-dense treatment schedule. In a dose-dense schedule, smaller doses are given more frequently. After the run-in period is completed, two additional groups will be included in the study. One group will receive tisotumab vedotin once every 3 weeks (21 day cycles). The other group will receive tisotumab vedotin once a week for 3 weeks followed by 1 week off (28-day cycles). We expect to recruit up to approximately 142 patients in this study. The primary endpoints of this study are incidence of dose limiting toxicities in the run-in phase and confirmed ORR in Part 2 of the study, based on the proportion of patients who achieve a confirmed CR or PR as assessed by the investigator.

Study Status

Recruiting. Data expected to be presented at ASCO, June 2019.

Collaboration with Seattle Genetics

In October 2011, we entered into a license and collaboration agreement with Seattle Genetics granting us an exclusive right to utilize Seattle Genetics' ADC technology with our HuMax-TF antibody in return for milestone payments and royalties. We also granted Seattle Genetics a right to exercise a co-development and co-commercialization option at the end of Phase I clinical development for tisotumab vedotin. In August 2017, Seattle Genetics exercised this option to co-develop and co-commercialize tisotumab vedotin with us. Seattle Genetics will be responsible for tisotumab vedotin commercialization activities in the United States, Canada and Mexico, while we will be responsible for commercialization activities in all other territories. We are currently in discussions with Seattle Genetics regarding the detailed terms on which we will work together to commercialize tisotumab vedotin under this agreement. All costs and profits for tisotumab vedotin will be shared on a 50:50 basis. However, either party may opt out of co-development and profit-sharing in return for receiving milestone payments and royalties from the continuing party. See "—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—Seattle Genetics Tisotumab Vedotin Collaboration" for more information regarding our agreement with Seattle Genetics.

Intellectual Property

We have issued patents and pending patent applications for tisotumab vedotin in numerous jurisdictions, including the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter do not begin to expire until December 2029. In addition to our key composition of matter patents, we have issued patents and pending patent applications in numerous jurisdictions relating to specific formulations, indications and combination therapies that may offer additional protection. See "—Intellectual Property" for more information about our patents and other intellectual property.

Enapotamab Vedotin (HuMax-AXL-ADC)

Enapotamab vedotin (HuMax-AXL-ADC) is an ADC created to target to AXL (from *anexelekt*, or uncontrolled growth), a signaling molecule expressed on many solid cancers and implicated in tumor biology. AXL is a unique receptor tyrosine kinase, or RTK, that is aberrantly expressed in many solid tumor types and is implicated in tumor cell proliferation, migration and invasion. AXL was first

described as a transforming gene in chronic myeloid leukemia. It is a RTK that belongs to the Tyro3, AXL and Mer, or TAM, family. AXL function in normal physiology includes tissue homeostasis, regulation of inflammation and autoimmune responses and sperm production. AXL contributes to tumor progression and has been associated with poor clinical prognosis in many cancer types. Over-expression has been described in solid cancers, including lung, esophageal, ovarian, breast, cervical, thyroid, endometrial and pancreatic cancers. AXL is emerging as a marker in tumors with resistance to therapy (e.g., tyrosine kinase inhibitors, chemotherapy). In addition, over-expression of AXL is observed in advanced tumors with epithelial-mesenchymal transition, or EMT-like features.

Enapotamab vedotin is currently in Phase I/II development for the treatment of multiple types of solid tumors. Enapotamab vedotin is fully owned by Genmab, and the ADC technology used with enapotamab vedotin has been licensed from Seattle Genetics.

Clinical Studies

In December 2016, we announced a Phase I/II clinical trial to evaluate the safety of enapotamab vedotin the treatment of patients with solid tumors. We launched Part 1 of the study in December 2016 and Part 2a in April 2018. In May 2018, we launched a Phase I/II clinical trial of enapotamab vedotin for the treatment of multiple types of solid tumors, with several expansion cohorts currently ongoing. We expect to report preliminary efficacy data from the expansion cohort phase in 2019.

GCT1021-01

Study Design

Open-label, dose-escalation clinical trial with expansion cohorts to evaluate the safety of enapotamab vedotin in patients with solid tumors. We expect to enroll up to approximately 292 patients in the study. The purpose of the trial is to determine the maximum tolerated dose and to establish the safety profile of enapotamab vedotin in a mixed population of patients with specified solid tumors, as well as preliminary indications of efficacy. The trial consists of two parts; a dose escalation part (Part 1, first in-human, or FIH) and an expansion part (Part 2a). The dose escalation part has two dose escalation arms: the first arm investigates a once every 3 weeks dosing schedule and the second arm investigates a three administrations over 4 weeks dosing schedule. The expansion part of the trial will further explore the RP2D and dosing regimens of enapotamab vedotin as determined in Part 1, as well as preliminary indications of efficacy. The primary endpoints of this study are, in Part 1, DLTs to assess the recommended Part 2a dose of enapotamab vedotin and, in both phases, AEs to determine the safety and tolerability of enapotamab vedotin throughout the treatment periods of the patients participating in the trial. Secondary endpoints are efficacy measures, including tumor shrinkage and pharmacokinetic parameters of serum max concentration, or C_{max}, and area under the curve, or AUC.

Study Status

Recruiting. Data expected to be presented at ASCO, June 2019.

ADC Technology License from Seattle Genetics

In September 2014, we entered into an ADC license agreement with Seattle Genetics. Under this agreement, we paid an upfront fee of \$11.0 million for exclusive rights to utilize Seattle Genetics' ADC technology with our HuMax-AXL antibody. Pursuant to this agreement, Seattle Genetics is also entitled to receive more than \$200.0 million in potential milestone payments and mid-to-high single digit royalties on worldwide net sales of any resulting products. In addition, prior to our initiation of a Phase III study for any resulting products, Seattle Genetics has the right to exercise an option to

increase the royalties to the low tens in exchange for a reduction of the milestone payments owed by us. Irrespective of any exercise of this option, we remain in full control of the development and commercialization of any resulting products. See "—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—Seattle Genetics ADC Technology License" for more information regarding our agreement with Seattle Genetics. Since 2014, we have paid \$10.0 million in milestone payments to Seattle Genetics under this agreement. In the year ended December 31, 2018, we paid \$7.0 million in milestone payments. There were no milestone payments in the three months ended March 31, 2019.

HexaBody-DR5/DR5 (GEN1029)

HexaBody-DR5/DR5 is a proprietary antibody therapeutic candidate created with our proprietary HexaBody technology. HexaBody-DR5/DR5 consists of two non-competing HexaBody molecules that are designed to target two distinct epitopes on death receptor 5, or DR5, a cell surface receptor that mediates a process called programmed cell death. Increased expression of DR5 has been reported in several types of tumors. We believe that HexaBody-DR5/DR5 may have potential in treatment of a number of solid cancers. HexaBody-DR5/DR5 is the first HexaBody molecule to enter the clinic.

In 2018, we initiated a Phase I/II clinical trial of HexaBody-DR5/DR5 for the treatment of solid tumors, with the first patient dosed in May 2018.

GCT1029-01

Study Design Open-label, multi-center, Phase I/II clinical trial to evaluate the safety of HexaBody-DR5/DR5 in a mixed population of patients with specified solid tumors. The trial is expected to include up to approximately 188 patients. The trial consists of two parts, a Part 1 FIH dose escalation part and a Part 2a expansion part. The expansion phase of the trial will be initiated once the RP2D has been determined. The primary endpoints of this study are, in Part 1, DLTs to assess the recommended Part 2a dose of HexaBody-DR5/DR5 and, in both phases, treatment-related AEs to determine the safety and tolerability of HexaBody-DR5/DR5 throughout the treatment periods of the patients participating in the trial.

Study Status Recruiting. We expect to report initial clinical data from this study in 2019.

IDD Biotech Asset Purchase Agreement

In March 2015, we entered into an asset purchase agreement with IDD Biotech SAS, or IDD Biotech, to acquire DR5 antibodies and the intellectual property rights associated therewith in connection with our development of HexaBody-DR5/DR5. We obtained all right, title and interest in the antibodies and related technology of HexaBody-DR5/DR5 in exchange for an upfront payment of €2.5 million and a subsequent selection milestone payment of €3.5 million for the selection of a clinical candidate. We are also subject to meeting development and sales milestones that, if all achieved, would require us to make payments totaling approximately €100.0 million. Upon the first commercial sale of a product derived from the purchased antibodies, we would also make, on a country-by-country basis, low-single digit royalty payments on net sales of such product. We can develop and commercialize the purchased antibodies for use in any field except the diagnostic field and we are entitled to out-license the antibodies to any third party for development and commercialization. Patents for the purchased antibodies have been assigned to us and we are the sole owner of any intellectual property rights related to these antibodies. See "—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—IDD Biotech Asset Purchase Agreement" for more information regarding our agreement with IDD Biotech.

DuoBody-CD3xCD20 (GEN3013)

DuoBody-CD3xCD20 is a proprietary bispecific antibody therapeutic candidate created using our proprietary DuoBody technology. DuoBody-CD3xCD20 is designed to target CD3, which is expressed on all T-cell subtypes and is part of the T-cell receptor, and CD20, a clinically well-validated therapeutic target. CD20 is expressed in a majority of B-cell malignancies, including CLL, diffuse large B-cell lymphoma, follicular lymphoma and mantle cell lymphoma. Binding CD20 on B-cells and CD3 on T-cells can engage T-cells and redirect their activity against B-cells. T-cell activation—a result of the CD20-CD3 interaction—promotes the proliferation/expansion of pre-existing T-cells, which may further contribute to the depletion of B-cells. In a number of laboratory models, DuoBody-CD3xCD20 has shown high potency in killing CD20+ tumors and induced potent tumor cell lysis across a panel of B-cell tumor lines. A variety of B-cell xenograft models also indicated that DuoBody-CD3xCD20 induces tumor cell regression. In addition, in cynomolgus monkeys, both subQ and IV formulations of DuoBody-CD3xCD20 resulted in rapid and sustained B-cell depletion in the periphery and the lymph nodes. We believe that DuoBody-CD3xCD20 could also have potential to treat B-cell malignancies.

We dosed the first patient in a Phase I/II study of a subQ formulation of DuoBody-CD3xCD20 for the treatment of B-cell malignancies in July 2018.

GCT3013-01

Study Design Open-label, multi-center, Phase I/II trial to determine the maximum tolerated dose and the RP2D, as well as to establish the safety profile of DuoBody-CD3xCD20, in patients with relapsed, progressive or refractory B-cell lymphoma. The trial is expected to include up to approximately 110 patients. The trial consists of two parts: a FIH Part 1 dose escalation and a Part 2a expansion. The expansion part of the trial will be initiated once the RP2D has been determined. The primary endpoints of this study are, in Part 1, DLTs to assess the recommended Part 2a dose of DuoBody-CD3xCD20 and, in both phases, treatment-related AEs. Secondary endpoints are efficacy measures, including cytokine measures, area under the concentration time curve, or AUCC, maximum plasma concentration and reduction in tumor size, and immunogenicity measures.

Study Status Recruiting. We expect to report preliminary data for dose escalation cohorts from this study in 2019.

DuoBody-PD-L1x4-1BB (GEN1046)

DuoBody-PD-L1x4-1BB is a bispecific antibody designed to target PD-L1 and 4-1BB to block the inhibitory PD-1/PD-L1 axis and simultaneously activate essential co-stimulatory activity via 4-1BB using an inert Fc backbone. In pre-clinical settings, DuoBody-PD-L1x4-1BB promoted conditional T-cell activation in a tumor-specific manner by simultaneous activation and release of the key inhibitory brake. Pre-clinical studies also indicated a release of T-cell inhibition through the PD-1/PD-L1 axis, including in the absence of 4-1BB, strong co-stimulation via the agonistic activity of 4-1BB and T-cell clonal expansion. We are developing DuoBody-PD-L1x4-1BB for the treatment of solid cancers in collaboration with BioNTech using our proprietary DuoBody technology platform and BioNTech's PD-L1 and 4-1BB antibodies.

We are currently recruiting patients for a Phase I/II study of DuoBody-PD-L1x4-1BB for the treatment of malignant solid tumors.

GCT1046-01

Study Design Phase I/II, open-label, single arm safety trial of DuoBody-PD-L1x4-1BB in approximately 192 patients with malignant solid tumors. The trial consists of a dose escalation part and an expansion part. The dose escalation part will determine the RP2D and the safety profile of DuoBody-PD-L1x4-1BB in subjects with certain relapsed or refractory, advanced and/or metastatic malignant solid tumors who are no longer candidates for standard therapy. The expansion phase will be initiated once the RP2D has been established in Phase 1. In the expansion phase, DuoBody-PD-L1x4-1BB will be administered IV once every 21 days. The primary endpoints of the trial are DLTs, AEs and safety laboratory parameters, including hematology, biochemistry, coagulation and endocrines.

Study Status Recruiting.

Collaboration with BioNTech

In May 2015, we entered into an agreement with BioNTech to jointly research, develop and commercialize bispecific antibody products using our DuoBody technology platform and antibodies. Under the terms of the agreement, BioNTech provides proprietary antibodies against key immunomodulatory targets, while we provide access to our DuoBody technology platform. We paid an upfront fee of \$10.0 million to BioNTech and an additional \$2.0 million as certain BioNTech assets were selected for further development. If the companies jointly select any product candidates for clinical development, development costs and product ownership will be shared equally going forward. If one of the companies does not wish to move a product candidate forward, the other company is entitled to continue developing the product on predetermined licensing terms. The agreement also includes provisions which will allow the parties to opt out of joint development at key points. See "—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—BioNTech DuoBody Collaboration" for more information regarding our collaboration with BioNTech.

Proprietary Pre-Clinical Pipeline

In addition to our marketed products and clinical product candidates, we have approximately 20 active in-house and partnered pre-clinical programs. Our pre-clinical pipeline builds on our proprietary technologies and may include naked antibodies, immune effector function enhanced antibodies developed with our HexaBody technology, bispecific antibodies created with our DuoBody platform and bispecific antibodies with target-mediated enhanced hexamerization created with our DuoHexaBody platform, as well as various ADC formats. We submitted a CTA to regulatory authorities in the United Kingdom for DuoBody-CD40x4-1BB in 2019 and anticipate submitting an IND to the FDA and/or a CTA to the EMA for DuoHexaBody-CD37 in 2019. A number of the pre-clinical programs are carried out in cooperation with our partners, including the DuoBody-CD40x4-1BB immune-oncology program with BioNTech and our new research collaboration and exclusive license agreement with Immatics. See "—Product and Technology Collaborations" below for more information about our partnerships.

Our most advanced proprietary pre-clinical programs are:

- *DuoBody-CD40x4-1BB*. DuoBody-CD40x4-1BB is a bispecific antibody designed to target CD40 and 4-1BB (CD137) using an inert Fc backbone, which we created in collaboration with BioNTech using our proprietary DuoBody technology platform and BioNTech's CD40 and 4-1BB antibodies. We are conducting our research on DuoBody-CD40x4-1BB for potential treatment of solid cancers in collaboration with our partner BioNTech. DuoBody-CD40x4-1BB is designed to target CD40 and 4-1BB enhanced both DC- and antigen-dependent T-cell activation,

using an inert DuoBody format. In pre-clinical settings, DuoBody-CD40x4-1BB simultaneously activated APC and enhance T-cell activation. Pre-clinical studies also indicated the conditional activation and expansion of previously activated cytotoxic CD8+ T-cells, clonal expansion of T-cells and cytokine production resulting from DuoBody-CD40x4-1BB. In 2019, we submitted a CTA to regulatory authorities in the United Kingdom to test DuoBody-CD40x4-1BB in a clinical study. We expect to initiate a Phase I/II clinical study for DuoBody-CD40x4-1BB in 2019. See "—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—BioNTech DuoBody Collaboration" for more information regarding our collaboration with BioNTech.

- *DuoHexaBody-CD37*. DuoHexaBody-CD37 is a bispecific IgG1 with an E430G hexamerization-enhancing mutation in the IgG Fc domain created with our proprietary DuoHexaBody technology platform. DuoHexaBody-CD37 is designed to target two non-overlapping epitopes on CD37. In pre-clinical settings DuoHexaBody-CD37 has been shown to induce potent *in vivo* and *in vitro* anti-tumor activity through superior CDC and potent ADCC across a broad panel of lymphoma cell lines expressing various levels of CD37. In whole blood, DuoHexaBody-CD37 depleted B-cells, but not other leukocyte populations. B-cells were the highest expressors of CD37. In xenograft models of DuoHexaBody-CD37 on Burkitt's lymphoma, CLL and B-cell lymphoma, DuoHexaBody-CD37 inhibited tumor growth at levels as low as 0.1 mg/kg. Treatment results in potent tumor cell lysis studies in a variety of B-cell malignancies also indicated that DuoHexaBody-CD37 may be more potent than CD20 antibodies on the same types of cells. We expect to submit an IND to the FDA and/or a CTA to the EMA in 2019 to test DuoHexaBody-CD37 in a clinical study.

Partnered Programs

In addition to our two marketed products and five proprietary clinical product candidates, our partners are conducting clinical development programs with antibodies created by us or created using our DuoBody bispecific antibody technology. The following chart summarizes the disease indications and most advanced development status for each of the partnered product candidates in our clinical pipeline. Our partnered product pipeline also includes a number of product candidates in pre-clinical development by our partners. See "—Product and Technology Collaborations" below for more information about our partnerships. Unless otherwise indicated, data for all clinical studies for partnered programs presented below are based on reports we have received from our partners, reports

our partners have published or presented regarding these studies or information published on clinicaltrials.gov.

Partnered Product Candidates									
Product	Target	Partner	Disease Indications	Most Advanced Development Phase					Status / Recent Milestone
				Pre-Clinical	I	I/II	II	III	
Teprotumumab (RV001)	IGF-1R	Roche ⁽¹⁾	Graves' orbitopathy						Topline results reported February 2019; FDA submission expected in 2019
HuMax-IL8	IL8	BMS	Advanced cancers						Study announced January 2018
ADCT-301 (camidanlumab tesirine)	CD25	ADC Therapeutics	Lymphoma						Study ongoing
			Solid tumors						First patient dosed January 2019
JNJ-61186372	EGFR, c-Met	Janssen ⁽²⁾	NSCLC						Initial data from Part I presented September 2018
JNJ-63709178⁽³⁾	CD3, CD123	Janssen ⁽²⁾	AML						Recruiting
JNJ-64007957	BCMA, CD3	Janssen ⁽²⁾	R/R MM						First patient dosed September 2017
JNJ-64407564	CD3, GPRC5D	Janssen ⁽²⁾	R/R MM						First patient dosed May 2018
Lu AF82422	alpha-Synuclein	Lundbeck	Parkinson's disease						First patient enrolled August 2018

- (1) Horizon Pharma is conducting clinical development of teprotumumab under a sublicense from Roche.
(2) Created using our proprietary DuoBody technology through our DuoBody collaboration with Janssen. See "—Product and Technology Collaborations—Collaborations and Other Agreements for our Partnered Product Candidates—Janssen DuoBody Collaboration" for more information regarding our DuoBody collaboration with Janssen.
(3) In June 2018, this study was put on clinical hold by the FDA due to the occurrence of a Grade 3 adverse event. The clinical hold was lifted in October 2018 and the study is currently ongoing.

Our Technology Platforms

We have developed proprietary antibody technology platforms that provide the foundation for our research, a resource for the development of new product candidates, an income stream from technology licensing and an opportunity to contribute to the development of new antibody therapies through our licensing partners. Our proprietary technologies include (i) our DuoBody platform, which can be used for the creation and development of bispecific antibodies; (ii) our HexaBody platform, which can be used to increase the potential potency of antibodies through hexamerization; (iii) our DuoHexaBody platform, which enhances the potential potency of bispecific antibodies through hexamerization; and (iv) our HexElect platform, which combines two HexaBody molecules to maximize potential potency while minimizing potential toxicity by more selective binding to desired target cells. Antibody products created with these technologies may be used in a wide variety of indications including cancer and autoimmune, central nervous system and infectious diseases. We believe these technologies may be the next step towards the development of effective treatments in the already successful field of antibody therapeutics.

We also license technologies from a number of other companies that we use or have used to contribute to the antibody products in our pipeline. Key technologies include Seattle Genetics' ADC technologies, the OmniAb® transgenic mouse and rat platforms from Open Monoclonal Technology, Inc. (acquired by Ligand Pharmaceuticals Incorporated), or OMT, certain transgenic mouse technologies from Medarex, Inc., a wholly owned subsidiary of BMS, or Medarex, the rabbit antibody platform from MAB Discovery GmbH and certain expression systems used by Lonza for production of our product candidates.

Our Proprietary Technology

DuoBody Platform

The DuoBody platform is our innovative proprietary platform for the creation and development of bispecific antibodies. Bispecific antibodies bind to two different epitopes (or "docking" sites) either on the same, or on different targets (also known as dual-targeting). We believe that dual-targeting may improve binding specificity and enhance therapeutic efficacy or bring two different cells together (for example engaging a T-cell to kill a tumor cell). Bispecific antibodies generated with our DuoBody platform can be used for the development of potential therapeutics for cancer, hemophilia and autoimmune, infectious, cardiovascular and central nervous system diseases. DuoBody molecules are designed to combine the benefits of bispecificity with the strengths of conventional antibodies, which may allow DuoBody molecules to be administered and dosed in the same way as other antibody therapeutics. Based on a proof-of-concept study, we believe that our DuoBody platform generates bispecific antibodies via a versatile and broadly applicable process which has the potential to be easily performed at high throughput, at standard bench, as well as on a commercial manufacturing scale. We use the DuoBody platform to create our own bispecific antibody programs and we actively seek partners interested in developing antibody therapeutics using our DuoBody technology. We currently have four commercial partners for the DuoBody technology, Janssen, BioNTech, Novo Nordisk and Gilead Sciences. See "[—Product and Technology Collaborations—Collaborations and Other Agreements for our Partnered Products](#)" for more information about our current licenses and collaborations.

DuoBody-CD3xCD20 and DuoBody-PD-L1x4-1BB are our first proprietary bispecific antibodies created with DuoBody technology to reach clinical development. A Phase I/II study of DuoBody-CD3xCD20 for the treatment of B-cell malignancies is ongoing and we are currently recruiting patients for a Phase I/II study of DuoBody-PD-L1x4-1BB for the treatment of malignant solid tumors. DuoBody-PD-L1x4-1BB is being developed through our DuoBody collaboration with BioNTech. See "[—Our Products and Product Candidates—DuoBody-CD3xCD20 \(GEN3013\)](#)" and "[—Our Products and Product Candidates—DuoBody-PD-L1x4-1BB \(GEN1046\)](#)" above for more information about these product candidates. In addition, in 2019 we submitted a CTA for DuoBody-CD40x4-1BB, which is also being developed through our DuoBody collaboration with BioNTech. See "[—Our Products and Product Candidates—Proprietary Pre-Clinical Pipeline](#)" for more information about DuoBody-CD40x4-1BB and "[—Product and Technology Collaborations—Collaborations for our Proprietary Product Candidates—BioNTech DuoBody Collaboration](#)" for more information about our collaboration with BioNTech. In addition, Janssen has progressed a number of product candidates into clinical development through our DuoBody partnership. See "[—Our Products and Product Candidates—Collaborations and Other Agreements for our Partnered Product Candidates—Janssen DuoBody Collaboration](#)" for more information about our DuoBody collaboration with Janssen.

HexaBody Platform

Our HexaBody platform is a proprietary technology that is designed to increase the potency of antibodies. The HexaBody platform is designed to build on natural biology to strengthen the natural killing ability of antibodies while retaining regular structure and specificity. The HexaBody technology allows for the creation of potentially potent therapeutics by inducing antibody hexamer formation (clusters of six antibodies) after binding to their target antigen on the cell surface. We have used the HexaBody platform to generate antibodies with an enhanced complement-mediated killing design, allowing antibodies with limited or absent killing capacity to be transformed into potent, cytotoxic antibodies. In addition to complement-mediated killing, the clustering of membrane receptors by the HexaBody platform may lead to subsequent outside-in signaling (e.g. in the case of our HexaBody-DR5/DR5 product leading to cell death). The HexaBody technology creates opportunities to explore new product candidates, to repurpose drug candidates unsuccessful in previous clinical trials due to

insufficient potency and may provide a useful strategy in product life cycle management. We believe that the HexaBody technology is broadly applicable and may be combined with our DuoBody platform as well as other antibody technologies. The technology has the potential to enhance antibody therapeutics for a broad range of applications in cancer and infectious diseases.

HexaBody-DR5/DR5 is our first proprietary antibody created with HexaBody technology to reach clinical development. A Phase I/II clinical trial of HexaBody-DR5/DR5 for the treatment of solid tumors is ongoing. See "[—Our Products and Product Candidates—HexaBody-DR5/DR5 \(GEN1029\)](#)" above for more information about HexaBody-DR5/DR5. We actively seek new partners interested in developing antibody therapeutics using our HexaBody technology.

DuoHexaBody Platform

The DuoHexaBody platform is a novel proprietary technology that combines the dual targeting design of our DuoBody technology with the potential enhanced potency of our HexaBody technology, creating bispecific antibodies with a target-mediated enhanced hexamerization design. We currently have one proprietary bispecific antibody created with DuoHexaBody technology in pre-clinical development, DuoHexaBody-CD37. We expect to submit an IND and/or a CTA in 2019 to test DuoHexaBody-CD37 in a clinical study. See "[—Our Products and Product Candidates—Proprietary Pre-Clinical Pipeline](#)" above for more information about DuoHexaBody-CD37. We actively seek partners interested in developing antibody therapeutics using our DuoHexaBody technology.

HexElect Platform

The HexElect platform is a novel proprietary technology that combines two HexaBody molecules in order to selectively hit only those cells that express both targets by making the activity of complexes of HexaBody molecules dependent on their binding to two different targets on the same cell. The HexElect platform maximizes potency while minimizing potential toxicity, potentially leading to more potent and safer products. We actively seek partners interested in developing antibody therapeutics using our HexElect technology.

Licensed Technologies and Collaboration

Antibody-Drug Conjugates

Certain of our product candidates use ADC technology licensed from our partners. ADCs are mAbs designed to be coupled with potent toxic agents. By using antibodies designed to recognize specific targets on tumor cells, these toxic agents can be preferentially delivered to these cells. In this way, only malignant cells would be killed leaving the healthy cells intact. We have entered into an ADC license and collaboration agreement with Seattle Genetics in connection with tisotumab vedotin, which we are developing in collaboration with Seattle Genetics, and we license Seattle Genetics' ADC technology for use in our development of enapotamab vedotin. We also license ADC Therapeutics' PBD-based warhead and linker technology for camidanlumab tesirine, a product candidate currently in clinical development by ADC Therapeutics. For more information about these agreements, see "[—Product and Technology Collaborations](#)" below.

Antibody Generation and Production Technology Platforms

We also license technologies from a number of other companies that we use or have used to generate or produce antibodies for our product pipeline. Key technologies include the OmniAb transgenic mouse and rat platforms from OMT, certain transgenic mouse technologies from Medarex, the rabbit antibody platform from MAB Discovery GmbH and certain expression systems used by Lonza for production of our product candidates. See "—Product and Technology Collaborations" for more information about our technology licenses.

Translational Research Capabilities

Leveraging our expertise in antibody technologies and product development, we are expanding our translational research capabilities with the goal of building a library of antibody therapeutics that can be tailored to patients. Our translational research capabilities will be designed to profile and catalog patient tumor and immune genotype/phenotype and match our antibody therapies with appropriate patient populations. In addition, we intend to expand our data science capabilities to be able to probe our clinical and translational data.

Research and Development

Since inception, we have devoted significant time and resources to create and develop daratumumab, ofatumumab, our product candidates and our antibody-based technologies. For the year ended December 31, 2018, and the three months ended March 31, 2019 we recorded DKK 1,431.2 million and DKK 546.1 million, respectively, in research and development expenses. We expect our research and development expenses, along with our other operating expenses, to increase substantially over the next few years as we advance our proprietary product pipeline through clinical development and towards regulatory approval and commercialization.

Manufacturing

We do not currently manufacture the drug products that we need to conduct our clinical trials, and we therefore rely on our partners or contract manufacturing organizations, or CMOs, to supply drug product for our IND-enabling studies, clinical trials and process validation batches and related activities for BLA and other regulatory submissions, and we expect to rely on such partners or CMOs for production of commercial supply of our products in the future. Manufacturing clinical products is subject to extensive regulations that impose various procedural and documentation requirements, which govern record keeping, manufacturing processes and controls, personnel, quality control and quality assurance. Our vendors are required to comply with cGMP regulations, which are regulatory requirements enforced by the FDA, the EMA and other regulatory bodies to assure proper design, monitoring and control of manufacturing processes and facilities for human pharmaceuticals.

We have no involvement with the manufacturing process for our marketed products, DARZALEX and Arzerra, which are handled by Janssen and Novartis, respectively, under the applicable agreements. Currently, the majority of the drug products required for our clinical trials and pre-clinical studies are manufactured by Lonza. In addition, we rely on other third parties to perform additional steps in the manufacturing process, including fill and finish, shipping and storage of drug products and our product candidates. To meet our expected needs for commercial manufacturing in connection with the anticipated commercial launch of tisotumab vedotin, we are currently in negotiations with a CMO to manufacture commercial quantities of tisotumab vedotin, subject to regulatory approval. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. Although we rely on our cGMP manufacturers and suppliers, we have personnel with substantial manufacturing and production experience to oversee our relationships with such manufacturers and suppliers.

While we believe that Lonza and our other CMOs are capable of producing sufficient quantities of drug product to support our currently planned commercialization, clinical trials and pre-clinical studies, we also believe that there are a number of alternative third-party manufacturers that have similar capabilities that would be capable of providing sufficient quantities of commercial products and drug product for our planned clinical trials and pre-clinical studies. However, should Lonza and/or our other CMOs not be able to provide sufficient quantities of commercial products or drug product for our planned commercialization, clinical trials or pre-clinical studies, we would be required to seek other CMOs to provide this drug product, potentially resulting in a delay in such trials or delivery of our commercialized products.

Commercial Strategy

Our marketed products, DARZALEX and Arzerra, are marketed by Janssen and Novartis, respectively, under worldwide license agreements with us. We receive royalties from Janssen and Novartis based on net sales of DARZALEX and Arzerra, but we are not involved with commercialization activities or strategy. We are currently in the early stages of building and expanding our commercial capabilities to allow us to market our own products in the future for the indications and in the geographies we determine would be most effective to create value for our shareholders. Our goal is to become a commercial-stage company with oncology products in the United States, Europe and Japan, with an initial focus on achieving commercial launch readiness in Western Europe and Japan to support the potential launch of tisotumab vedotin for the treatment of cervical cancer in these jurisdictions, subject to obtaining regulatory approval and, where applicable, reimbursement approval. We view Japan as a promising commercial opportunity where a modest commercial and medical affairs infrastructure has the potential to become a high value investment. Given the low rate of cancer screening and HPV vaccinations in Japan, cervical cancer presents a significant unmet need in the Japanese medical market. With respect to the U.S. launch of tisotumab vedotin, under our collaboration agreement, Seattle Genetics is responsible for commercialization activities in the United States, Canada, and Mexico, and we are responsible for commercialization activities in all other territories. We are currently in discussions with Seattle Genetics regarding the detailed terms on which we will work together to commercialize tisotumab vedotin under this agreement.

Moving forward, we may choose to commercialize new products, fully by ourselves or partially, or we may rely on our partners to commercialize new products. This will be determined on a product-by-product or indication-by-indication basis in each proposed market and will depend on the agreements we have with our partners and our assessment of the most effective commercialization plan to benefit patients and create value for our shareholders.

Competition

The biotechnology and pharmaceutical industries generally, and the cancer drug sector specifically, are characterized by rapidly advancing technologies, evolving understanding of disease etiology, intense competition and a strong emphasis on intellectual property. While we believe that our product candidates and our knowledge and experience provide us with competitive advantages, we face substantial potential competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions and governmental agencies and public and private research institutions. Many of our current or potential competitors, either alone or with their collaboration partners, have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical studies, conducting clinical trials and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also

compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Accordingly, our competitors may be more successful than we may be in developing, commercializing and achieving widespread market acceptance. In addition, our competitors' products may be more effective or more effectively marketed and sold than any treatment we or our development partners may commercialize and may render our product candidates obsolete or noncompetitive before we can recover the expenses related to developing and commercializing our product candidates.

Below is a description of competition in certain of our products and product candidates.

With respect to daratumumab, there are numerous other FDA-approved drugs for the treatment of MM, including immunomodulating agents such as Celgene's Revlimid and Pomalyst®; PIs such as Janssen and Takeda's Velcade®, Amgen's Kyprolis®, and Takeda's Ninlaro®; histone deacetylase inhibitors such as Novartis' Farydak®; and mAbs such as BMS' Emluciti™. Several of these drugs are used in combination with chemotherapy and corticosteroids. The competition daratumumab faces from these and other therapies is intensifying. Additionally, Sanofi is conducting several Phase III clinical trials with isatuximab, a CD38 antibody, for the treatment of MM and reported in February 2019 that its Phase III study of isatuximab met its primary endpoint of improving PFS in patients with R/R MM. We are also aware of numerous additional investigational agents that are currently being studied. If any of these investigational agents are successful they may compete with daratumumab in the future. Data have also been presented on several developing technologies and related potential products, including bispecific antibodies, ADCs and CAR-Ts that may compete with daratumumab in the future.

Ofatumumab is currently being investigated by Novartis in a low dose subQ formulation for the treatment of RMS in the Phase III ASCLEPIOS I and II clinical studies. Competition in the MS market is intense. There are numerous FDA-approved drugs for the treatment of the various forms of MS, including Biogen Inc.'s Tecfidera®, Novartis' GILENYA®, Sanofi's AUBAGIO® and several mAbs such as Genentech's OCREVUS® (a CD20 antibody), Sanofi's LEMTRADA®, Biogen's TYSABRI®; glatiramer acetate-based therapies such as Teva Pharmaceutical Industries Limited's COPAXONE® and Sandoz's Glatopa®; and interferon-beta-based therapies such as Biogen's AVONEX® and PLEGRIDY®, Bayer AG's BETASERON®/Betaferon®, Novartis' EXTAVIA®, and Merck KGaA's Rebif®. A number of companies are also working to develop additional potential treatments for MS that may in the future further intensify the competition in the MS market, such as Celgene's Ozanimod and Novartis' Siponimod currently being evaluated in Phase III clinical trials. Potential future sales may also be negatively impacted by the introduction of generics, prodrugs of existing therapeutics or biosimilars of existing products and other technologies.

With respect to tisotumab vedotin, we are aware of other companies that currently have products in development for the treatment of late-stage cervical cancer which could be competitive with tisotumab vedotin, including checkpoint inhibitors from Agenus Inc., Regeneron Pharmaceuticals Inc., BMS, Merck, Roche, and Innovent Biologics, Inc. as well as other drugs in development from companies such as Immunomedics.

In addition, many other pharmaceutical and biotechnology companies are developing and/or marketing therapies for the same types of cancer that our products and product candidates are designed and being developed to treat. We are also aware of other companies that have or are developing technologies that may be competitive with ours, including bispecific antibody, CAR-T and RNA-based technologies. In addition, our DuoBody and other technology partners may develop compounds utilizing our technology that may compete with product candidates that we are developing.

In addition, in the United States, the Biologics Price Competition and Innovation Act of 2009 created an abbreviated approval pathway for biological products that are demonstrated to be "highly similar" or "biosimilar" to or "interchangeable" with an FDA-approved biological product. This

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

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

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

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

Product and Technology Collaborations

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

We also license technologies from a number of other companies that we use or have used to contribute to the antibody products in our pipeline. Key technologies include Seattle Genetics' ADC technologies, the OmniAb transgenic mouse and rat platforms from OMT, certain transgenic mouse technologies from Medarex, the rabbit antibody platform from MAB Discovery GmbH and certain expression systems used by Lonza for production of our product candidates. Pursuant to certain of these licenses, we or our partners are or may be obligated to pay small royalties for certain products generated or produced using these technologies upon commercialization of such products or product candidates.

Collaborations for our Marketed Products

Janssen Daratumumab License and Development Agreement

In August 2012, we entered into a global license, development and commercialization agreement, or the Janssen Agreement, with Janssen Biotech Inc., one of the Janssen Pharmaceutical Companies of Johnson & Johnson, or Janssen, granting Janssen an exclusive, sublicensable license to certain of our patents, know-how and materials, owned by or licensed to us, to research, develop, make, offer and sell worldwide certain licensed products containing the human mAb denoted "daratumumab," also known as HuMax-CD38 and DARZALEX. With respect to the licensed technology, we have given up the ability to develop or commercialize other products with affinity to the CD38 antigen target. We recorded an upfront license fee of \$55.0 million and Johnson & Johnson Development Corporation, or JJDC, invested DKK 475.2 million (approximately \$80.0 million at the date of the agreement) to subscribe for 5.4 million newly issued shares of Genmab at a price of DKK 88 per share. Janssen is fully responsible for developing and commercializing the licensed products and all costs associated therewith.

Under this agreement, we could be entitled to up to approximately \$1.0 billion in development, regulatory and sales milestones, in addition to tiered double digit royalties between 12% and 20% of net sales. The next sales milestones are payable upon net sales reaching \$2.5 billion and \$3.0 billion in a calendar year. The following royalty tiers apply for net sales in a calendar year: 12% on net sales up to \$750 million; 13% on net sales between \$750 million and \$1.5 billion; 16% on net sales between \$1.5 billion and \$2.0 billion; 18% on net sales between \$2.0 billion and \$3.0 billion; and 20% on net sales exceeding \$3.0 billion. The royalties payable by Janssen are limited in time and subject to reduction on a country-by-country basis for customary reduction events, including upon patent expiration or invalidation in the relevant country and upon the first commercial sale of a biosimilar product in the relevant country (for as long as the biosimilar product remains for sale in that country). Pursuant to the terms of the agreement, Janssen's obligation to pay royalties under this agreement will expire on a country-by-country basis on the later of the date that is 13 years after the first sale of daratumumab in such country or upon the expiration of the last-to-expire product patent (as defined in the agreement) covering daratumumab in such country. Janssen may fully or partially terminate the

agreement at any time upon 150 days' prior written notice to us. Our issued U.S., European and Japanese patents covering the composition of matter for daratumumab do not begin to expire until March 2026. Upon Janssen's termination of the agreement, we are granted an exclusive, perpetual, sublicensable license under any intellectual property controlled by Janssen or its affiliates to the extent necessary to make, have made, import, use, offer to sell or sell the terminated licensed product in such territory where the license has been terminated. If certain milestones have been met by Janssen prior to the termination, then we must pay royalties to Janssen for 10 years from our first commercial sale of a licensed product.

Novartis Ofatumumab Collaboration

In December 2006, we entered into a co-development and collaboration agreement with GSK, pursuant to which GSK obtained exclusive, worldwide rights to develop and commercialize ofatumumab. This agreement was subsequently amended in 2010. In 2015, GSK transferred the ofatumumab collaboration for oncology and autoimmune diseases to Novartis. Novartis is now responsible for the development and commercialization of ofatumumab in all potential indications. Novartis is fully responsible for all costs associated with developing and commercializing ofatumumab. Under the current agreement with Novartis, we are entitled to royalties of 20% of worldwide net sales of ofatumumab for intravenous treatments and 10% of worldwide net sales of ofatumumab for non-intravenous treatments, as well as certain potential regulatory and sales milestones, of which only certain sales milestones remain. Ofatumumab is approved and marketed under the name Arzerra for the treatment of certain CLL cancer indications, where ofatumumab is being administered intravenously. In addition, Novartis is currently investigating a subQ formulation of ofatumumab for the treatment of RMS. We therefore believe that the split between intravenous and non-intravenous administration of ofatumumab will, in practice, align with the split between cancer and non-cancer treatments, and we therefore generally refer to the higher royalty rate as being applicable to cancer treatments and the lower royalty rate as being applicable to non-cancer treatments. The royalties are on a country-by-country basis subject to reduction in a specified amount based on the market share of competing products or a joint committee determination that a license of intellectual property owned by a third party is necessary for commercialization. Novartis can terminate the agreement in its entirety or on a country-by-country basis at any time on 9 months' prior written notice. In January 2018, due to low and decreasing global demand for Arzerra primarily related to increased competition from new entrants to the CLL treatment space, Novartis announced that it intends to transition the commercial availability of Arzerra to limited availability through managed access programs or alternative solutions for the treatment of approved CLL indications in non-U.S. markets where applicable and allowed by local regulations. In 2019, marketing authorizations for Arzerra were withdrawn in the European Union and certain other territories. We expect Arzerra to remain commercially available for approved CLL indications in the United States and Japan. We recorded a one-time payment of \$50.0 million from Novartis in 2018 as payment for lost potential milestones and royalties.

Collaborations for our Proprietary Product Candidates

Seattle Genetics Tisotumab Vedotin Collaboration

In October 2011, we entered into a license and collaboration agreement with Seattle Genetics granting us an exclusive right to utilize Seattle Genetics' ADC technology with our HuMax-TF antibody in return for milestone payments and royalties. We also granted Seattle Genetics a right to exercise a co-development and co-commercialization option at the end of Phase I clinical development for tisotumab vedotin. In August 2017, Seattle Genetics exercised this option to co-develop and co-commercialize tisotumab vedotin with us. Seattle Genetics will be responsible for tisotumab vedotin commercialization activities in the United States, Canada and Mexico, while we will be responsible for commercialization activities in all other territories. We are currently in discussions with Seattle Genetics

regarding the detailed terms on which we will work together to commercialize tisotumab vedotin under this agreement. All costs and profits for tisotumab vedotin will be shared on a 50:50 basis. However, either party may opt out of co-development and profit-sharing in return for receiving milestone payments and royalties from the continuing party.

Seattle Genetics ADC Technology License

In September 2014, we entered into an ADC license agreement with Seattle Genetics. Under this agreement, we paid an upfront fee of \$11.0 million for exclusive rights to utilize Seattle Genetics' ADC technology with our HuMax-AXL antibody. Pursuant to this agreement, Seattle Genetics is also entitled to receive more than \$200.0 million in potential milestone payments and mid-to-high single digit royalties on worldwide net sales of any resulting products. In addition, prior to our initiation of a Phase III study for any resulting products, Seattle Genetics has the right to exercise an option to increase the royalties to the low tens in exchange for a reduction of the milestone payments owed by us. Irrespective of any exercise of this option, we remain in full control of the development and commercialization of any resulting products.

IDD Biotech Asset Purchase Agreement

In March 2015, we entered into an asset purchase agreement with IDD Biotech to acquire DR5 antibodies and the intellectual property rights associated therewith in connection with our development of HexaBody-DR5/DR5. We obtained all right, title and interest in the antibodies and related technology of HexaBody-DR5/DR5 in exchange for an upfront payment of €2.5 million and a subsequent selection milestone payment of €3.5 million for the selection of a clinical candidate. We are also subject to meeting development and sales milestones that, if all achieved, would require us to make payments totaling approximately €100.0 million. Upon the first commercial sale of a product derived from the purchased antibodies, we would also make, on a country-by-country basis, low-single digit royalty payments on net sales of such product. We can develop and commercialize the purchased antibodies for use in any field except the diagnostic field and we are entitled to out-license the antibodies to any third party for development and commercialization. Patents for the purchased antibodies have been assigned to us and we are the sole owner of any intellectual property rights related to these antibodies.

BioNTech DuoBody Collaboration

In May 2015, we entered into an agreement with BioNTech SE, or BioNTech to jointly research, develop and commercialize bispecific antibody products using our DuoBody technology platform and antibodies. Under the terms of the agreement, BioNTech provides proprietary antibodies against key immunomodulatory targets, while we provide access to our DuoBody technology platform. We paid an upfront fee of \$10.0 million to BioNTech and an additional \$2.0 million as certain BioNTech assets were selected for further development. If the companies jointly select any product candidates for clinical development, development costs and product ownership will be shared equally going forward. If one of the companies does not wish to move a product candidate forward, the other company is entitled to continue developing the product on predetermined licensing terms. The agreement also includes provisions which will allow the parties to opt out of joint development at key points. Two product candidates are currently in development in connection with this agreement, DuoBody-PD-L1x4-1BB and DuoBody-CD40x4-1BB. We submitted CTAs for these product candidates in 2019 and are currently recruiting patients for a Phase I/II study of DuoBody-PD-L1x4-1BB.

Collaborations and Other Agreements for our Partnered Product Candidates

Janssen DuoBody Collaboration

In July 2012, we entered into a collaboration with Janssen to create and develop bispecific antibodies using our DuoBody platform. Under this agreement, Janssen received an exclusive worldwide license to use the DuoBody technology to create panels of bispecific antibodies (up to 10 DuoBody programs) to multiple disease target combinations. We recorded an upfront payment of \$3.5 million from Janssen and will potentially be entitled to milestone and license payments of up to approximately \$175.0 million, as well as royalties for each commercialized DuoBody product. Janssen may terminate this agreement in whole or with respect to any particular target binding pair upon providing 120 days' prior written notice to us in accordance with the terms of the agreement. Under the terms of a December 2013 amendment, Janssen was entitled to work on up to 10 additional programs. In exchange, we recorded an initial payment of \$2.0 million from Janssen and are potentially entitled to receive average milestone and license payments of approximately \$191.0 million if Janssen successfully initiates, develops and commercializes all such additional programs. In addition, we will be entitled to royalties on net sales of any commercialized products. All research work is funded by Janssen. As of March 31, 2019, Janssen has exercised 14 licenses under this collaboration and we have recorded \$60.0 million in milestone payments to date. No further options remain for potential use by Janssen. Four product candidates are currently in clinical development by Janssen under this agreement.

ADC Therapeutics ADC Collaboration

In June 2013, we entered an agreement to develop camidanlumab tesirine, or ADCT-301, a new ADC product combining our HuMax-TAC antibody with ADC Therapeutics' PBD-based warhead and linker technology. We and ADC Therapeutics each initially had an equal share in the product. ADC Therapeutics will lead and fund pre-clinical development. Prior to submission of an IND filing, we had the right to elect to retain equal ownership of the product. In March 2015, we decided not to exercise our co-development right for camidanlumab tesirine and now have a 25% ownership stake in the product. Following the completion of the ongoing Phase I study, a divestment of the program shall be initiated, with Genmab having a first opportunity to bid on the program. We are not currently, and have not been, responsible for any development costs under this agreement.

BMS HuMax-IL8 Collaboration

In May 2012, we granted an exclusive, worldwide license to HuMax-IL8 to Cormorant Pharmaceuticals AB, or Cormorant, which was acquired by BMS in 2016. Under the terms of the agreement, we received an undisclosed upfront payment and are entitled to milestone payments and royalties on net sales. BMS will be responsible for all future costs of developing, manufacturing and commercializing HuMax-IL8. We are entitled to receive up to a total of €10.0 million in licensing and sales milestones and royalty payments in the low-single digits on net sales of the HuMax-IL8 product by BMS and a percentage in the low-double digits to high-teens range on license income from any BMS sublicensee(s).

Roche Teprotumumab Collaboration

In May 2001, we entered into a collaboration agreement with Roche to develop human antibodies to disease targets identified by Roche. In 2002, this alliance was expanded and Roche made an equity investment in Genmab. Under the agreement, we are entitled to milestones as well as mid- to high-single digit royalties on successful products. Horizon Pharma is currently conducting clinical development of teprotumumab under a sublicense from Roche pursuant to this agreement.

Lundbeck CNS and Technology Collaboration

In October 2010, we entered into an agreement with Lundbeck to create and develop human antibody therapeutics for disorders of the central nervous system. Pursuant to this agreement, we agreed to create novel human antibodies to three targets identified by Lundbeck, with Lundbeck responsible for fully funding the development of each antibody. The agreement also granted Lundbeck access to our antibody creation and development capabilities. Under the terms of the agreement, we recorded an upfront payment of €7.5 million. If all milestones in the agreement are achieved, the total value of the agreement to us would be approximately €38.0 million, plus low-single digit royalties on net sales. We also received research funding from Lundbeck and Lundbeck is responsible for any and all third-party payments. The most advanced product candidate resulting from this collaboration is Lu AF82422, which is currently in clinical development by Lundbeck.

Amgen AMG 714 Collaboration

In 2001, we entered into a collaboration with Immunex Corporation, or Immunex, relating to antibodies to IL15. In 2002, Amgen acquired Immunex. In July 2003, we recorded a payment of \$10.0 million when Amgen exercised its commercialization options for the HuMax-IL15 antibody program (now AMG 714). We are entitled to receive up to \$20.0 million in milestone payments if all milestone events are met for AMG 714, in addition to sales milestone payments of up to \$65.0 million and tiered royalties between 10% and 20%. In July 2014, we agreed with Amgen that if Amgen grants an exclusive sublicense to a third party for the development of AMG 714, we are entitled to receive 35% of any net compensation received by Amgen for such sublicense. In 2015, Amgen sublicensed AMG 714 to a private company, Celimmune, LLC, which conducted two Phase II studies of AMG 714 for nonresponsive and refractory celiac disease. Amgen subsequently exercised an option to acquire Celimmune and AMG 714 in 2017. In November 2018, Amgen and Provention Bio, Inc., or Provention, announced that Amgen had sublicensed AMG 714 to Provention and indicated that Provention plans to lead the next phase of development and regulatory activities for the program.

Immatic Research Collaboration

In July 2018, we entered into a research collaboration and exclusive license agreement with Immatics to discover and develop next-generation bispecific immunotherapies to target multiple cancer indications. We received an exclusive license to three proprietary targets disclosed and developed from Immatics' XPRESIDENT targets and T-cell receptor technology, with an option to license up to two additional targets at predetermined economics. We and Immatics will conduct joint research, funded by us, on multiple antibody and/or T-cell receptor-based bispecific therapeutic product concepts. We may elect to progress any resulting product candidates, and will be responsible for development, manufacturing and worldwide commercialization. For any products that are commercialized by us, Immatics will have an option to limited co-promotion efforts in selected countries in the European Union. Under the terms of the agreement, we paid Immatics an upfront fee of \$54.0 million and Immatics is eligible to receive up to \$550.0 million in development, regulatory and commercial milestone payments for each product, as well as tiered royalties in the high-single digits to low tens on net sales.

Novo Nordisk DuoBody Collaboration

In August 2015, we entered into an agreement to grant Novo Nordisk commercial licenses to use the DuoBody technology platform to create and develop bispecific antibody candidates for two therapeutic programs. The bispecific antibodies are intended to target a disease area outside of cancer therapeutics. Under the terms of the agreement, we recorded an upfront payment of \$2.0 million from Novo Nordisk. After an initial period of exclusivity for the two target combinations, Novo Nordisk has an option to maintain exclusivity or take the licenses forward on a non-exclusive basis. The rights

granted to Novo Nordisk may also be sublicensed, in whole or in part, to an affiliate or third party. Under the agreement, we are entitled to milestones of up to approximately \$250 million as well as mid-single digit royalties on successful products. The agreement may be terminated at any time by Novo Nordisk upon 60 days' prior notice.

In December 2017, we entered into a new agreement with Novo Nordisk for up to an additional five potential target pair combinations which may be reserved on either an exclusive or non-exclusive basis and three commercial license options. We recorded an upfront payment of \$2.0 million from Novo Nordisk and will be entitled to milestones payments and royalties for each product upon eventual product sales on similar terms as the initial agreement. This agreement contains similar termination provisions as the initial agreement.

Gilead Sciences DuoBody Collaboration

In August 2016, we entered into an agreement to grant Gilead Sciences an exclusive license and an option on a second exclusive license to use the DuoBody technology platform to create and develop bispecific antibody candidates for a therapeutic program targeting HIV. In 2019, Gilead Sciences informed us that it has decided not to exercise its option for a second license. Gilead Sciences has sole responsibility for research, development, marketing and sale of the licensed antibody. Under the terms of the agreement, we recorded an upfront payment of \$5.0 million from Gilead Sciences. We are entitled to potential development, regulatory and sales milestones of up to \$277.0 million for the first product and further milestones for subsequent products. In addition, we will be entitled to royalties in the mid- to high-single digits on Gilead Sciences' net sales of any commercialized products.

Other Enabling Technologies

Medarex UltiMAB® System License

In 1999, we entered into a license agreement with Medarex, now a wholly owned subsidiary of BMS, pursuant to which we received access to the UltiMAB technology, the KM Mouse technology and the right to obtain antibody-exclusive licenses for an unlimited number of antigens and own the worldwide development and commercialization rights to antibody products targeting such antigens. In addition, Medarex granted us 16 antigen-exclusive licenses in exchange for Genmab shares that are fully paid-up subject to, in case the products have been generated in the KM Mouse, pass-through of milestones and royalties payable by Medarex under its own license of the KM Mouse technology. Our principal obligation under this agreement is to make milestone and royalty payments in connection with any such antibody-exclusive licenses or in connection with use of the KM Mouse technology under this agreement. We used technology licensed from Medarex to generate daratumumab, ofatumumab, tisotumab, forming part of tisotumab vedotin, enapotamab, forming part of enapotamab vedotin, the CD20 antibody forming part of DuoBody-CD3xCD20, and certain of our other product candidates. Based on the type of license and technology used in their development, product candidates that are subject to future payment obligations under this license agreement include ofatumumab, enapotamab vedotin, DuoBody-CD3-CD20, DuoBody-cMetxEGFR and Lu AF82422, but do not include daratumumab and tisotumab vedotin. With respect to ofatumumab and Lu AF82422, Novartis and Lundbeck, respectively, have agreed to bear the majority of our payments to Medarex under these agreements. Aggregate milestones for the product candidates subject to payment obligations range from \$1.5 million to \$6.0 million per product, of which a total of approximately \$17.4 million remains payable by us or our partners across all such product candidates currently in development. Royalties are in the low single digits of net sales.

Intellectual Property

Patents

As of January 10, 2019, we held more than 1,000 patents and patent applications, including more than 30 issued U.S. patents and more than 70 U.S. patent applications. All of our current issued patents and patent applications are projected to expire between 2019 and 2038.

Our owned and licensed patents and patent applications are directed to daratumumab, ofatumumab, our product candidates, antibodies, our proprietary technologies and other antibody-based and/or enabling technologies. We commonly seek patent claims directed to compositions of matter, including antibodies, bispecific antibodies, and antibody drug conjugates, as well as methods of using such compositions. When appropriate, we also seek claims to related technologies, such as antibody format technologies. For daratumumab, ofatumumab and each of our product candidates, we or our partners have filed or expect to file multiple patent applications. We maintain patents and prosecute applications worldwide for technologies that we have out-licensed, such as our DuoBody technology. Similarly, for partnered products and product candidates, such as daratumumab, ofatumumab and tisotumab vedotin, we seek to work closely with our development partners to coordinate patent efforts, including patent application filings, prosecution, term extension, defense and enforcement. As daratumumab, ofatumumab and our development product candidates advance through research and development, we seek to diligently identify and protect new inventions, such as formulations, combination therapies, and methods of treatment. We also work closely with our scientific personnel to identify and protect new inventions that could eventually add to our development or technology pipeline.

With respect to daratumumab, we have issued patents and pending patent applications in numerous jurisdictions, including patents issued in the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter for daratumumab do not begin to expire until March 2026. In addition to our key composition of matter patents for daratumumab, we and Janssen have issued patents and pending patent applications in numerous jurisdictions and for specific formulations, indications and combination therapies that may offer additional protection. With respect to ofatumumab, we have issued patents and pending patent applications in numerous jurisdictions, including in the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter for ofatumumab do not begin to expire until October 2023, with the U.S. composition of matter patent extended to May 2031. With respect to tisotumab vedotin, we have issued patents and pending patent applications in numerous jurisdictions, including the United States, Europe and Japan. Our issued U.S., European and Japanese patents covering the composition of matter for tisotumab vedotin do not begin to expire until December 2029. In addition to our key composition of matter patents for tisotumab vedotin, we have issued patents and pending patent applications in numerous jurisdictions relating to specific formulations, indications and combination therapies that may offer additional protection.

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

The information in the above list is based on our current assessment of patents that we own or control or have exclusively licensed. The information is subject to revision, for example, in the event of changes in the law or legal rulings affecting our patents or if we become aware of new information. Significant legal issues remain unresolved as to the extent and scope of available patent protection for biotechnology products and processes in the United States and other important markets outside the United States. We expect that litigation will likely be necessary to determine the term, validity, enforceability, and/or scope of certain of our patents and other proprietary rights. An adverse decision or ruling with respect to one or more of our patents could result in the loss of patent protection for a

product and, in turn, the introduction of competitor products or follow-on biologics to the market earlier than anticipated.

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

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

Trademarks

As of January 1, 2019 we and/or our subsidiaries own approximately 184 international trademark registrations and applications, and 10 U.S. trademark registrations, including: Genmab®; the Y-shaped Genmab logo®; Genmab in combination with the Y-shaped Genmab logo®; HuMax®; DuoBody®; DuoBody in combination with the DuoBody logo®; HexaBody®; HexaBody in combination with the HexaBody logo®; DuoHexaBody®; HexElect®; and UniBody®. Arzerra® is a trademark of Novartis Pharma AG or its affiliates. DARZALEX® is a trademark of Janssen Pharmaceutica NV. Other than the registered trademarks listed above, we currently rely on our unregistered trademarks, trade names and service marks, as well as our domain names and logos, as appropriate, to market our brands and to build and maintain brand recognition. We are seeking to register and will continue to seek to register

and renew, or secure by contract where appropriate, trademarks, trade names and service marks as they are developed and used, and reserve, register and renew domain names as appropriate. If we do not secure trademark registration successfully for our trademarks, we may encounter difficulty in enforcing, or be unable to enforce, our rights in our trademarks, trade names and service marks against third parties.

Trade Secrets

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

Government Regulation

The FDA, the EMA and other regulatory authorities at U.S. federal, state, and local levels, as well as in other countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring, and post-approval reporting of biologics such as those we are developing. We, along with our partners and third-party contractors, are required to navigate the various pre-clinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval or licensure of our product candidates. The process of obtaining regulatory approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and financial resources. The following sections outline the approval process and other rules and regulations applicable to biologics in the United States and the European Union. While the regulatory process in many countries is similar to the United States or the European Union, each jurisdiction has its own regulations, and approval in one jurisdiction does not guarantee approval in any other jurisdiction.

Review and Approval of Biologic Products in the United States

Biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, or FD&C Act, and the Public Health Service Act, or PHS Act, and other federal, state, local and foreign statutes and regulations. Our product candidates must be approved by the FDA before they may be legally marketed in the United States.

The process required by the FDA before biologic product candidates may be marketed in the United States generally involves the following:

- completion of pre-clinical laboratory tests and animal studies performed in accordance with the FDA's current Good Laboratory Practices, or cGLP, regulation;

- submission to the FDA of an IND, which must become effective before clinical trials may begin and must be updated annually or when significant changes are made;
- approval by an independent Institutional Review Board, or IRB, or ethics committee at each clinical site before the trial is begun;
- performance of adequate and well-controlled human clinical trials to establish the safety, purity and potency of the proposed biologic product candidate for its intended purpose;
- preparation of and submission to the FDA of a Biologics License Application, or BLA, after completion of all pivotal clinical trials;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the proposed product is produced to assess compliance with cGMP and to assure that the facilities, methods and controls are adequate to preserve the biological product's continued safety, purity and potency, and of selected clinical investigations to assess compliance with current Good Clinical Practices, or cGCPs; and
- FDA review and approval of the BLA to permit commercial marketing of the product for particular indications for use in the United States, which must be updated annually when significant changes are made.

Prior to beginning the first clinical trial with a product candidate, we or our partner must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

A clinical trial involves the administration of the investigational product to human patients under the supervision of qualified investigators in accordance with cGCPs, which includes the requirement that all research patients provide their informed consent for their participation in any clinical study. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the patients are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board or data monitoring committee, which provides authorization for whether or not a

study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for patients or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

For purposes of BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- *Phase 1*—The investigational product is initially introduced into human patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- *Phase 2*—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- *Phase 3*—The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be made a condition to approval of the BLA.

Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within a specified period, if at all, and there can be no assurance that the data collected will support FDA approval or licensure of the product. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate, and must 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 candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

BLA Submission and Review by the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, non-clinical studies and clinical trials are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. The BLA must include all relevant data available from pertinent pre-clinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by investigators. The submission of a BLA requires payment of a substantial user fee to the FDA, and the sponsor of an approved BLA is also subject to annual program fees. These fees are typically increased annually. A waiver of user fees may be obtained under certain limited circumstances.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the biological product candidate for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The Food and Drug Administration Safety and Innovation Act, or FDASIA, requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted.

Once a BLA has been submitted, the FDA's goal is to review the application within 10 months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after the FDA accepts the application for filing. The review process may be extended by the FDA's requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed, or held meets standards designed to assure the product's continued safety, purity and potency. The FDA may convene an advisory committee to provide clinical insight on application review questions. Before approving a BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with cGCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or at all, and we may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us or our partners from marketing our products. After the FDA evaluates a BLA and conducts inspections of manufacturing facilities where the product will be produced, the FDA may issue an approval letter, or a Complete Response Letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may request additional information or clarification. The FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the BLA with a Risk Evaluation and Mitigation Strategy, or REMS, plan 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. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after

commercialization, and may limit further marketing of the product based on the results of these post-marketing studies. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Expedited Development and Review Programs

A sponsor may seek approval of its product candidate under programs designed to accelerate the FDA's review and approval of new drugs and biological products that meet certain criteria. Specifically, new drugs and biological products are eligible for fast track designation, or FTD, if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address an unmet medical need for the condition. For a fast track product, the FDA may consider sections of the BLA for review on a rolling basis before the complete application is submitted if relevant criteria are met. A FTD product candidate may also qualify for priority review, under which the FDA sets the target date for FDA action on the BLA at six months after the FDA accepts the application for filing. Priority review is granted when 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 10 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.

Under the accelerated approval program, the FDA may approve a BLA on the basis of either a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical objective 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. Post-marketing studies or completion of ongoing studies after marketing approval are generally required to verify the biologic's clinical benefit in relationship to the surrogate endpoint or ultimate outcome in relationship to the clinical benefit. In addition, a sponsor may seek FDA breakthrough therapy designation, or BTd, of its product candidate if the product candidate is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant objectives, such as substantial treatment effects observed early in clinical development. Sponsors may request the FDA to designate a breakthrough therapy at the time of or any time after the submission of an IND, but ideally before an end-of-Phase 2 meeting with the FDA. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application, which may include holding meetings with the sponsor and the review team throughout the development of the therapy; providing timely advice to, and interactive communication with, the sponsor regarding the development of the drug to ensure that the development program to gather the non-clinical and clinical data necessary for approval is as efficient as practicable; involving senior managers and experienced review staff, as appropriate, in a collaborative, cross-disciplinary review; assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor; and considering alternative clinical trial designs when scientifically appropriate, which may result in smaller trials or more efficient trials that require less time to complete and may minimize the number of patients exposed to a potentially less efficacious treatment. BTd also allows the sponsor to submit sections of the BLA for review on a rolling basis.

The FDA is also exploring other options to expedite processing of certain applications. For example, in 2018 the FDA started using real-time review of drug applications to evaluate clinical data as soon as the trial results become available. This means that the FDA can approve a new indication

soon after an applicant files a marketing application. Currently, this approach is only being implemented by the FDA's Oncology Center of Excellence through two pilot programs, including the FDA's Real-Time Oncology Review, or RTOR, Pilot Program, which is currently available for certain supplemental applications for already-approved cancer drugs.

FTD, priority review, BTD, and pilot review programs do not change the standards for approval but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Review and Approval of Combination Products

Although most of our product candidates are regulated as biologics, certain of our product candidates are subject to regulation in the United States as combination products. If marketed individually, each component would be subject to different regulatory pathways and would require FDA approval of independent marketing applications by the FDA. A combination product, however, is assigned to a Center within the FDA that will have primary jurisdiction over its regulation based on a determination of the combination product's primary mode of action, which is the single mode of action that provides the most important therapeutic action. Our ADC candidates are both drug and biologic molecules. Such ADCs are regulated as therapeutic biologics and the FDA's Center for Drug Evaluation and Research, or CDER, will have primary jurisdiction over pre-market development. The CDER currently has regulatory responsibility, including pre-market review and continuing oversight, over certain therapeutic biologic products. We expect to seek approval of these combination products through single BLA reviewed by CDER, and we do not expect that the FDA will require a separate marketing authorization for each of the drug and biologic constituents of such products.

Orphan Drugs

Under the Orphan Drug Act, the FDA may grant orphan drug designation, or ODD, to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with either a patient population of fewer than 200,000 individuals in the United States, or a patient population greater of than 200,000 individuals in the United States when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States of that drug or biologic. ODD must be requested before submitting a BLA. After the FDA grants ODD, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has received ODD and subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years from the approval of the BLA, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of ODD are tax credits for certain research and a waiver of the BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received ODD. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was

materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-Approval Requirements

Any products manufactured or distributed by us or our partners pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual program user fee requirements for any marketed products, as well as new application fees for supplemental applications with clinical data. Biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we or our partners may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance. If our present or future suppliers are not able to comply with these requirements, the FDA may, among other things, halt our clinical trials, require us or our partners to recall a product from distribution, or withdraw approval of the BLA.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products and product candidates. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical 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 the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of biologics. A company can make only those claims relating to safety and efficacy, purity and potency that are

approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of any off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict marketing authorization holders' communications on the subject of off-label use of their products.

Biosimilars and Exclusivity

The Affordable Care Act, signed into law in 2010, includes a subtitle called the Biologics Price Competition and Innovation Act, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

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 study or studies. 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 in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or diminishing efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being worked out by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant's own pre-clinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law. In addition, government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact of the BPCIA is subject to significant uncertainty.

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

Regulation of Diagnostic Tests

Certain of our product candidates may require use of a diagnostic to identify appropriate patient populations that may benefit from our products. These companion diagnostics are medical devices, often *in vitro* devices, which provide information that is essential for the safe and effective use of a corresponding drug. In the United States, unless an exemption applies, diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and approval of a premarket approval application, or PMA approval. We expect that any companion diagnostic developed for our drug candidates will utilize the PMA pathway.

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

On August 6, 2014, the FDA issued a final guidance document addressing the development and approval process for "In Vitro Companion Diagnostic Devices." According to the guidance, for novel drugs such as ours, a companion diagnostic device and its corresponding drug should be approved or cleared contemporaneously by the FDA for the use indicated in the therapeutic product labeling. The guidance also explains that a companion diagnostic device used to make treatment decisions in clinical trials of a drug generally will be considered an investigational device, unless it is employed for an intended use for which the device is already approved or cleared. If used to make critical treatment decisions, such as patient selection, the diagnostic device generally will be considered a significant risk device under the FDA's Investigational Device Exemption, or IDE, regulations. Thus, the sponsor of the diagnostic device will be required to comply with the IDE regulations. According to the guidance, if a diagnostic device and a drug are to be studied together to support their respective approvals, both products can be studied in the same investigational study, if the study meets both the requirements of the IDE regulations and the IND regulations.

In the EEA, *in vitro* diagnostics medical devices are required to conform with the essential requirements of the EU Directive on *in vitro* diagnostic medical devices (Directive No 98/79/EC, as amended). To demonstrate compliance with the essential requirements, the manufacturer must undergo a conformity assessment procedure. The conformity assessment varies according to the type of *in vitro* diagnostics medical device and its classification. The conformity assessment of *in vitro* diagnostics medical devices can require the intervention of an accredited EEA Notified Body. If successful, the conformity assessment concludes with the drawing up by the manufacturer of an EC Declaration of

Conformity entitling the manufacturer to affix the CE mark to its products and to sell them throughout the EEA.

On April 5, 2017, the European Parliament passed the In Vitro Device Regulation, or IVDR, which repeals and replaces Directive No 98/79/EC. Unlike directives, which must be implemented into the national laws of the EU member states, a regulation is directly applicable, i.e., without the need for adoption of EU member state laws implementing them, in all EEA member states. The IVDR, among other things, is intended to establish a uniform, transparent, predictable and sustainable regulatory framework across the EU for *in vitro* diagnostic medical devices and ensure a high level of safety and health while supporting innovation. The IVDR will not become fully applicable until five years following its entry into force.

Other Healthcare Laws and Compliance Requirements

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products that are granted regulatory approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Such restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration (including any kickback, bribe or rebate), directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, lease or order of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid. The term "remuneration" has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or a specific intent to violate it to have committed a violation; in addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. Violations of the federal Anti-Kickback Statute may result in civil monetary penalties up to \$100,000 for each violation, plus up to three times the remuneration involved. Civil penalties for such conduct can further be assessed under the federal False Claims Act. Violations can also result in criminal penalties, including criminal fines and imprisonment of up to 10 years. Similarly, violations can result in exclusion from participation in government healthcare programs, including Medicare and Medicaid;
- the federal civil and criminal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. When an entity is determined to have violated the federal civil False Claims Act, the government may impose civil fines and penalties and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal laws that prohibit, among other things, knowingly and

willingly executing, or attempting to execute, a scheme or making false statements in connection with the delivery of or payment for health care benefits, items, or services;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, which also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information on covered entities and their business associates that perform certain functions or activities that involve the use or disclosure of protected health information on their behalf. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or collectively the ACA, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, within the U.S. Department of Health and Human Services, information related to payments and other transfers of value to physicians, certain other healthcare providers, and teaching hospitals and information regarding ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Also, the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business. We cannot assure you that our internal control policies and procedures will protect us from reckless or negligent acts committed by our employees, future distributors, partners or agents. Violations of these laws, or allegations of such violations, could result in fines, penalties or prosecution and have a negative impact on our business, results of operations and reputation.

Healthcare Reform

A primary trend in the United States healthcare industry and elsewhere is cost containment. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States.

In March 2010, the U.S. Congress enacted the ACA, which, among other things, includes changes to the coverage and payment for drug products under government health care programs. Among the provisions of the ACA of importance to our potential product candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of two percent (2%) per fiscal year, which went into effect in April 2013 and will remain in effect through 2027 unless additional Congressional action is taken.

Since its enactment, there have been numerous legal challenges and Congressional actions to repeal and replace provisions of the ACA. Some of the provisions of the ACA have yet to be implemented, and there have been legal and political challenges to certain aspects of the ACA. Since January 2017, President Trump has signed two executive orders and other directives designed to delay, circumvent, or loosen certain requirements mandated by the ACA. Moreover, the Tax Reform Bill was enacted on December 22, 2017, and includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, ruled that the individual mandate is a critical and inseparable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. While the Trump Administration and CMS have both stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, if any, and other efforts to repeal and replace the ACA will impact the ACA and our business. Congress may consider other legislation to repeal or replace additional elements of the ACA. We continue to evaluate the effect that the ACA, the repeal of the individual mandate, and any additional repeal and replacement efforts may have on our business but expect that the ACA, as currently enacted or as it may be amended in the future, and other healthcare reform measures that may be adopted in the future could have a material adverse effect on our industry generally and on our ability to maintain or increase sales of our existing products that we successfully commercialize or to successfully commercialize our product candidates, if approved. In addition to the ACA, there will continue to be proposals by legislators at both the federal and state levels, regulators and third party payors to keep healthcare costs down while expanding individual healthcare benefits.

Coverage and Reimbursement

Sales of pharmaceutical products depend significantly on the availability of third-party coverage and reimbursement. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. Although we currently believe that third-party payors will provide coverage and reimbursement for our products and product candidates, if

approved, these third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. We may need to conduct expensive clinical studies to demonstrate the comparative cost-effectiveness of our products. The product candidates that we develop may not be considered cost-effective. It is time consuming and expensive for us to seek coverage and reimbursement from third-party payors. Moreover, a payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

The process for determining whether a payor will provide coverage for a product is typically separate from the process for setting the reimbursement rate that the payor will pay for the product. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be available. Additionally, in the United States there is no uniform policy among payors for coverage or reimbursement. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies, but also have their own methods and approval processes. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service, or will provide coverage at an adequate reimbursement rate. As a result, the coverage determination process will require us to provide scientific and clinical support for the use of our products to each payor separately and will likely be a time-consuming process. If coverage and adequate reimbursement are not available, or are available only at limited levels, successful commercialization of, and obtaining a satisfactory financial return on, any product we develop may not be possible.

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 marketing, we may need to conduct expensive studies in order to demonstrate the medical necessity and cost-effectiveness of any products, which would be in addition to the costs expended to obtain regulatory approvals. Third-party payors may not consider our products or product candidates to be medically necessary or cost-effective compared to other available therapies.

Additionally, the containment of healthcare costs (including drug prices) has become a priority of federal and state governments. The U.S. government, state legislatures, and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement, and requirements for substitution by generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could limit our net revenue and results. If these third-party payors do not consider our products to be cost-effective compared to other therapies, they may not cover our products or product candidates once approved as a benefit under their plans or, if they do, the level of reimbursement may not be sufficient to allow us to sell our products on a profitable basis. Decreases in third-party reimbursement for our products once approved or a decision by a third-party payor not to cover our products could reduce or eliminate utilization of our products and have an adverse effect on our sales, results of operations, and financial condition. In addition, state and federal healthcare reform measures have been and will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in additional pricing pressures or reduced demand for our products or product candidates once approved.

Review and Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality,

safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, an applicant will need to obtain the necessary approvals by the comparable non-U.S. regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. Specifically, the process governing approval of medicinal products in the European Union generally follows the same lines as in the United States. It entails satisfactory completion of pre-clinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication. It also requires the submission to the relevant competent authorities of a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the European Union.

The Clinical Trials Directive 2001/20/EC, the Directive 2005/28/EC on Good Clinical Practice, or GCP, and the related national implementing provisions of the individual EU member states, or EU Member States, govern the system for the approval of clinical trials in the European Union. Under this system, an applicant must obtain prior approval from the competent national authority of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. The clinical trial application must be accompanied by, among other documents, an investigational medicinal product dossier, or the Common Technical Document, with supporting information prescribed by Directive 2001/20/EC, Directive 2005/28/EC, where relevant the implementing national provisions of the individual EU Member States and further detailed in applicable guidance documents.

In April 2014, the new Clinical Trials Regulation, (EU) No 536/2014, or the Clinical Trials Regulation, was adopted, and is anticipated to enter into force in 2019. The Clinical Trials Regulation will be directly applicable in all of the EU Member States, repealing the current Clinical Trials Directive 2001/20/EC. Conduct of all clinical trials performed in the European Union will continue to be bound by currently applicable provisions until the new Clinical Trials Regulation becomes applicable. The extent to which on-going clinical trials will be governed by the Clinical Trials Regulation will depend on when the Clinical Trials Regulation becomes applicable and on the duration of the individual clinical trial. If a clinical trial continues for more than three years from the day on which the Clinical Trials Regulation becomes applicable, the Clinical Trials Regulation will at that time begin to apply to the clinical trial.

The Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the European Union. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, the "EU portal"; a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (EU Member States concerned). Part II is assessed separately by each EU Member State concerned. Strict deadlines have been established for the assessment of clinical trial applications. The role of the relevant ethics committees in the assessment procedure will continue to be governed by the national law of the concerned EU Member State. However, overall related timelines will be defined by the Clinical Trials Regulation.

To obtain a marketing authorization for a product under European Union regulatory systems, an applicant must submit an MAA either under a centralized procedure administered by the EMA, or one of the procedures administered by competent authorities in the EU Member States (decentralized procedure, national procedure or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the European Union. Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the European Union, applicants have to

demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver or (3) a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all EU Member States and three of the four European Free Trade Association, or EFTA, States, Iceland, Liechtenstein and Norway. Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases, including products for the treatment of cancer. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established at the EMA is responsible for conducting the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Within 15 calendar days of receipt of a final opinion from the CHMP, the European Commission must prepare a draft decision concerning an application for marketing authorization. This draft decision must take the opinion and any relevant provisions of EU law into account. Before arriving at a final decision on an application for centralized authorization of a medicinal product the European Commission must consult the Standing Committee on Medicinal Products for Human Use. The Standing Committee is composed of representatives of the EU Member States and chaired by a non-voting European Commission representative. The European Parliament also has a related "droit de regard". The European Parliament's role is to ensure that the European Commission has not exceeded its powers in deciding to grant or refuse to grant a marketing authorization.

Unlike the centralized authorization procedure, the decentralized marketing authorization procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all EU Member States.

The mutual recognition procedure similarly is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of other EU Member States. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

In the European Union, innovative medicinal products approved on the basis of a complete independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity pursuant to Directive 2001/83/EC. Regulation (EC) No 726/2004 repeats this entitlement for medicinal products authorized in accordance with the centralized authorization procedure. Data exclusivity prevents applicants for authorization of generics of these innovative products from referencing the innovator's data to assess a generic (abbreviated) application for a period of eight years. During an additional two-year period of market exclusivity, a generic marketing authorization application can be submitted and authorized, and the innovator's data may be referenced, but no generic medicinal product can be placed on the European Union market until the expiration of the market exclusivity. The overall 10-year period will be extended to a maximum of 11 years if, during the first eight years of those 10 years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical tests, pre-clinical tests and clinical trials.

A marketing authorization has an initial validity for five years in principle. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the EU Member State. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide, on justified grounds relating to pharmacovigilance, to proceed with one further five year period of marketing authorization. Once subsequently definitively renewed, the marketing authorization shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the European Union market (in case of centralized procedure) or on the market of the authorizing EU Member State within three years after authorization ceases to be valid (the so-called sunset clause).

Regulation (EC) No. 141/2000, as implemented by Regulation (EC) No. 847/2000 provides that a drug can be designated as an orphan drug by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union when the application is made, or (2) a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the drug in the European Union would generate sufficient return to justify the necessary investment. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, the drug will be of significant benefit to those affected by that condition.

Once authorized, orphan medicinal products are entitled to 10 years of market exclusivity in all EU Member States and in addition a range of other benefits during the development and regulatory review process including scientific assistance for study protocols, authorization through the centralized marketing authorization procedure covering all member countries and a reduction or elimination of registration and marketing authorization fees. However, marketing authorization may be granted to a similar medicinal product with the same orphan indication during the 10 year period with the consent of the marketing authorization holder for the original orphan medicinal product or if the manufacturer of the original orphan medicinal product is unable to supply sufficient quantities. Marketing authorization may also be granted to a similar medicinal product with the same orphan indication if this product is safer, more effective or otherwise clinically superior to the original orphan medicinal

product. The period of market exclusivity may, in addition, be reduced to six years if it can be demonstrated on the basis of available evidence that the original orphan medicinal product is sufficiently profitable not to justify maintenance of market exclusivity.

In case an authorization for a medicinal product in the European Union is obtained, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. These include:

- Compliance with the European Union's stringent pharmacovigilance or safety reporting rules must be ensured. These rules can impose post-authorization studies and additional monitoring obligations.
- The manufacturing of authorized medicinal products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the applicable European Union laws, regulations and guidance, including Directive 2001/83/EC, Directive 2003/94/EC, Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice. These requirements include compliance with European Union cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients, including the manufacture of active pharmaceutical ingredients outside of the European Union with the intention to import the active pharmaceutical ingredients into the European Union.
- The marketing and promotion of authorized drugs, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the European Union notably under Directive 2001/83EC, as amended, and EU Member State laws.

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union (commonly referred to as "Brexit"). Thereafter, on March 29, 2017, the country formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community. The withdrawal of the United Kingdom from the European Union will take effect either on the effective date of the withdrawal agreement or, in the absence of agreement, two years after the United Kingdom provided its notice of withdrawal pursuant to the Treaty on European Union. Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from EU directives and regulations, Brexit could materially impact the future regulatory regime which applies to products and the approval of product candidates in the United Kingdom. It remains to be seen how, if at all, Brexit will impact regulatory requirements for product candidates and products in the United Kingdom.

EEA Data Privacy and Data Security

In the EEA, we, our partners or our third party CMOs and CROs may be subject to laws relating to our collection, control, processing and other use of personal data (i.e. data relating to an identifiable individual) because we process personal data of our employees, customers, vendors and other third parties based in the EEA in relation to the operation of our business.

In the European Union, the data privacy regime applicable to us includes the General Data Protection Regulation (2016/679), or GDPR, and the E-Privacy Directive 2002/58/EC, or EPD. We depend on a number of third parties to provide our services, certain of which process personal data on our behalf and are therefore considered our processors under the GDPR. Since the adoption of GDPR, we have entered into contractual arrangements as required by article 28 of the GDPR with each such provider, and have amended material pre-existing contracts as necessary. Where we transfer personal data outside the EEA, we do so in compliance with the relevant data export requirements. We

take our data protection obligations seriously as any improper disclosure, particularly with regard to our customers' sensitive personal data, could negatively impact our business and/or our reputation.

GDPR

The GDPR became applicable on May 25, 2018 and replaced the previous data protection regime which consisted of separate laws issued by each EU Member State, based on the EU Data Protection Directive. Unlike the Directive (which needed to be transposed at national level), the GDPR is directly applicable in each EU Member State, resulting in a more uniform application of data privacy laws across the European Union. However, the GDPR does allow each Member State to implement laws which supplement the GDPR, causing some variation between EU Member States (for example, in connection with processing employee personal data and processing for scientific purposes). The GDPR also provides that EU Member States may separately introduce further conditions, including limitations, to the processing of genetic, biometric or health data, which could limit our ability to collect, use and share personal data, or could cause our compliance costs to increase, ultimately having an adverse impact on our business. We need to ensure compliance with the supplemental laws in each jurisdiction where we operate.

The GDPR applies extraterritorially and implements stringent operational requirements for processors and controllers of personal data, including, for example, imposing accountability obligations requiring controllers and processors to maintain a record of their data processing and policies. It requires us, as a controller of personal data, to be transparent and to disclose to data subjects (being the individuals to whom the personal data relates), in a concise, intelligible and easily accessible form, how their personal information is used by us. It also imposes limitations on our retention of information, introduces mandatory data breach notification requirements and sets certain standards for controllers to demonstrate that they have obtained valid consent for certain data processing activities where consent is the legal basis relied upon to process the data.

The GDPR also states that personal data may only be collected for specified, explicit and legitimate purposes which have a legal basis set out in the GDPR, and may only be processed in a manner consistent with those purposes. Personal data must also be adequate, relevant, not excessive in relation to the purposes for which it is collected, be secure, not be transferred outside of the EEA unless certain steps are taken to ensure an adequate level of protection and must not be kept for longer than necessary to achieve the purposes for which it was collected. To the extent that we process, control or otherwise use sensitive data relating to individuals (for example, patients' health or medical information, race or ethnicity), more stringent rules apply, limiting the circumstances and the manner in which we are legally permitted to process that data and transfer that data outside of the EEA. In particular, in order to process such data, explicit consent to the processing (including any transfer) is usually required from the data subject.

Fines for non-compliance with the GDPR have the potential to be significant—the greater of €20 million or 4% of our global annual turnover in the previous financial year.

EPD

The requirements laid down by the EPD have been transposed into the national laws of each EU Member State since 2003. The requirements will be particularly relevant when we send electronic direct marketing to individuals in the European Union or when we use cookies or similar technologies on our websites directed at individuals in the European Union and will usually require us to obtain consent from recipients to carry out these activities. Although all EU Member State national laws stem from the EPD, the laws differ by jurisdiction, sometimes significantly. We need to ensure compliance with the laws in each jurisdiction where we operate.

The European Union is in the process of replacing the EPD with an E-Privacy Regulation which, unlike the EPD which needed to be transposed into the national law of EU Member States, will be

directly applicable in each EU Member State. The text of the new Regulation has not yet been finalized nor has an implementation date been set, however the current draft of the Regulation includes a regime for issuing monetary fines for non-compliance corresponding to the level implemented by the GDPR—up to €20 million or 4% of our global annual turnover in the previous financial year, whichever is higher. We will continue to monitor the progress of the new Regulation and make necessary modifications to our practices as and when required.

Legal Proceedings

From time to time in the ordinary course of business we may become involved in various lawsuits, claims and proceedings relating to the conduct of our business, including those pertaining to the defense and enforcement of our patent or other intellectual property rights. These proceedings are costly and time consuming. Successful challenges to our patent or other intellectual property rights through these proceedings could result in a loss of rights in the relevant jurisdiction and may allow third parties to use our proprietary products and technologies without a license from us or our partners.

For example, in April 2016, MorphoSys filed a complaint at the U.S. District Court of Delaware against Genmab and Janssen Biotech, Inc. for patent infringement based on activities relating to the manufacture, use and sale of DARZALEX in the United States, which was subsequently amended to include two additional MorphoSys patents. In addition, a further claim by Janssen and us that the three MorphoSys patents were unenforceable due to inequitable conduct by MorphoSys was included in the case. On January 25, 2019, the District Court ruled on summary judgment that the three MorphoSys patents were invalid for lack of enablement. MorphoSys had the opportunity to appeal the District Court's decision. On January 31, 2019, MorphoSys dismissed its infringement claims against us and Janssen with prejudice, and we and Janssen, in turn, dismissed our inequitable conduct claims against MorphoSys. As such, there will be no further proceedings in the case.

Employees

As of March 31, 2019, we had 419 employees. Of these employees, 361 were engaged in or support research and development and 58 were in administrative and business related positions. Each of our employees has signed confidentiality and inventions assignment agreements, or have signed employment agreements containing confidentiality and inventions assignment provisions, and none are covered by a collective bargaining agreement. We have never experienced employment-related work stoppages and consider our employee relations to be good.

Facilities

Our corporate headquarters are located in Copenhagen, Denmark, where we currently lease approximately 56,500 square feet, pursuant to a lease agreement dated as of February 15, 2017, by and between us and Castellum 2 i København ApS, or Castellum, as amended. The lease is perpetual, but can be terminated with six months' prior notice, which can be made effective no earlier than December 1, 2022 in the case of termination by us, and no earlier than December 1, 2027 in the case of termination by Castellum. Our indirectly wholly owned subsidiary, Genmab B.V., leases approximately 90,094 square feet (8,370 square meters) of office, laboratory and pre-clinical development space in Utrecht, The Netherlands pursuant to a lease agreement dated June 17, 2015. The start date of the lease term is May 22, 2017 and the lease term is 15 years with a cost-free break option at 10 years. In addition, our wholly owned subsidiary, Genmab US, Inc., leases office space in Princeton, New Jersey.

We believe that suitable additional or alternative space for each of our locations would be available as required in the future on commercially reasonable terms. However, the unexpected loss of our Utrecht laboratory facility or termination of the lease could result in delays in development of certain products and technology while we transition our research operations to an alternate facility.

MANAGEMENT

General

We have a two-tier governance structure consisting of a board of directors, or the Board, and senior management. Below is a summary of relevant information concerning the Board and senior management.

Members of Our Board of Directors and Senior Management

Board of Directors

The following table sets forth the name, age and position of each of our Board members as of the date of this prospectus. Our Board consists of six members elected by our shareholders at the general meeting, or Shareholder Elected Members (and each, a Shareholder Elected Member), and three members elected by our employees, or Employee Elected Members (and each, an Employee Elected Member). Shareholder Elected Members are elected by our shareholders every year and Employee Elected Members are elected by our employees every third year. The terms of office of the Shareholder Elected Members expire in 2020 and the terms of office of the Employee Elected Members expire in 2022. All members of the Board, however elected, are eligible for re-election.

The business address of our directors is our registered office address at c/o Genmab A/S, Kalvebod Brygge 43, 1560 Copenhagen V, Denmark.

<u>Name of Board Member</u>	<u>Age</u>	<u>Position(s)</u>
Mats Pettersson	73	Chairman (independent, Shareholder Elected)
Deirdre P. Connelly	58	Deputy Chairman (independent, Shareholder Elected)
Anders Gersel Pedersen	67	Board member (non-independent, Shareholder Elected)
Pernille Erenbjerg	51	Board member (independent, Shareholder Elected)
Paolo Paoletti	68	Board member (independent, Shareholder Elected)
Rolf Hoffmann	60	Board member (independent, Shareholder Elected)
Peter Storm Kristensen	44	Board member (non-independent, Employee Elected)
Mijke Zachariasse	45	Board member (non-independent, Employee Elected)
Daniel J. Bruno	39	Board member (non-independent, Employee Elected)

The following is a brief summary of the business experience of our Board members:

Mats Pettersson was elected to the Board in 2013 and currently acts as Chairman of the Board and as a member of the Audit and Finance Committee. Mr. Pettersson served as a member of the board of NsGene A/S from 2008 to 2012, Ablynx NV from 2007 to 2013, and as member of the board of H. Lundbeck A/S from 2003 to 2013, serving as Chairman from 2011 to 2013, BBB NV from 2008 to 2015, Photocure ASA from 2008 to 2015 and Moberg Pharma AB from 2010 to 2016. He was a member of various executive management committees at Pharmacia Corporation (acquired by Pfizer Inc.). Mr. Pettersson is the founder and former Chief Executive Officer of SOBI AB, an international biotechnology company headquartered in Stockholm, Sweden. Mr. Pettersson is a current board member of Magle Chemoswed AB. He holds a bachelor's degree and an M.B.A. from Handelshögskolan vid Göteborgs universitet in Gothenburg, Sweden.

Deirdre P. Connelly was elected to the Board in 2017 and currently acts as Deputy Chairman of the Board and the Chairman of the Compensation Committee. She is a member of the Audit and Finance Committee and the Nominating and Corporate Governance Committee. Ms. Connelly was formerly the President of North America Pharmaceuticals for GlaxoSmithKline plc from 2009 to 2015 and currently serves on the board of directors of Macy's, Inc. and of the Lincoln National Corporation. Prior to her time at GlaxoSmithKline plc, she spent 26 years with Eli Lilly and Company from 1984 to 2009, including tenures as President of U.S. Eli Lilly and Company and Vice President of Human

Resources and Vice President of Human Resources for Pharmaceutical Operations. She holds a bachelor's degree in Economics and Marketing from Lycoming University and is a graduate of Harvard University's Advanced Management Program.

Anders Gersel Pedersen was elected to the Board in 2003 and currently serves as the Chairman of the Nominating and Corporate Governance Committee and is a member of the Scientific Committee and the Compensation Committee. Dr. Pedersen currently serves as the Deputy Chairman of the board of Bavarian Nordic A/S and as a member of the board of Hansa Medical AB, and was formerly the Executive Vice President of Research & Development at H. Lundbeck A/S. Dr. Pedersen holds a medical degree and a doctoral degree in neuro-oncology from University of Copenhagen and a B.S. in Business Administration from Copenhagen Business School. He is a member of the European Society of Medical Oncology, the American Society of Clinical Oncology, the Danish Society of Medical Oncology, the Danish Society of Internal Medicine and the International Association for the Study of Lung Cancer.

Pernille Erenbjerg was elected to the Board in 2015 and currently serves as the Chairman of the Audit and Finance Committee and as a member of the Nominating and Corporate Governance Committee. Ms. Erenbjerg has a background in the finance industry and has previously practiced as a Certified Public Accountant, or CPA. Ms. Erenbjerg qualifies as an audit committee financial expert. Ms. Erenbjerg previously served as the Group CEO and President of TDC A/S and is a board member and audit committee member of Nordea AB, as well as the deputy chair of the board of directors of Millicom. She was formerly a member of the board of DFDS A/S from 2014 to 2018 and the Royal Danish Theatre from 2011 to 2015. She is formerly a partner at Deloitte Touche Tohmatsu Limited and spent 14 years as a CPA at Arthur Anderson LLP from 1987 to 2002. Ms. Erenbjerg holds a B.S. and a M.Sc. in Economics from Copenhagen Business School.

Paolo Paoletti was elected to the Board in 2015 and currently serves as the Chairman of the Scientific Committee and is a member of the Compensation Committee. Dr. Paoletti served as President of Oncology at GlaxoSmithKline plc and in various roles at Eli Lilly and Company, including Vice President of Oncology Research. Dr. Paoletti is the Acting CEO of GammaDelta Therapeutics Limited and is the Chairman of the board of PsiOxus Therapeutics Limited and a member of the board of FORMA Therapeutics, Inc. He was formerly the CEO of Kesios Therapeutics Ltd. from 2015 to 2017 and previously served as a member of the board of NuCana BioMed Ltd. Dr. Paoletti holds a medical degree from the University of Pisa.

Rolf Hoffmann was elected to the Board in 2017 and is a member of the Audit and Finance Committee and the Scientific Committee. Mr. Hoffmann has over 20 years of experience in the international pharmaceutical and biotechnology industries at Eli Lilly and Company from 1987 to 2004 and Amgen Inc. from 2004 to 2012. Mr. Hoffmann is currently an adjunct professor of Strategy and Entrepreneurship at the University of North Carolina Business School and serves as Chairman of the board of directors at Biotest AG and as a board member at Trigemina, Inc., EUSA Pharma, Inc., Paratek Pharmaceuticals, Inc. and Shield Therapeutics plc. He holds an M.A. in English from the University of Cologne, an M.A. in Kinesiology from Deutsche Sporthochschule Köln in Cologne, Germany and an M.B.A. from the University of North Carolina at Chapel Hill.

Peter Storm Kristensen was elected to the Board in 2016. Mr. Kristensen currently serves as our Associate Director of Legal. Prior to joining Genmab, he was a lawyer at Copenhagen University Hospital and Patienterstatningen from 2005 to 2007. He holds a law degree from University of Copenhagen.

Mijke Zachariasse was elected to the Board in 2019. Dr. Zachariasse joined us in 2017 and currently serves as our Associate Director of Protein Production and Chemistry. Prior to joining us, from 2010 to 2017, she was a Research Policy Advisor/Head of the Research Support Office at Utrecht University. From 2008 to 2010, Dr. Zachariasse was Managing Director of the Leiden Institute of

Physics. Dr. Zachariasse served as a Programme Officer at the Foundation for Fundamental Research on Matter from 2002 to 2008. She received her Doctorate in Physics from the Technical University of Eindhoven.

Daniel J. Bruno was elected to the Board in 2016. Mr. Bruno currently serves as our Vice President and Corporate Controller. Prior to joining Genmab, he worked at PricewaterhouseCoopers in the Assurance and Business Advisory Services division. He holds an M.S. degree in accounting and finance from Farleigh Dickinson University and is a CPA.

Senior Management

The following table sets forth information with respect to each of the members of our senior management, including their respective ages and their positions as of the date of this prospectus. The business address of these members of our senior management is our registered office address at c/o Genmab A/S, Kalvebod Brygge 43, 1560 Copenhagen V, Denmark. We note that only Jan G. J. van de Winkel, David A. Eatwell and Judith Klimovsky are registered with the Danish Business Authority as members of executive management, or registered managers, within the meaning of the DCA.

<u>Name of Member of Senior Management</u>	<u>Age</u>	<u>Position(s)</u>
Jan G. J. van de Winkel	58	President and Chief Executive Officer
David A. Eatwell	58	Executive Vice President and Chief Financial Officer
Judith Klimovsky	62	Executive Vice President and Chief Development Officer
Birgitte Stephensen	58	Senior Vice President, IPR & Legal
Michael K. Bauer	55	Senior Vice President, Head of Operations R&D
Tahamtan Ahmadi	45	Senior Vice President, Oncology and Translational Medicine
Anthony Pagano	41	Senior Vice President, Global Finance and Corporate Development
Martine J. van Vugt	49	Chief of Staff

The following is a brief summary of the business experience of our senior management.

Jan G. J. van de Winkel is our co-founder and had served as President, Research & Development and Chief Scientific Officer of the Company until his appointment as President & Chief Executive Officer in 2010. Dr. van de Winkel served as Vice President and Scientific Director of Medarex Europe prior to founding Genmab. Dr. van de Winkel holds a professorship of immunotherapy at Utrecht University. He is Chairman of the board of directors of Hookipa Pharma Inc. and a member of the board of directors of Celdara Medical, LLC and LEO Pharma A/S, and a member of the scientific advisory board of Thuja Capital Healthcare Fund and the advisory board of Capricorn Health-tech Fund. He holds an M.Sc. and a Ph.D. from the University of Nijmegen in the Netherlands.

David A. Eatwell joined us in 2008 and currently serves as the Executive Vice President and Chief Financial Officer. Mr. Eatwell has experience in leading international life science businesses, having spent 15 years working in Europe and ten years in the United States. Most recently, he served as Chief Financial Officer of Catalent Pharma Solutions, Inc., a leading provider of manufacturing and packaging services for the pharmaceutical and biotech industry. Prior to Catalent Pharma Solutions, Inc., Mr. Eatwell served as a divisional CFO of Cardinal Health, Inc. Mr. Eatwell is a member of the Association of Chartered Certified Accountants. Mr. Eatwell holds a degree in Business Administration from Swindon College in the United Kingdom.

Judith Klimovsky joined us in 2017 and currently serves as the Executive Vice President and the Chief Development Officer. She worked previously as a drug developer with more than 10 years of experience in research and development leadership roles at Bristol-Myers Squibb Company and Novartis Pharma AG. Dr. Klimovsky is also a medical doctor who has worked as a clinician in hospital environments. Prior to joining us, she held various positions at Novartis Pharma AG from 2009 to 2017, including Senior Vice President, Head of Clinical Development. Dr. Klimovsky is a member of the board of directors of Bellicum Pharmaceuticals. She holds a medical degree from the Universidad de Buenos Aires in Argentina.

Birgitte Stephensen joined us in 2002 and was appointed Senior Vice President in 2010. Ms. Stephensen has experience in both private practice and industry working with legal and intellectual property matters within the pharmaceutical and biotechnology fields. Prior to joining us, Ms. Stephensen worked in a patent law firm from 1988 to 1997, and was with the patent department of Novo Nordisk A/S from 1997 to 2002. Ms. Stephensen qualified as a European patent attorney in 1994. She earned an M.Sc. from the School of Pharmaceutical Sciences at the University of Copenhagen.

Michael K. Bauer joined us in 2006 and was appointed Senior Vice President in 2010. Before joining us, Dr. Bauer held various positions in academia, the pharmaceutical industry and the venture finance sector in Germany, New Zealand, the United States and Denmark, including at the University of Auckland from 1992 to 1998, Novo Nordisk A/S from 1998 to 2005 and BankInvest Group from 2005 to 2006. Dr. Bauer earned an M.Sc. from the University of Stuttgart-Hohenheim and a Ph.D. from the University of Göttingen, both in Germany.

Tahamtan Ahmadi joined us in 2017 and currently serves as the Senior Vice President, Oncology and Translational Medicine. Prior to that, Dr. Ahmadi was Head of Experimental Medicine and Early Development Oncology at Janssen and a member of the Senior Leadership Team for Oncology from 2012 to 2017. During his time at Janssen, he led the global development of daratumumab including clinical R&D and medical affairs strategy across indications. Dr. Ahmadi was previously a faculty member of the Department of Hematology and Oncology at the University of Pennsylvania. He holds an M.D. from the University of Cologne and a Ph.D. from the University of Freiburg, both in Germany, and has experience in translational research, strategic product development, global regulatory submissions and clinical development.

Anthony Pagano joined Genmab in 2007, was appointed Senior Vice President, Global Finance in 2011 and had his role expanded in 2019 to include Corporate Development. Prior to joining us, Mr. Pagano was Corporate Controller and Senior Director of Business Planning at NovaDel Pharma, Inc. from 2005 to 2007, a publicly-traded specialty pharmaceutical company. He previously worked as a Manager at KPMG LLP from 1999 to 2005. He is a Certified Public Accountant and received a B.S. in Accounting from The College of New Jersey, as well as an M.B.A. from the Stern School of Business at New York University.

Martine J. van Vugt started her professional career with us in 2001 and was appointed Chief of Staff in January 2019. Previously, she was responsible for our Project and Alliance Management as well as Strategic Initiatives and continues to oversee these areas. She has been active in our business development since 2011. From 1998 and until joining us in 2001, she studied dendritic cell vaccination therapy as a post-doctoral fellow. Dr. van Vugt holds an M.Sc. from the University of Wageningen and a Ph.D. from Utrecht University.

Corporate Governance

Board of Directors

The Board plays an active role in setting our strategies and goals and monitoring our operations and results. Board duties include establishing policies for strategy, accounting, organization and finance

and the appointment of the Company's registered managers. The Board also assesses our capital and share structure and is responsible for approving share issues and the grant of warrants and RSUs. In addition, the Board ensures that our affairs are managed in accordance with our articles of association and applicable law.

The Board performs its duties in accordance with the rules of procedure of the Board. The rules of procedure are reviewed and updated by all members of the Board on a regular basis. The Board meets for at least eight scheduled face-to-face or telephonic meetings during the year. During 2018, the Board held eight meetings in addition to the informal ongoing communication between Board members and our CEO. Our Board may consist of between three and nine Shareholder Elected Members, elected for terms of one year, with possibility of re-election. In addition, our employees may, pursuant to Danish statutory rules regarding the representation of employees on the board of directors and election regulations adopted by the Board, elect employee representatives to the Board, for terms of three years, with possibility of re-election. Currently, the Board has three Employee Elected Members, Peter Storm Kristensen, Mijke Zachariasse and Daniel J. Bruno. In total, our Board currently consists of nine Board members (including six Shareholder Elected Members and three Employee Elected Members). The Board elects a chairman from among its members. The majority of our Board members are considered to be independent under the corporate governance standards of the Nasdaq Stock Market and Nasdaq Copenhagen.

Senior Management

Registered managers are appointed by the Board, which sets out the terms and conditions of their employment and the framework for their duties. Registered managers are responsible for our day to day management, including all assignments that rest upon them according to the Board and under Danish law, in compliance with the guidelines and directions issued by the Board. Management of our day to day operations does not include transactions of an unusual nature or of significant importance, or transactions being outside our business plan, which must be authorized by the Board. Registered managers appoint other members of senior management.

Committees of the Board of Directors

The Board has established and appointed a Compensation Committee, an Audit and Finance Committee, a Nominating and Corporate Governance Committee and a Scientific Committee. These committees are charged with reviewing issues pertaining to their respective fields that are due to be considered at Board meetings. Under Danish corporate law, it is not possible to delegate the decision-making authority of the entire Board to board committees. Written charters specifying the tasks and responsibilities for each of the committees have been adopted by the Board.

Audit and Finance Committee

According to the Audit and Finance Committee charter which we will amend and adopt in connection with this offering, the Audit and Finance Committee must consist of at least three non-executive Board members, all of whom must be independent. Furthermore, the Chairman of the Board shall not be Chairman of the Audit and Finance Committee. As of the date of this prospectus, the Audit and Finance Committee consists of members Mats Pettersson, Rolf Hoffmann and Deirdre P. Connelly and is chaired by Pernille Erenbjerg. The Audit and Finance Committee assists the Board with the oversight of the financial reporting process, the effectiveness of internal controls over financial reporting and risk management, the independent audit process and compliance with legal and regulatory requirements, in accordance with the Audit and Finance Committee charter. Each member of the Audit and Finance Committee satisfies the independence requirements of the corporate governance standards of the Nasdaq Stock Market, and Pernille Erenbjerg qualifies as an "Audit Committee financial expert," as defined in Nasdaq Rule 5605(c)(2)(A) and as determined by our

Board. The following description reflects amendments to our Audit and Finance Committee charter that we will adopt in connection with this offering.

Our Audit and Finance Committee oversees our accounting and financial reporting processes and the audits of our consolidated financial statements. Our Audit and Finance Committee has the following principal responsibilities:

- overseeing the financial reporting principles and process to ensure the quality, transparency and integrity of the published financial information;
- overseeing the appropriateness and effectiveness of our internal controls over financial reporting and risk management system and evaluating the need for an internal audit;
- overseeing the independent auditor process, including annual assessment of the performance and qualifications of the independent auditor, overseeing non-audit services and, to the extent permitted by applicable law, being directly responsible for the appointment, retention and compensation of the independent auditor in connection with audit, review or attestation services;
- considering the independence of the independent auditor, including by (i) ensuring receipt from the independent auditor of a formal written statement delineating all relationships it has with the Company, (ii) actively engaging in dialogue with the independent auditor with respect to factors that may impact its objectivity and independence, and (iii) taking, or recommending that the Board takes, appropriate action to oversee auditor independence;
- ensuring that disagreements between management and the independent auditors and management responses thereto are discussed with the independent auditor and resolving disagreements between management and the independent auditor;
- assessing transactions between the Company and the Company's related parties and, in respect of material related party transactions, submitting a recommendation for approval or non-approval of such transactions to the Board prior to their completion.
- overseeing compliance with legal and regulatory requirements in relation to financial reporting and regulation;
- engaging independent counsel and other advisors;
- obtaining appropriate funding, as determined by the Audit and Finance Committee, for compensation to the independent auditor and to any advisors that the Audit and Finance Committee chooses to engage;
- undertaking the whistleblower function, including establishment of procedures for the receipt, retention and treatment of any complaints, including confidential anonymous submissions from our employees regarding accounting, auditing and internal control issues received through a formalized complaint process, as well as review of such complaints; and
- evaluating its own performance and the achievement of its duties on a regular basis, and annually reviewing and updating the Audit and Finance Committee charter and discussing any required changes thereto with the Board.

The Audit and Finance Committee also performs such other functions and exercises such other powers as may be delegated to it by the Board from time to time.

Compensation Committee

According to its charter, our Compensation Committee must consist of at least two independent non-executive directors, appointed by the Board. As of the date of this prospectus, the Compensation Committee consists of members Paolo Paoletti and Anders Gersel Pedersen and is chaired by

Deirdre P. Connelly, Paolo Paoletti and Deirdre P. Connelly satisfy the independence requirements of the corporate governance standards of the Nasdaq Stock Market. We consider Anders Gersel Pedersen non-independent solely by virtue of the length of his tenure on our Board, following his election to the Board in 2003. The Compensation Committee assists the Board in the areas of compensation of managers and the adoption of policies that concern our compensation programs, including equity-based programs and benefit plans. The Compensation Committee also makes recommendations to the Board regarding specific remuneration packages for each of the members of the Board as well as our registered managers, including pension rights and any compensation payments. The proposed remuneration principles, if adopted by the Board, are subject to the approval of our shareholders at the annual general meeting. The following description reflects amendments to our Compensation Committee charter that we will adopt in connection with this offering. The Compensation Committee's primary responsibilities are as follows:

- reviewing trends in compensation and the competitiveness of our executive compensation programs to ensure (a) the attraction and retention of registered managers, (b) the motivation of registered managers to achieve our business objectives, and (c) the alignment of the interests of key leadership with the long-term interests of our shareholders;
- making proposals for the approval of the Board prior to approval by shareholders at the general meeting, on the compensation policy for members of the Board and the registered managers, including the overall principles of incentive pay schemes, compensation structure and long-term incentive compensation plans and a remuneration policy applicable to the Company in general;
- reviewing goals and objectives of our CEO and evaluating his or her performance in their light to make recommendations concerning CEO compensation upon deliberations or voting in the CEO's absence;
- overseeing the evaluation of the performance of the Company's registered managers, and discussing their annual compensation, including salary, bonus, incentive and equity compensation;
- reviewing plans for registered managers' development and corporate succession plans for registered management;
- reviewing termination and compensation packages for new registered managers as requested by management;
- in its sole discretion, retaining, terminating and receiving advice from outside counsel, compensation consultants or other advisers, upon consideration of (i) whether such counsel, consultant or adviser provides other services to the Company and the amount of fees they receive from the Company as a percentage of their total revenue, (ii) the policies of such counsel, consultant or adviser designed to prevent conflicts of interest, (iii) any business or personal relationship of the consultant, counsel or adviser with a member of the Compensation Committee or a member of senior management of the Company, and (iv) any ownership of shares in the Company by the consultant, legal counsel or adviser;
- approving the fees of outside counsel, compensation consultants or other advisers, to be appropriately funded by the Company and directly overseeing the work of such counsel, consultants or advisers; and
- overseeing that the information in the annual report on the compensation of the Board and registered managers is correct, true and sufficient.

The Compensation Committee also performs such other functions and exercises such other powers as may be delegated to it by the Board from time to time.

Nominating and Corporate Governance Committee

According to its charter, our Nominating and Corporate Governance Committee must include at least two independent non-executive directors, appointed by the Board. As of the date of this prospectus, the Nominating and Corporate Governance Committee consists of members Pernille Erenbjerg and Deirdre P. Connelly and is chaired by Anders Gersel Pedersen. Pernille Erenbjerg and Deirdre P. Connelly satisfy the independence requirements of the corporate governance standards of the Nasdaq Global Select Market. We consider Anders Gersel Pedersen non-independent solely by virtue of the length of his tenure on our Board, following his election to the Board in 2003. The Nominating and Corporate Governance Committee identifies, reviews, evaluates and recommends to the full Board candidates to serve as directors of the Company and makes recommendations to the Board regarding Board and committee members and corporate governance issues. The Nominating and Corporate Governance Committee's primary responsibilities include the following:

- proposing to the full Board policies on the size and composition of the Board, including proposals for specific changes to Board size, composition or internal rules of the Board;
- describing the qualifications required for the Board and the registered managers and for a given position and identifying and recommending qualified candidates to the Board;
- evaluating at least annually the skills, knowledge and experience of the individual members of the Board and the registered managers and evaluating, reviewing and considering whether to recommend existing directors for re-election;
- maintaining an orientation and continuing education program for directors;
- establishing a process for the periodic review and assessment of the performance of the Board and its committees and conducting such review of the structure and performance of each board committee and committee member, recommending any changes considered appropriate, as well as recommending the establishment of new or special committees as desirable or necessary from time to time;
- periodically assessing the independence of directors and our corporate governance principles and their application, and recommending any changes deemed appropriate to the Board, including in connection with any proposals submitted by shareholders that relate to corporate governance matters;
- overseeing and reviewing the processes and procedures in place to ensure that the Board and its committees timely receive accurate, relevant and appropriately detailed information;
- reviewing the adequacy of internal rules of the Board, management and any other codes of ethics with the Board and management;
- overseeing our policies and practices regarding philanthropic and political activities; and
- periodically reviewing, discussing and assessing the performance of the committee as well as the adequacy of its charter, and recommending any proposed changes to the Board for approval.

Scientific Committee

According to its charter, the Scientific Committee must include at least three non-executive directors, the majority of whom must be independent, with a broad scientific and medical understanding and experience, appointed by the Board. As of the date of this prospectus, the Scientific Committee consists of members Anders Gersel Pedersen and Rolf Hoffmann and is chaired by Paolo Paoletti. The Scientific Committee provides input and advises the Board in matters relating to our research and development strategy, including reviewing our pre-clinical and clinical product pipeline in

view of our overall strategy and vision. The Scientific Committee's primary responsibilities include the following:

- reviewing and discussing our pre-clinical and clinical product portfolio, including the commercial attractiveness and the ranking thereof;
- reviewing and discussing our research and development strategy and reviewing scientific and technological trends that we believe are of significant importance and providing strategic advice and making recommendations with respect to our ongoing research and development programs;
- reviewing the extent of our research and development capacity and its organization, including the product development process; and
- reviewing and discussing the Company's intellectual property strategies.

Code of Business Conduct

In connection with this offering, we will adopt an amended written code of business conduct, or code of conduct, which outlines the principles of legal and ethical business conduct under which we do business. The code of conduct applies to all of our Board members and employees. The full text of the code of conduct will be made available on our website at www.genmab.com. This website address is included in this prospectus as an inactive textual reference only. The information and other content appearing on our website are not part of this prospectus. Any amendments or waivers from the provisions of the code of conduct will be made only after approval by our Board and will be disclosed in accordance with applicable rules and regulations promptly following the date of such amendment or waiver.

Other Corporate Governance Matters

The Sarbanes-Oxley Act, as well as related rules subsequently implemented by the SEC, require foreign private issuers, including our company, to comply with various corporate governance practices. In addition, the Nasdaq Listing Rules provide that foreign private issuers may follow home country practice in lieu of Nasdaq Global Select Market corporate governance standards, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws. The home country practices we intend to follow in lieu of the Nasdaq Listing Rules are described below.

- We do not intend to follow the quorum requirements of the Nasdaq Stock Market applicable to meetings of shareholders. In accordance with Danish corporate law and generally accepted business practice, our articles of association do not provide quorum requirements for general meetings of shareholders.
- We do not intend to follow the requirements of the Nasdaq Stock Market regarding the provision of proxy statements for general meetings of shareholders. Danish corporate law does not have a regulatory regime for the solicitation of proxies. The solicitation of proxies is not a generally accepted business practice in Denmark, although it has recently become more common for listed companies to do so. However, a shareholder may be represented at a general meeting by proxy. Unless containing a provision to the contrary, instruments of proxy will be deemed to be in force until revoked in writing by notification to the company. We intend to provide notice convening a general meeting, including an agenda and other relevant documents, to the Danish Business Authority and written notice to all registered shareholders who have so requested.
- We do not intend to follow the requirements of the Nasdaq Stock Market regarding shareholder approval for certain issuances of securities under Nasdaq Listing Rule 5635. Pursuant to Danish

corporate law and our articles of association, our shareholders have authorized our Board to issue securities, including shares and warrants.

- We do not intend to follow the requirement of the Nasdaq Stock Market that each member of the Compensation Committee be independent as defined under Nasdaq Listing Rule 5605(a)(2). No such requirement exists pursuant to Danish law. We do not have an independent Compensation Committee within the meaning of the Nasdaq Listing Rules because we consider Anders Gersel Pedersen, a member of the Compensation Committee, to be a non-independent director solely by virtue of the length of his tenure on our Board, following his election to the Board in 2003. We do not consider Dr. Pedersen's tenure as material to his ability to be independent from senior management in connection with his duties as a Compensation Committee member.
- We do not intend to follow the requirement of the Nasdaq Stock Market that we have independent director oversight of director nominations as prescribed by Nasdaq Listing Rule 5605(e)(1). No such requirement exists pursuant to Danish law. We do not have independent oversight of director nominations because we consider Anders Gersel Pedersen, Chairman of the Nominating and Corporate Governance Committee, to be a non-independent director solely by virtue of the length of his tenure on our Board, following his election to the Board in 2003. We do not consider Dr. Pedersen's tenure as material to his ability to be independent from senior management in connection with his duties as Chairman of the Nominating and Corporate Governance Committee.

Because we are a foreign private issuer, the members of our Board and senior management are not subject to short-swing profit and insider trading reporting obligations under Section 16 of the Exchange Act. They will, however, be subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules, to the extent applicable. We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act, the rules adopted by the SEC and the Nasdaq Listing Rules.

Compensation

In 2018, the aggregate remuneration paid to the Board was DKK 11.25 million.

No member of the Board is entitled to any kind of remuneration upon retirement from his or her position as a member of the Board. We have not allocated funds for any pension benefits, severance schemes or similar measures, or undertaken any other obligations to do so on behalf of the Board, and we have no obligation to do so.

For the financial year ended December 31, 2018, the aggregate remuneration to our senior management was DKK 86.7 million, all of which was fully accrued at December 31, 2018. This amount includes base salary, defined contribution plans, other benefits, share-based compensation expenses and annual cash bonuses. Compensation paid for the financial year ended December 31, 2018 to each of Dr. Jan van de Winkel, David A. Eatwell and Judith Klimovsky is disclosed below, as such disclosure is included in our audited consolidated financial statements for the years ended December 31, 2018 and 2017 included elsewhere in this prospectus. See Note 5.1 of these financial statements for details on compensation of these individuals.

The Board has adopted a remuneration policy for the Board and registered managers, including general guidelines for incentive remuneration. No member of our Board and senior management has received or will receive separate remuneration in connection with this offering.

Compensation of Members of Our Board of Directors and Certain Members of Senior Management

During 2018, our Board granted the following warrants to members of our Board and certain members of our senior management:

	Number of Warrants held at December 31, 2017	Granted	Exercised	Expired	Transfers	Number of Warrants held at December 31, 2018	Black-Scholes Value Warrants Granted in 2018 DKK	Weighted Average Exercise Price Outstanding Warrants DKK
Board of Directors								
Mats Pettersson	38,750	—	(12,500)	—	—	26,250	—	207.23
Anders Gersel Pedersen	32,750	—	(3,750)	—	—	29,000	—	116.83
Pernille Erenbjerg	—	—	—	—	—	—	—	—
Paolo Paoletti	—	—	—	—	—	—	—	—
Rolf Hoffmann	—	—	—	—	—	—	—	—
Deirdre P. Connelly	—	—	—	—	—	—	—	—
Peter Storm Kristensen*	2,515	—	—	—	—	2,515	—	663.38
Rick Hibbert*†	1,451	350	(925)	—	—	876	128,113	998.81
Daniel J. Bruno*	16,776	2,811	(3,750)	—	—	15,837	1,028,927	922.01
Mijke Zachariasse*	240	317	—	—	—	557	116,033	1,187.44
	92,482	3,478	(20,925)	—	—	75,035	1,273,073	354.96
Senior Management								
Jan van de Winkel	164,802	23,266	(80,000)	—	—	108,068	8,516,194	748.36
David A. Eatwell	373,056	12,145	(50,000)	—	—	335,201	4,445,507	215.41
Judith Klimovsky	21,879	15,053	—	—	—	36,932	5,509,940	1,118.99
	559,737	50,464	(130,000)	—	—	480,201	18,471,641	404.84
Total	652,219	53,942	(150,925)	—	—	555,236	19,744,714	398.10

* Each Employee Elected Member was granted warrants as an employee of Genmab.

† Stepped down from the Board at the Annual General Meeting in March 2019 upon the expiration of his term.

During 2018, our Board granted the following RSUs to members of our Board and certain members of our senior management:

	Number of RSUs held at December 31, 2017	Granted	Settled	Transfers	Number of RSUs held at December 31, 2018	Fair Value RSUs Granted in 2018 DKK
Board of Directors						
Mats Pettersson	4,818	780	(2,300)	—	3,298	799,500
Anders Gersel Pedersen	3,613	390	(1,725)	—	2,278	399,750
Pernille Erenbjerg	3,959	390	(2,700)	—	1,649	399,750
Paolo Paoletti	3,959	390	(2,700)	—	1,649	399,750
Rolf Hoffmann	1,509	390	—	—	1,899	399,750
Deirdre P. Connelly	1,509	585	—	—	2,094	599,625
Peter Storm Kristensen*	1,091	390	—	—	1,481	399,750
Rick Hibbert*†	924	515	—	—	1,439	527,875
Daniel J. Bruno*	2,946	1,394	—	—	4,340	1,428,850
Mijke Zachariasse*	75	113	—	—	188	115,825
	24,403	5,337	(9,425)	—	20,315	5,470,425
Senior Management						
Jan van de Winkel	47,597	8,308	(22,400)	—	33,505	8,515,700
David A. Eatwell	29,056	4,337	(13,325)	—	20,068	4,445,425
Judith Klimovsky	7,204	5,375	—	—	12,579	5,509,375
	83,857	18,020	(35,725)	—	66,152	18,470,500
Total	108,260	23,357	(45,150)	—	86,467	23,940,925

* Each Employee Elected Member, except Mijke Zachariasse who was elected to the Board in March 2019, was granted 390 RSUs as a member of the Board in 2018. The remaining RSUs were granted to each Employee Elected Member in his or her capacity as an employee of the Company.

† Stepped down from the Board at the Annual General Meeting in March 2019 upon the expiration of his term.

During 2018, our Board members received the following compensation in connection with their membership on the Board:

	Base Board Fee DKK'000	Committee Fees DKK'000	Shared-based Compensation Expenses DKK'000	Total DKK'000
Mats Pettersson*	1,200	300	866	2,366
Anders Gersel Pedersen*	500	280	646	1,426
Pernille Erenbjerg*	400	300	538	1,238
Paolo Paoletti*	400	150	538	1,088
Rolf Hoffmann*	400	280	670	1,350
Deirdre P. Connelly*	700	350	674	1,724
Peter Storm Kristensen**	400	—	286	686
Rick Hibbert**†	400	—	286	686
Daniel J. Bruno**	400	—	286	686
Mijke Zachariasse **††	—	—	—	—
Total	4,800	1,660	4,790	11,250

* Shareholder Elected Member

** Employee Elected Member

† Stepped down from the Board at the Annual General Meeting in March 2019 upon the expiration of his term.

†† Elected to the Board in March 2019.

During 2018, our registered managers received the following compensation in connection with their employment with us:

	Base Salary	Defined Contribution Plans	Other Benefits	Annual Cash Bonus	Share-based Compensation Expenses	Total
	DKK'000	DKK'000	DKK'000	DKK'000	DKK'000	DKK'000
Jan van de Winkel	7,087	1,160	242	6,378	13,420	28,287
David A. Eatwell	3,908	155	1,396	2,111	8,121	15,691
Judith Klimovsky	3,552	112	238	2,131	5,870	11,903
Total	14,547	1,427	1,876	10,620	27,411	55,881

Certain Senior Management Agreements

Remuneration given to our President and CEO, Jan G. J. van de Winkel, our Executive Vice President and CFO, David A. Eatwell and our Executive Vice President and CDO, Judith Klimovsky in accordance with their service agreements consists of a base salary, a cash bonus, RSUs and warrants. The cash bonus for Dr. van de Winkel is to be determined by the Compensation Committee and approved by the Board in a range of 0 to 100 percent of his annual base salary. The cash bonus for Mr. Eatwell and Dr. Klimovsky is conditional upon the recommendation of the CEO, in an amount between 0 and 60 percent of the individual's annual base salary as determined by the Compensation Committee and approved by the Board. For 2018, warrants and RSUs have been granted to the above named individuals under our warrant and RSU programs, which are further described below. These individuals qualify for all of our benefit programs, including pension plans.

The above-named individuals can terminate their employment with us by giving a 6-month notice. We can terminate their employment with us by giving them a 12-month notice. In the event that we terminate the service agreements without cause, we will be obliged to pay the then existing salary (including all benefits set forth in their respective service agreements) to Dr. van de Winkel and Mr. Eatwell for two years, and to Dr. Klimovsky for one year, after the end of the 12-month notice period.

In the event of a termination in connection with a change in control (as defined in the individuals' service agreements), we will pay an additional two years of then current salary (including all benefits set forth in their respective service agreements) to Dr. van de Winkel and Mr. Eatwell, and three years of then current salary (including all benefits set forth in her service agreement) to Dr. Klimovsky. Dr. van de Winkel and Mr. Eatwell will also receive an amount equal to two times the highest total bonus awarded to them, and Dr. Klimovsky will receive an amount equal to the highest total bonus awarded to her, in any year during the term of their respective employment, in each case payable in a lump sum payment on the individual's last working day.

Other than as set out above, Dr. van de Winkel, Mr. Eatwell and Dr. Klimovsky are not entitled to any kind of remuneration upon termination of employment. We have not granted any loans, issued any guarantees or undertaken any other obligations to do so on behalf of any member of our senior management.

For further details on the terms and conditions of the warrants, see "—Warrant Program" below.

For further details on the terms and conditions of the RSUs, see "—Restricted Stock Unit Program" below.

Other than as set out above, no exceptional or extraordinary agreements, including agreements regarding bonus schemes, other than ordinary incentive schemes and remuneration of the senior management implying financial obligations for us, have been concluded with members of our senior management.

Warrant Program

We have established a warrant program, or the Warrant Program, as an incentive for our employees and members of senior management. Warrants are granted by the Board in accordance with authorizations given to it by our shareholders. Warrant grants are subject to the relevant terms of our articles of association and the incentive guidelines adopted by the shareholders at the general meeting, or the remuneration principles. Under the terms of the Warrant Program, (i) warrants are granted at an exercise price equal to the share price on the grant date, (ii) the exercise price cannot be fixed at a lower price than the market price at the grant date and (iii) in connection with exercise, the warrants are to be settled with the delivery of our shares. The Warrant Program contains anti-dilution provisions if changes occur in our share capital prior to the warrants being exercised.

In case of a change of control event as defined in the Warrant Program, the warrant holder will immediately be granted the right to exercise all of his or her warrants regardless of the fact that such warrants would otherwise only become fully vested at a later point in time. Warrant holders who are no longer employed by or affiliated with us will, however, only be entitled to exercise such percentages of warrants as would otherwise have vested under the terms of the Warrant Program.

Granted warrants are generally subject to provisions reflecting the principles of the former section 4 and 5 of the Danish Stock Option Act (*Aktieoptionsloven*), which allows for the forfeiture of unexercised warrants if the grantee separates from the company or one of our subsidiaries under circumstances in which the warrant holder is considered a "bad-leaver", understood as, for example, being dismissed for cause or resigning without us having materially breached the employment contract. Warrant holders may maintain all granted warrants if they separate from the company or one of our subsidiaries under circumstances where they are considered as "good-leavers", such as dismissal without cause, leaving us pursuant to an agreed severance agreement or retirement, warrant holder's resignation due to our material breach of contract or the warrant holder's death.

The terms of the warrants issued under the Warrant Program were amended in August 2004, April 2012 and March 2017. Warrants granted on terms as amended in August 2004 can be exercised starting from one year after the grant date and lapse on the tenth anniversary of the grant date. As a general rule, the warrant holder may only exercise 25% of the warrants granted per full year of employment or affiliation with us after the grant date. However, the warrant holder will be entitled to continue to be able to exercise all warrants on a regular schedule in instances where the employment relationship is terminated by us without cause.

Warrants granted on terms as amended in April 2012 will lapse at the seventh anniversary of the grant date. All other terms of these warrants are identical to those issued pursuant to the August 2004 amendment.

Warrants granted on terms as amended in March 2017 are subject to a cliff vesting period and become fully vested three years from the date of grant. All other terms of such warrants are identical to those issued pursuant to the April 2012 amendment.

In addition, in March 2019, our shareholders authorized the Board to issue additional warrants to subscribe for up to a nominal value of DKK 500,000 of our shares, on one or more occasions, to our employees, as well as employees of our directly and indirectly owned subsidiaries, but not to our registered managers. The terms of these warrants are identical to those issued pursuant to the March 2017 amendment.

As of December 31, 2018, our outstanding warrants and the holders of such warrants may be summarized as follows:

	Number of Warrants Held by the Board of Directors*	Number of Warrants Held by Messrs. van de Winkel and Eatwell and Ms. Klimovsky	Number of Warrants Held by Employees**	Number of Warrants Held by Certain Former Members of Senior Management, Board of Directors and Employees	Total Outstanding Warrants	Weighted Average Exercise Price DKK
Outstanding at January 1, 2018	92,242	559,737	574,295	291,912	1,518,186	436.01
Granted	3,161	50,464	222,882	—	276,507	1,034.66
Exercised	(20,925)	(130,000)	(46,883)	(114,089)	(311,897)	241.34
Expired	—	—	—	(37,875)	(37,875)	253.76
Cancelled	—	—	(4,582)	(17,129)	(21,711)	940.01
Transfers	—	—	(39,624)	39,624	—	—
Outstanding at December 31, 2018	74,478	480,201	706,088	162,443	1,423,210	592.14
Exercisable at year end	62,647	355,347	297,128	152,743	867,865	295.02
Exercisable warrants in the money at year end	60,688	340,775	257,115	148,701	807,279	230.43

* Warrants held by the Board include only warrants granted to Employee Elected Members of the Board in their capacity as employees of the Company, include warrants held by Rick Hibbert, who stepped down from the Board at the Annual General Meeting in March 2019 upon the expiration of his term and do not include warrants held by Mijke Zachariasse, who was elected to the Board in March 2019.

** Warrants held by employees include warrants held by Mijke Zachariasse, who was elected to the Board in March 2019.

Restricted Stock Unit Program

We have established an RSU program as an incentive for all our employees, members of senior management and members of the Board.

RSUs are granted and performance vesting criteria decided by the Board in its sole discretion. Under the terms of the RSU program, RSUs are subject to a cliff vesting period and become fully vested on the first banking day of the month following a period of three years from the date of grant. If an employee, member of senior management, or member of the Board ceases his or her employment or Board membership prior to the vesting date, all RSUs that are granted but not yet vested will lapse automatically. However, if an employee, a member of senior management or a member of the Board ceases employment or Board membership due to retirement or age limitation in our articles of association, death, serious sickness or serious injury then all RSUs that are granted, but not yet vested will remain outstanding and will be settled in accordance with their terms. In addition, for an employee or a member of senior management, RSUs that are granted but not yet vested will remain outstanding and will be settled in accordance with their terms in instances where the employment relationship is terminated by us without cause. Within 30 days of the vesting date, the holder of an RSU receives one share in the Company for each RSU. We may, at our sole discretion in extraordinary circumstances, choose to make a cash settlement instead of delivering shares.

The RSU program contains anti-dilution provisions if changes occur in our share capital prior to the vesting date and provisions to accelerate vesting of RSUs in the event of a change of control as defined in the RSU program.

We intend to purchase our own shares in order to cover our obligations in relation to the RSUs. Authorization to purchase our own shares up to a nominal value of DKK 500,000 (500,000 shares) was given by the shareholders at the annual general meeting in March 2016. Pursuant to this authorization and to cover our obligations under the RSU program, in 2018, we acquired 125,000 of our treasury shares, representing approximately 0.2% of share capital, for DKK 146.2 million, including directly attributable costs. Additionally, in March 2019, our shareholders authorized us to repurchase up to an additional nominal value of DKK 500,000 (500,000 shares). A portion of the shares that may be repurchased under this authorization may be used to cover our obligations in relation to the RSUs. The weighted average fair value of RSUs granted in 2018 was DKK 1,033.95.

As of December 31, 2018, our outstanding RSUs and the holders of such RSUs may be summarized as follows:

	Number of RSUs Held by the Board of Directors*	Number of RSUs Held by Messrs. van de Winkel and Eatwell and Ms. Klimovsky	Number of RSUs Held by Employees**	Number of RSUs Held by Former Members of the Board of Directors and Employees	Total Outstanding RSUs
Outstanding at January 1, 2018	24,328	83,857	55,475	4,384	168,044
Granted	5,224	18,020	79,395	—	102,639
Settled	(9,425)	(35,725)	—	(2,300)	(47,450)
Transferred	—	—	(3,358)	3,358	—
Cancelled	—	—	(1,466)	(2,865)	(4,331)
Outstanding at December 31, 2018	20,127	66,152	130,046	2,577	218,902

* RSUs held by the Board include RSUs granted to Employee Elected Members in their capacity as employees of our Company, include RSUs held by Rick Hibbert, who stepped down from the Board at the Annual General Meeting in March 2019 upon the expiration of his term and do not include RSUs held by Mijke Zachariasse, who was elected to the Board in March 2019.

** RSUs held by employees include RSUs held by Mijke Zachariasse, who was elected to the Board in March 2019.

Insurance and Discharge of Liability

According to the DCA, shareholders, at the general meeting, are permitted to discharge our Board members and registered managers from liability for any particular financial year based on a resolution relating to the period covered by the financial statements for the previous financial year. This discharge means that the shareholders will relieve such Board members and registered managers from liability to us. However, shareholders cannot discharge any claims by individual shareholders or other third parties. In addition, the discharge can be set aside in case the general meeting prior to its decision to discharge was not presented with all reasonable information necessary for the general meeting to assess the matter at hand.

In addition, we provide our Board members and registered managers with directors' and officers' liability insurance.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

We have not granted any loans, guarantees, or other commitments to or on behalf of any members of our board of directors or senior management.

Employment Agreement and Warrant Grants

We have entered into employment agreements with, and issued warrants to, our senior management. See "Management—Compensation—Certain Management Agreements" and "Management—Compensation—Warrant Program" for more information.

PRINCIPAL SHAREHOLDERS

The following table sets forth information relating to the beneficial ownership of our shares as of March 31, 2019 by:

- each person, or group of affiliated persons, known by us to beneficially own equal to or more than 5% of our outstanding shares;
- each of our board members; and
- each member of our senior management.

Name of Beneficial Owner	Share Beneficial Ownership Prior to this Offering				Share Beneficial Ownership After this Offering	
	Number of Shares Beneficially Owned	Number of Warrants Exercisable and RSUs to be Settled Within 60 Days	Fully Diluted Number of Shares Beneficially Owned	Fully Diluted Percentage of Beneficial Ownership	Fully Diluted Number of Shares Beneficially Owned	Fully Diluted Percentage of Beneficial Ownership
5% Shareholders						
Artisan Partners Limited Partnership ⁽¹⁾	3,081,731	—	3,081,731	5.01%		
Board Members and Senior Management						
Mats Pettersson	25,757	26,250	52,007	0.08%		
Anders Gersel Pedersen	8,718	29,000	37,718	0.06%		
Pernille Erenbjerg	3,178	—	3,178	0.01%		
Paolo Paoletti	3,815	—	3,815	0.01%		
Rolf Hoffmann	1,050	—	1,050	0.00%		
Deirdre P. Connelly	2,200	—	2,200	0.00%		
Mijke Zachariasse	—	—	—	0.00%		
Peter Storm Kristensen	—	1,615	1,615	0.00%		
Daniel J. Bruno	—	5,682	5,682	0.01%		
Jan G. J. van de Winkel	668,484	51,371	719,855	1.17%		
David A. Eatwell	35,261	303,976	339,237	0.55%		
Judith Klimovsky	—	—	—	—		
Birgitte Stephensen	*	*	*	*		
Michael K. Bauer	—	*	*	*		
Tahamtan Ahmadi	—	—	—	—		
Anthony Pagano	—	*	*	*		
Martine J. van Vugt	*	*	*	*		
All board members and senior management as a group (17 persons)	751,963	488,048	1,240,011	2.02%		

* Indicates beneficial ownership of less than 1% of the total outstanding shares.

(1) This information is based solely on a notification provided by Artisan Partners Limited Partnership pursuant to Section 38 of the Danish Capital Markets Act. Genmab issued a major shareholder announcement on January 9, 2018. Artisan Partners Limited Partnership does not have different voting rights from other shareholders.

The number of shares beneficially owned by each entity, person or member of our board of directors or senior management is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting

power or investment power as well as any shares for which the individual has the right to subscribe within 60 days of March 31, 2019 through the exercise of any options, warrants or other rights. There are 488,048 shares for which our board members and senior management as a group have the right to subscribe within 60 days of March 31, 2019 pursuant to the exercise of warrants or settlement of RSUs. See "Description of Share Capital and Certain Corporate Matters", as well as "Management—Compensation—Warrant Program" and "Management—Compensation—Restricted Stock Unit Program" for a description of certain terms related to the exercise of our warrants and settlement of RSUs.

Subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares owned by that person.

The percentage of shares beneficially owned prior to this offering is computed on the basis of 61,523,868 shares outstanding as of March 31, 2019. Shares for which a person has the right to subscribe within 60 days of March 31, 2019 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person.

The percentage of shares beneficially owned after this offering is computed on the basis of _____ shares outstanding as of March 31, 2019, after giving effect to the issue of _____ shares offered hereby.

DESCRIPTION OF SHARE CAPITAL AND CERTAIN CORPORATE MATTERS

Introduction

Set forth below is a summary of certain information concerning our share capital as well as a description of certain provisions of our articles of association and relevant provisions of the DCA. The summary includes certain references to, and descriptions of, material provisions of our articles of association to be effective in connection with the consummation of this offering and Danish law in force as of the date of this prospectus. The summary below contains only material information concerning our share capital and corporate status and does not purport to be complete and is qualified in its entirety by reference to our articles of association and applicable Danish law. Further, please note that as an American Depositary Share, or ADS, holder you will not be treated as one of our shareholders and will not have any shareholder rights.

General

We were incorporated on June 11, 1998 as a private limited liability company (*Anpartsselskab*, or *ApS*) under Danish law as a shelf company and are registered with the Danish Business Authority (*Erhvervsstyrelsen*) in Copenhagen, Denmark under registration number (CVR) no. 21023884. Our name was changed to Genmab ApS on November 17, 1998 and we commenced operations in February 1999. On May 31, 1999, we were converted into a public limited liability company (*Aktieselskab*, or *A/S*) and changed our name to Genmab A/S. Our shares have been listed for trading on Nasdaq Copenhagen since October 2000.

Our company's headquarters and registered office is located at Kalvebod Brygge 43, 1560 Copenhagen V, Denmark. Our business is conducted from Denmark as well as from The Netherlands and the United States. Our website address is www.genmab.com. The information on, or information that can be accessed through, our website is not part of and should not be incorporated by reference into this prospectus. We have included our website address as an inactive textual reference only.

Development of Share Capital

Since August 25, 2000, we have had one class of shares (prior to this date we had multiple classes of shares). As of March 31, 2019 our registered, issued and outstanding share capital was DKK 61.5 million distributed into 61,523,868 shares of nominal value DKK 1 each.

The development of our share capital within the last three financial years and up to and including March 31, 2019 is set forth in the table below. All of the capital increases listed in the table below are a result of exercise of warrants by members of our board of directors, management and other

employees under our incentive programs. For a description of the terms of our outstanding warrants and RSUs under these incentive programs, see "Management—Compensation."

	<u>Capital Increase, No. of Shares</u>	<u>Gross Proceeds, DKKm</u>	<u>Share Capital, No. of Shares</u>	<u>Issued Share Capital, DKK</u>
Share capital at December 31, 2015			59,531,263	59,531,263
2016				
Capital increase, February 2016 at various prices between DKK 26.75 and DKK 364 per share (cash)	146,321	38.4	59,677,584	59,677,584
Capital increase, May 2016 at various prices between DKK 26.75 and DKK 466.20 per share (cash)	156,348	43.6	59,833,932	59,833,932
Capital increase, August 2016 at various prices between DKK 31.75 and DKK 623.50 per share (cash)	347,825	83.9	60,181,757	60,181,757
Capital increase, September 2016 at various prices between DKK 31.75 and DKK 364 per share (cash)	66,840	18.0	60,248,597	60,248,597
Capital increase, November 2016 at various prices between DKK 40.41 and DKK 636.50 per share (cash)	101,459	25.6	60,350,056	60,350,056
2017				
Capital increase, February 2017 at various prices between DKK 31.75 and DKK 939.50 per share (cash)	385,087	103.3	60,735,143	60,735,143
Capital increase, April 2017 at various prices between DKK 66.60 and DKK 939.50 per share (cash)	176,843	44.0	60,911,986	60,911,986
Capital increase, May 2017 at various prices between DKK 80.55 and DKK 939.50 per share (cash)	43,252	14.4	60,955,238	60,955,238
Capital increase, June 2017 at various prices between DKK 55.85 and DKK 1,233 per share (cash)	163,164	32.1	61,118,402	61,118,402
Capital increase, August 2017 at various prices between DKK 66.60 and DKK 939.50 per share (cash)	21,070	7.7	61,139,472	61,139,472
Capital increase, September 2017 at various prices between DKK 31.75 and DKK 939.50 per share (cash)	23,670	6.77	61,163,142	61,163,142
Capital increase, November 2017 at various prices between DKK 40.41 and DKK 636.50 per share (cash)	22,532	6.68	61,185,674	61,185,674
2018				
Capital increase, February 2018 at various prices between DKK 40.41 and DKK 939.50 per share (cash)	65,419	18.3	61,251,093	61,251,093
Capital increase, April 2018 at various prices between DKK 80.55 and DKK 1,145 per share (cash)	30,149	9.21	61,281,242	61,281,242
Capital increase, May 2018 at various prices between DKK 46.74 and DKK 939.50 per share (cash)	155,576	33.1	61,436,818	61,436,818
Capital increase, July 2018 at various prices between DKK 66.60 and DKK 1,233 per share (cash)	24,025	5.6	61,460,843	61,460,843
Capital increase, August 2018 at various prices between DKK 66.60 and DKK 939.50 per share (cash)	10,726	3.17	61,471,569	61,471,569
Capital increase, September 2018 at various prices between DKK 174.00 and DKK 466.20 per share (cash)	18,414	4.12	61,489,983	61,489,983
Capital increase, November 2018 at various prices between DKK 174.00 and DKK 636.50 per share (cash)	7,588	1.71	61,497,571	61,497,571
2019				
Capital increase, February 2019 at various prices between DKK 40.41 and DKK 636.50 per share (cash)	26,297	5.39	61,523,868	61,523,868

Authorizations to Our Board of Directors

Our board of directors is authorized to increase our share capital as follows:

- Until April 10, 2023, our board of directors is authorized to increase our share capital on one or more occasions without pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares. The capital increase can be made by cash or by non-cash payment. Within the authorization to increase the share capital by nominally DKK 7,500,000 shares, our board of directors may on one or more occasions and without pre-emption rights for the existing shareholders issue up to nominally DKK 2,000,000 shares to the Company's employees as well as employees of the Company's directly and indirectly owned subsidiaries by cash payment at market price or at a discount price as well as by the issue of bonus shares. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be negotiable instruments, issued in the name of the holder and registered in the name of the holder in the register of shareholders. The new shares shall give right to dividends and other rights as determined by the board of directors in its resolution to increase the capital. Further, during the same period, our board of directors is authorized to increase our share capital on one or more occasions with pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares. The capital increase can be made by cash or by non-cash payment. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be negotiable instruments, issued in the name of the holder and registered in the name of the holder in the register of shareholders. The new shares shall give right to dividends and other rights as determined by the board of directors in its resolution to increase the capital. Any capital increases pursuant to such authorizations cannot exceed an aggregate nominal amount of DKK 7,500,000.
- Until March 28, 2022, our board of directors is authorized to issue on one or more occasions warrants to subscribe shares up to a nominal value of DKK 500,000 and to make the related capital increases in cash up to a nominal value of DKK 500,000. The authorization entitles our board of directors to issue warrants to the Company's employees as well as employees of the Company's directly and indirectly owned subsidiaries. Pursuant to relevant provisions of the DCA in force from time to time, our board of directors may reapply or reissue any lapsed non-exercised warrants, provided that such reapplication or reissue is made under terms and conditions and with the time limits specified under the authority. One warrant shall give the right to subscribe for one share with a nominal value of DKK 1 at a subscription price per share determined by our board of directors which, however, shall be no less than the market price per share of the Company's shares at the time of issue. The existing shareholders shall not have a right of pre-emption when our board of directors exercises this authorization and the exercise period and the more detailed terms of the warrants shall be determined by our board of directors. The shares that are issued through the exercise of warrants shall have the same rights as existing shares. Our board of directors has issued 333,217 warrants and re-issued 2,933 warrants under this authorization as of December 31, 2018. In addition to this authorization, our board of directors has issued and re-issued warrants under authorizations no longer in force which give a right for the warrant holders to subscribe for shares as described in section "Management—Compensation—Warrant Program."
- Additionally and until March 28, 2024, our board of directors is authorized to issue on one or more occasions additional warrants to subscribe shares up to a nominal value of DKK 500,000 and to make the related capital increases in cash up to a nominal value of DKK 500,000. The authorization entitles our board of directors to issue warrants to the Company's employees as well as employees of the Company's directly and indirectly owned subsidiaries (excluding the

Company's Executive Management). Pursuant to relevant provisions of the DCA in force from time to time, our board of directors may reapply or reissue any lapsed non-exercised warrants, provided that such reapplication or reissue is made under terms and conditions and with the time limits specified under the authority. One warrant shall give the right to subscribe for one share with a nominal value of DKK 1 at a subscription price per share determined by our board of directors which, however, shall be no less than the market price per share of the Company's shares at the time of issue. The existing shareholders shall not have a right of pre-emption when our board of directors exercises this authorization and the exercise period and the more detailed terms of the warrants shall be determined by our board of directors. The shares that are issued through the exercise of warrants shall have the same rights as existing shares. Our board of directors has not issued or re-issued any warrants under this authorization. In addition to this authorization, our board of directors has issued and re-issued warrants under authorizations no longer in force which give a right for the warrant holders to subscribe for shares as described in section "Management—Compensation—Warrant Program."

- Until March 17, 2021, our board of directors is authorized by one or more issues to raise loans against bonds or other financial instruments up to a maximum amount of DKK 3 billion with a right for the lender to convert his claim to a maximum of nominally DKK 4,000,000 equivalent to 4,000,000 new shares (convertible loans). Convertible loans may be raised in DKK or the equivalent in foreign currency (including US dollars (USD) or Euro (EUR)) computed at the rates of exchange ruling at the day of loan. Our board of directors is also authorized to effect the consequential increase of the capital. Convertible loans may be raised against payment in cash or in other ways. The subscription of shares shall be without pre-emption rights for the shareholders and the convertible loans shall be offered at a subscription price and conversion price that in the aggregate at least corresponds to the market price of the shares at the time of the decision of the board of directors. The time limit for conversion may be fixed for a longer period than five (5) years after the raising of the convertible loan. The terms for raising of convertible loans as well as time and terms for the capital increase shall be decided by our board of directors in accordance with the DCA. If our board of directors exercises the authorization new shares shall be negotiable instruments, issued in the name of the holder and carry dividend as of a date to be fixed by the board of directors. No restrictions shall apply as to the pre-emption right of the new shares, and shall rank *pari passu* with existing shares with respect to rights, redeemability and negotiability. Further, during the same period, our board of directors is authorized by one or more issues to raise loans against bonds or other financial instruments up to a maximum amount of DKK 3 billion with a right for the lender to convert his claim to a maximum of nominally DKK 4,000,000 equivalent to 4,000,000 new shares (convertible loans). Convertible loans may be raised in DKK or the equivalent in foreign currency (including US dollars (USD) or Euro (EUR)) computed at the rates of exchange ruling at the day of loan. The board of directors is also authorized to effect the consequential increase of the capital. Convertible loans may be raised against payment in cash or in other ways. The subscription of shares shall be with pre-emption rights for the shareholders and the convertible loans shall be offered at a subscription price and conversion price that in the aggregate at least corresponds to the market price of the shares at the time of the decision of the board of directors. The time limit for conversion may be fixed for a longer period than five (5) years after the raising of the convertible loan. The terms for raising of convertible loans as well as time and terms for the capital increase shall be decided by our board of directors in accordance with the DCA. If our board of directors exercises the authorization new shares shall be negotiable instruments, issued in the name of the holder and carry dividend as of a date to be fixed by the board of directors. No restrictions shall apply as to the pre-emption right of the new shares, and shall rank *pari passu* with existing shares with respect to rights, redeemability and negotiability.

Further, our board of directors is, under two separate shareholder authorizations, authorized to repurchase (i) up to 500,000 shares until March 17, 2021 and (ii) up to 500,000 shares until March 28, 2024. The purchase price for the shares may not deviate by more than 10% from the price quoted on Nasdaq Copenhagen at the time of the acquisition. As of December 31, 2018, we have repurchased a total of 225,000 shares (with a nominal value of DKK 225,000) under the first authorization and no shares under the second authorization. As of March 31, 2019, up to a further 275,000 shares (with a nominal value of DKK 275,000) can be repurchased under the first authorization and up to 500,000 shares (with nominal value of DKK 500,000) can be repurchased under the second authorization.

Our Shares

As of March 31, 2019, our registered, issued and outstanding share capital was DKK 61.5 million and excludes up to 1,419,895 shares that may be issued upon the exercise of warrants outstanding as of March 31, 2019. Exercise of our RSUs will not affect our share capital as we will deliver any shares under this program through the delivery of already issued shares. For a description of the terms of our outstanding warrants and RSUs, see "Management—Compensation." In connection with this offering, we intend to issue up to ADSs representing shares, excluding the underwriters' option to purchase up to additional ADSs. Each ADS will represent of one share. We intend to apply to have the ADSs listed on the Nasdaq Global Select Market under the symbol "GMAB." The underlying shares will continue to be listed on Nasdaq Copenhagen under the symbol "GEN."

Initial settlement of the ADSs issued in this offering will take place on the consummation date of this offering through The Depository Trust Company, or DTC, in accordance with its customary settlement procedures for equity securities. Each person owning ADSs held through DTC must rely on the procedures thereof and on institutions that have accounts therewith to exercise any rights of a holder of the ADSs.

Pre-emptive Rights

If our shareholders at a general meeting resolve to increase our share capital by a cash contribution, section 162 of the DCA will apply. Under that section, shareholders have a pre-emptive right to subscribe for new shares in proportion to their existing shareholdings. However, the pre-emptive right may be derogated from by a majority comprising at least two-thirds of the votes cast, as well as at least two-thirds of the share capital represented at the general meeting, provided the share capital increase takes place at market price or nine-tenths of the votes cast, as well as at least nine-tenths of the share capital represented at the general meeting if the share capital increase takes place below market price, unless (i) such capital increase is directed at certain but not all shareholders (in which case all shareholders must consent); or (ii) such capital increase is directed at our employees whereby a majority comprising at least two-thirds of the votes cast, as well as at least two-thirds of the share capital represented at the general meeting is required. Further, the pre-emptive rights may be derogated from by an exercise of the board of directors of a valid authorization in our articles of association, provided that the share capital increase takes place at market price. See "Description of American Depositary Shares—Dividends and Other Distributions—Rights to Purchase Additional Shares" for more information about the applicability of this provision to ADS holders.

Shareholders' Register

We are obliged to maintain a shareholders' register (*Ejerbog*). The shareholders' register is maintained by VP Services A/S, Weidekampsgade 14, DK-2300 Copenhagen S, Denmark, our Danish share registrar and issuing agent. It is mandatory that the shareholders' register is maintained within the European Union and that it is available to public authorities.

Pursuant to the DCA, public and private limited liability companies are required to register with the Danish Business Authority information regarding shareholders who own at least 5% of the share capital or the voting rights. Pursuant to this provision, we file registrations with the Danish Public Shareholders' Register of the Danish Business Authority. Shareholders that exceed or fall below the ownership threshold must notify us, and we will subsequently file the information with the Danish Business Authority. Reporting is further required upon passing or falling below thresholds of 10%, 15%, 20%, 25%, 50%, 90%, and 100% as well as one-third and two-thirds of the votes or the share capital. This also applies to beneficial holders of our shares, such as holders of the ADSs.

Articles of Association and Danish Corporate Law

Objectives

Our company has been established with the objectives of engaging in medical research, production and sale of such products and related business.

Summary of Provisions Concerning Members of the Board of Directors and the Executive Management

We are managed by a board of directors of between three and nine members elected for a term of one year by our shareholders at the (annual) general meeting. Retiring directors are eligible for re-election.

In addition, pursuant to our articles of association the employees of the Company and its directly and indirectly owned subsidiaries and branch offices, regardless of whether their place of residence is within or outside the EU/EEA, have the right to elect a number of members to our board of directors equal to half of the members of our board of directors elected by the general meeting, *provided* that the Company and its directly and indirectly owned subsidiaries residing in Denmark together during the last three (3) years before an ordinary election have employed at least 35 employees on average. If this condition of minimum number of employees is not met prior to an ordinary election by the employees of members of the board of directors and alternate members, the right for the employees to elect members to our board of directors and alternate members according to the articles of association shall cease for the period thereafter. An ordinary election by the employees of members of the board of directors and alternate members occurs every third year and re-election can occur, and the election is held in accordance with an election regulation approved by our board of directors. This right for the employees to elect members to our board of directors and alternate members differs from the provisions set out in the DCA. Pursuant to section 141 of the DCA, the employees of the Company and its directly and indirectly owned subsidiaries registered in Denmark and such subsidiaries' branch offices registered within the EU/EEA have a right to appoint members to our board of directors and alternate members if during the last three (3) years before an ordinary election the Company has employed at least 35 employees on average. If instead our employees decide to use their right to elect company representatives and/or group representatives to the board of directors pursuant to the DCA, the right for the group employees to elect employee representatives in accordance with our articles of association shall no longer apply.

The shareholders at the general meeting approve the remuneration of the board of directors.

The board of directors elects its own chairman and grants individual or joint powers of procuration. The board of directors prepares its own rules of procedure governing the performance of its duties.

We are bound by the joint signatures of a member of the board of directors and a registered manager; by two members of the board of directors; or all members of the board of directors jointly.

Rights and Restrictions in Relation to Existing Shares

- No share carries any special rights.
- Each share with a nominal value of DKK 1 carries one vote at general meetings.
- The shares are negotiable instruments, and no restrictions apply to the transferability of the shares.
- No shareholder shall be obliged to let his shares be redeemed in full or in part by us or by any other party, except as provided in the DCA.
- All shares shall be registered in the names of the holders and shall be entered in our shareholders' register.
- There are no restrictions on the rights of non-resident or foreign shareholders to hold or exercise voting rights with respect to our shares.

Adoption of Shareholder Resolutions

All resolutions put to the vote of shareholders at general meetings are subject to adoption by a simple majority of votes, unless the DCA or our articles of association prescribes other requirements.

Notice Convening Annual and Extraordinary General Meetings

General meetings shall be held in the municipality of Copenhagen or in the greater Copenhagen area (*Storkøbenhavn*). General meetings shall be convened by the board of directors giving not less than three weeks' and not more than five weeks' notice. General meetings shall be announced by notification to Nasdaq Copenhagen and through publication on our website. Furthermore, all shareholders registered in our shareholders' register who have so requested shall be notified by letter or email. The notice shall set out the time and place for the general meeting and the issues to be considered at the general meeting. If the general meeting is to consider a proposal to amend our articles of association, then the notice shall specify the material content of the proposal. The notice calling the general meeting as well as other documents prepared for and in connection with the general meeting shall be prepared in English and, if decided by our board of directors, also in Danish.

A shareholder's right to attend general meetings and to vote is determined on the basis of the shares that the shareholder owns on the registration date which date is one week before the general meeting is held.

Any shareholder shall be entitled to attend general meetings, provided he or she has requested an admission card from our offices not later than three days prior to the relevant meeting. The admission card will be issued to the shareholders registered in our shareholders' register. The shareholder may attend in person or be represented by proxy, and a shareholder shall be entitled to attend together with an advisor. A shareholder may vote by proxy or by mail, and a form for this use shall be made available on our website no later than three weeks prior to the general meeting. A vote by mail must be received by us not later than three days prior to the general meeting in order to be counted at the general meeting. As an ADS holder, you do not have a right to attend our general meetings unless you withdraw your shares in a timely manner prior to a general meeting and in accordance with the procedures set out in the deposit agreement. For a description of your rights as an ADS holder, see "Description of American Depositary Shares."

Extraordinary general meetings shall be held as directed by the shareholders at the general meeting, the board of directors or an auditor, or upon a written request to the board of directors by shareholders holding not less than 5% of the share capital for consideration of a specific issue. The general meeting shall be convened (after providing three to five weeks notice) within 14 days after the

proper request has been received by our board of directors. See "Risk Factors—Risks Related to this Offering—You may not be able to exercise your right to vote the shares underlying your ADSs."

Provisions as to certain Share Capital Thresholds to be Notified to Us and the Danish Authorities

Pursuant to section 38 of the Danish Capital Markets Act (*Kapitalmarkedssloven*), shareholders in a company incorporated in Denmark with its shares admitted to trading and official listing in Denmark or another country within the EU/EEA are required to immediately (meaning within the same trading day as the transaction) and simultaneously notify the company and the Danish Financial Supervisory Authority, or FSA, when the shareholder's stake (i) represents 5% or more of the voting rights in the company or the nominal value of its share capital, and (ii) when a change in a holding already notified implies that the limits of 5%, 10%, 15%, 20%, 25%, 50% or 90% and the limits of one-third and two-thirds of the voting rights or the nominal value are reached. This duty to notify also applies to anyone, who directly or indirectly holds (a) financial instruments that afford the holder a right to purchase existing shares, *e.g.*, share options; and/or (b) financial instruments based on existing shares and with an economic effect equal to that of the financial instruments mentioned under (a), regardless of them not affording the right to purchase existing shares, *e.g.*, the ADSs or, under the circumstances, cash-settled derivatives linked to the value of our shares or ADSs, *cf.* section 39 of the Danish Capital Markets Act. Holding these kinds of financial instruments counts towards the thresholds mentioned above and may thus trigger a duty to notify by themselves or when accumulated with a holding of shares or ADSs. The notifications must comply with the requirements for the contents thereof set out in sections 14, 15 and 16 of the Danish executive order on major shareholders (*Storaktionærbekendtgørelsen*), including the identity of the shareholder and the date when a limit is reached or no longer reached. Failure to comply with the duties of disclosure is punishable by fine or suspension of voting rights in instances of gross or repeated non-compliance. The FSA will in certain cases publish information concerning sanctions imposed, including, as a general rule, the name of the shareholder in question, as a consequence of non-compliance with the above rules. When we receive a notification pursuant to section 38 or 39 of the Danish Capital Markets Act, we must publish its contents as soon as possible. Furthermore, the general duty of notification pursuant to the DCA applies, which implies that shareholders must notify the company when the limit of 100% of the voting rights or nominal value of the shares is reached or no longer reached. This also applies to holders of the ADSs.

Shareholder Identification

The EU has adopted an amendment to the shareholder rights directive, or Directive 2017/828, which will be implemented in Denmark no later than June 10, 2019. The main purpose of the rules is to strengthen shareholder participation in listed companies. Pursuant to these rules, we may request from central security depositaries, or CSDs, depositaries and other intermediaries information about the identity of our shareholders and the number of shares, share class and date of acquisition of the shares held by our shareholders. The intermediaries will be required to transmit such requests on shareholder identification between them in order to provide us with the requested information.

EU Regulation No 596/2014 on Market Abuse

EU Regulation No 596/2014 on market abuse, or the Market Abuse Regulation, applies to us and dealings concerning our shares and will likewise apply to the ADSs. We have adopted internal rules on the possession and handling of inside information and with respect to our board of directors', registered managers' and employees' dealings in our shares or in financial instruments, such financial instruments also including ADSs to be listed on the Nasdaq Global Select Market. Furthermore, we have drawn up lists of those persons working for us who could have access to inside information on a regular or incidental basis and have informed such persons of the rules on insider trading and market manipulation, including the sanctions, which can be imposed in the event of a violation of those rules.

The EU Short Selling Regulation (EU Regulation 236/2012) Includes Certain Notification Requirements in connection with Short Selling of Shares Admitted to Trading on a Trading Venue (including Nasdaq Copenhagen) and Securities or Derivatives that Relate to Such Shares (including the ADSs).

When a natural or legal person reaches or falls below a net, short position of 0.2% of the issued share capital of a company that has shares admitted to trading on a trading venue, such person shall make a private notification (*i.e.*, such notification will not be made public) to the relevant competent authority, which in Denmark is the FSA. The obligation to notify the FSA, moreover, applies in each case where the short position reaches or no longer reaches 0.1% above the 0.2% threshold. In addition, when a natural or legal person reaches or falls below a net short position of 0.5% of the issued share capital of a company that has shares admitted to trading on a trading venue and each 0.1% above that, such person shall make a public notification of its net short position via the FSA. The notification requirements apply to both physical and synthetic short positions. In addition uncovered short selling (naked short selling) of shares admitted to trading on a trading venue is prohibited.

Limitation on Liability

Under Danish law, members of the board of directors or registered managers may be held liable for damages in the event that loss is caused due to their negligence. They may be held jointly and severally liable for damages to the company and to third parties for acting in violation of the articles of association and Danish law.

Comparison of Danish Corporate Law and Our Articles of Association and Delaware Corporate Law

The following comparison between Danish corporate law, which applies to us, and Delaware corporate law, the law under which many publicly listed companies in the United States are incorporated, discusses additional matters not otherwise described in this prospectus. This summary is subject to Danish law, including the DCA, and Delaware corporate law, including the Delaware General Corporation Law. Further, please note that as an ADS holder you will not be treated as one of our shareholders and will not have any shareholder rights.

Duties of Board Members

Denmark. Public limited liability companies in Denmark are usually subject to a two-tier governance structure with the board of directors having the ultimate responsibility for the overall supervision and strategic management of the company in question and with registered managers being responsible for the day-to-day operations. Each board member and registered manager is under a fiduciary duty to act in the interest of the company, but shall also take into account the interests of the creditors and the shareholders. Under Danish law, the members of the board of directors and registered managers of a limited liability company are liable for losses caused by negligence when shareholders, creditors or the company itself suffer such losses. They may also be liable for wrongful information given in the annual financial statements or any other public announcements from the company. An investor suing for damages is required to prove its claim with regard to negligence and causation. Danish courts, when assessing negligence, have been reluctant to impose liability unless the directors and officers neglected clear and specific duties. This is also the case when it comes to liability with regard to public offerings or liability with regard to any other public information issued by the company.

Delaware. The board of directors bears the ultimate responsibility for managing the business and affairs of a corporation. In discharging this function, directors of a Delaware corporation owe fiduciary duties of care and loyalty to the corporation and to its stockholders. Delaware courts have decided that the directors of a Delaware corporation are required to exercise informed business judgment in the performance of their duties. Informed business judgment means that the directors have informed

themselves of all material information reasonably available to them. Delaware courts have also imposed a heightened standard of conduct upon directors of a Delaware corporation who take any action designed to defeat a threatened change in control of the corporation. In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the stockholders.

Terms of the Members of Our Board of Directors

Denmark. Under Danish law, the members of the board of directors of a limited liability company are generally appointed for a one-year term, although employee elected board members are elected for a four-year tenure. In accordance with our articles of association, however, employee elected board members are elected for a term of three years. There is no limit on the number of consecutive terms the board members may serve. Pursuant to our articles of association, our board members are appointed by the general meeting of shareholders for a term of one year and are eligible for re-election. Election of board members is, according to our articles of association, an item that shall be included on the agenda for the annual general meeting. At the general meeting, shareholders are entitled at all times to dismiss a board member by a simple majority vote.

Delaware. The Delaware General Corporation Law generally provides for a one-year term for directors, but permits directorships to be divided into up to three classes, of relatively equal size, with up to three-year terms, with the years for each class expiring in different years, if permitted by the certificate of incorporation, an initial bylaw or a bylaw adopted by the stockholders. A director elected to serve a term on a "classified" board may not be removed by stockholders without cause. There is no limit in the number of terms a director may serve.

Board Member Vacancies

Denmark. Under Danish law, new board members are elected by the shareholders at a general meeting in the event of vacancies. Thus, a general meeting will have to be convened in order to fill a vacancy on the board of directors. However, the board of directors may choose to wait to fill vacancies until the next annual general meeting of the company, provided that the number of the remaining board members is still sufficient to constitute a quorum in accordance with Section 124 of the DCA. A statutory requirement to convene a general meeting to fill vacancies only arises if the number of remaining members on the board is less than three.

Delaware. The Delaware General Corporation Law provides that vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) unless (1) otherwise provided in the certificate of incorporation or bylaws of the corporation or (2) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case any other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.

Conflict-of-Interest Transactions

Denmark. Under Danish law, board members may not take part in any matter or decision-making that involves a subject or transaction in relation to which the board member has a conflict of interest with us.

Delaware. The Delaware General Corporation Law generally permits transactions involving a Delaware corporation and an interested director of that corporation if:

- the material facts as to the director's relationship or interest are disclosed and a majority of disinterested directors consent;

- the material facts are disclosed as to the director's relationship or interest and a majority of shares entitled to vote thereon consent; or
- the transaction is fair to the corporation at the time it is authorized by the board of directors, a committee of the board of directors or the stockholders.

Proxy Voting by Board Members

Denmark. In the event that a board member in a Danish limited liability company is unable to participate in a board meeting, the elected alternate, if any, shall be given access to participate in the board meeting. The members of our board of directors appointed by the general meeting have not elected alternates; however, the three board members elected by our employees have elected alternates. In a Danish limited liability company, unless the board of directors has decided otherwise, or as otherwise is set forth in the articles of association, the board member in question may grant a power of attorney to another board member, provided that this does not create risk to the company considering the agenda in question.

Delaware. A director of a Delaware corporation may not issue a proxy representing the director's voting rights as a director.

Shareholder Rights

Notice of Meeting

Denmark. According to the DCA and as implemented in our articles of association, general meetings in listed limited liability companies shall be convened by the board of directors with a minimum of three weeks' notice and a maximum of five weeks' notice. A convening notice shall also be forwarded to shareholders recorded in our shareholders' register who have requested such notification. There are specific requirements as to the information and documentation required to be disclosed in connection with the convening notice.

Delaware. Under Delaware law, unless otherwise provided in the certificate of incorporation or bylaws, written notice of any meeting of the stockholders must be given to each stockholder entitled to vote at the meeting not less than 10 nor more than 60 days before the date of the meeting and shall specify the place, date, hour and purpose or purposes of the meeting.

Voting Rights

Denmark. Each share confers the right to cast one vote at the general meeting of shareholders, unless the articles of association provide otherwise. Each holder of shares may cast as many votes as it holds shares. Voting instructions may be given only in respect of a number of ADSs representing an integral number of shares or other deposited securities. Shares that are held by us or our direct or indirect subsidiaries do not confer the right to vote.

ADS holders may only exercise voting rights with respect to the shares underlying their respective ADSs in accordance with the provisions of the deposit agreement, which provides that ADS holders may vote the shares underlying their ADSs either by withdrawing the shares or by instructing the depositary to vote the deposited shares or other deposited securities underlying such ADSs. The depositary will try, as far as practical, to vote the shares underlying the ADSs as instructed by the ADS holders.

Delaware. Under the Delaware General Corporation Law, each stockholder is entitled to one vote per share of stock, unless the certificate of incorporation provides otherwise. In addition, the certificate of incorporation may provide for cumulative voting at all elections of directors of the corporation, or at elections held under specified circumstances. Either the certificate of incorporation

or the bylaws may specify the number of shares and/or the amount of other securities that must be represented at a meeting in order to constitute a quorum, but in no event can a quorum consist of less than one-third of the shares entitled to vote at a meeting.

Stockholders as of the record date for the meeting are entitled to vote at the meeting, and the board of directors may fix a record date that is no more than 60 nor less than 10 days before the date of the meeting, and if no record date is set then the record date is the close of business on the day next preceding the day on which notice is given, or if notice is waived then the record date is the close of business on the day next preceding the day on which the meeting is held. The determination of the stockholders of record entitled to notice or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, but the board of directors may fix a new record date for the adjourned meeting.

Shareholder Proposals

Denmark. According to the DCA, extraordinary general meetings of shareholders will be held whenever our board of directors or our appointed auditor requires. In addition, one or more shareholders each representing at least 5% of the registered share capital of the company may, in writing, require that a general meeting be convened. If such a demand is made, the board of directors shall convene the general meeting within two weeks thereafter (after providing three to five weeks notice).

All shareholders have the right to present proposals for adoption at the annual general meeting, provided that the proposals are submitted at least six weeks prior to the meeting. In the event that the request is made at a later date, the board of directors will determine whether the proposals were made in due time to be included on the agenda.

Delaware. Delaware law does not specifically grant stockholders the right to bring business before an annual or special meeting of stockholders. However, if a Delaware corporation is subject to the SEC's proxy rules, a stockholder who owns at least \$2,000 in market value, or 1% of the corporation's securities entitled to vote, may propose a matter for a vote at an annual or special meeting in accordance with those rules.

Action by Written Consent

Denmark. Under Danish law, shareholders may take action and pass resolutions by written consent if such consent is unanimous. However, for a listed company, this method of adopting resolutions is generally not feasible.

Delaware. Although permitted by Delaware law, publicly listed companies do not typically permit stockholders of a corporation to take action by written consent.

Appraisal Rights

Denmark. The concept of appraisal rights does not exist under Danish law, except in connection with statutory redemption rights according to the DCA.

According to Section 73 of the DCA, a minority shareholder may require a majority shareholder that holds more than 90% of the company's registered share capital and votes to redeem his or her shares. Similarly, a majority shareholder holding more than 90% of the company's share capital and votes may, according to Section 70 of the DCA, squeeze out the minority shareholders. In the event that the parties cannot agree to the redemption squeeze out price, this shall be determined by an independent evaluator appointed by the court. Additionally, there are specific regulations in Sections 249, 267, 285 and 305 of the DCA that require compensation in the event of national or cross-

border mergers and demergers. Moreover, shareholders who vote against a cross-border merger or demerger are, according to Sections 286 and 306 of the DCA, entitled to have their shares redeemed.

Delaware. The Delaware General Corporation Law provides for stockholder appraisal rights, or the right to demand payment in cash of the judicially determined fair value of the stockholder's shares, in connection with certain mergers and consolidations.

Shareholder Suits

Denmark. Under Danish law, only a company itself can bring a civil action against a third party; an individual shareholder does not have the right to bring an action on behalf of a company. However, if shareholders representing at least 10% of the share capital have opposed at a general meeting a decision to grant discharge to a member of our board of directors or our registered managers or refrain from bringing law suits against, among other persons, a member of our board of directors or a registered manager, a shareholder may bring a derivative action on behalf of our company against, among other persons, a member of our board of directors or a registered manager. An individual shareholder may, in its own name, have an individual right to take action against such third party in the event that the cause for the liability of that third party also constitutes a negligent act directly against such individual shareholder.

Delaware. Under the Delaware General Corporation Law, a stockholder may bring a derivative action on behalf of the corporation to enforce the rights of the corporation. An individual also may commence a class action suit on behalf of himself and other similarly situated stockholders where the requirements for maintaining a class action under Delaware law have been met. A person may institute and maintain such a suit only if that person was a stockholder at the time of the transaction which is the subject of the suit. In addition, under Delaware case law, the plaintiff normally must be a stockholder at the time of the transaction that is the subject of the suit and throughout the duration of the derivative suit. Delaware law also requires that the derivative plaintiff make a demand on the directors of the corporation to assert the corporate claim before the suit may be prosecuted by the derivative plaintiff in court, unless such a demand would be futile.

Repurchase of Shares

Denmark. Danish limited liability companies may not subscribe for newly issued shares in their own capital. Such companies may, however, according to the DCA Sections 196-201, acquire fully paid shares of themselves, provided that the board of directors has been authorized to do so by the shareholders at a general meeting. Such authorization can only be given for a maximum period of five years and the authorization shall fix (i) the maximum value of the shares and (ii) the minimum and the highest amount that the company may pay for the shares. Such purchase of shares may generally only be acquired using distributable reserves. In addition, the board of directors may, on behalf of the company, acquire the company's own shares, without authorization, in case it is necessary to avoid a considerable and imminent detrimental effect on the company and provided certain conditions are met. In case the company has acquired its own shares under such circumstances the board of directors is obligated to inform the shareholders of such acquisition at the next general meeting.

Delaware. Under the Delaware General Corporation Law, a corporation may purchase or redeem its own shares unless the capital of the corporation is impaired or the purchase or redemption would cause an impairment of the capital of the corporation. A Delaware corporation may, however, purchase or redeem out of capital any of its preferred shares or, if no preferred shares are outstanding, any of its own shares if such shares will be retired upon acquisition and the capital of the corporation will be reduced in accordance with specified limitations.

Anti-Takeover Provisions

Denmark. Under Danish law, it is possible to implement limited protective anti-takeover measures. Such provisions may include, among other things, (i) different share classes with different voting rights and (ii) notification requirements concerning participation in general meetings. We have currently not adopted any such provisions, except for the obligation to request an admission card. See "—Articles of Association and Danish Corporate Law—Notice Convening Annual and Extraordinary General Meetings."

Delaware. In addition to other aspects of Delaware law governing fiduciary duties of directors during a potential takeover, the Delaware General Corporation Law also contains a business combination statute that protects Delaware companies from hostile takeovers and from actions following the takeover by prohibiting some transactions once an acquirer has gained a significant holding in the corporation.

Section 203 of the Delaware General Corporation Law prohibits "business combinations," including mergers, sales and leases of assets, issuances of securities and similar transactions by a corporation or a subsidiary with an interested stockholder that beneficially owns 15% or more of a corporation's voting stock, within three years after the person becomes an interested stockholder, unless:

- the transaction that will cause the person to become an interested stockholder is approved by the board of directors of the target prior to the transaction;
- after the completion of the transaction in which the person becomes an interested stockholder, the interested stockholder holds at least 85% of the voting stock of the corporation not including shares owned by persons who are directors and officers of interested stockholders and shares owned by specified employee benefit plans; or
- after the person becomes an interested stockholder, the business combination is approved by the board of directors of the corporation and holders of at least 66.67% of the outstanding voting stock, excluding shares held by the interested stockholder.

A Delaware corporation may elect not to be governed by Section 203 by a provision contained in the original certificate of incorporation of the corporation or an amendment to the original certificate of incorporation or to the bylaws of the company, which amendment must be approved by a majority of the shares entitled to vote and may not be further amended by the board of directors of the corporation. Such an amendment is not effective until 12 months following its adoption.

Inspection of Books and Records

Denmark. According to Section 150 of the DCA, a shareholder may, at the annual general meeting or at a general meeting whose agenda includes such item, request an inspection of the company's books regarding specific issues concerning the management of the company or specific annual reports. If approved by shareholders with a simple majority, one or more investigators are elected. If the proposal is not approved by a simple majority but 25% of the share capital votes in favor of the proposal, then the shareholder can request the court to appoint an investigator, however, the request will only be allowed if the court finds it to be based on reasonable grounds.

Delaware. Under the Delaware General Corporation Law, any stockholder may inspect certain of the corporation's books and records, for any proper purpose, during the corporation's usual hours of business.

Pre-Emptive Rights

Denmark. As a general rule, shareholders of the company are entitled to subscribe for new shares in proportion to their existing shareholdings in the event of a cash increase of the share capital. Such a cash increase of the share capital can be resolved by the general meeting by at least two-thirds of the votes cast as well as at least two-thirds of the share capital represented at the general meeting.

However, in the below-mentioned scenarios, the general meeting may resolve to depart from the shareholders' right to proportionate subscription if the following voting requirements are met:

- two-thirds majority requirement: if the new shares issued in connection with the capital increase are subscribed for at market price for the benefit of some of the existing shareholders, the above-mentioned two-thirds majority requirement applies;
- consent requirement: if the new shares issued in connection with the capital increase are subscribed for at a discount for the benefit of some of the existing shareholders, consent from the shareholders who do not get an opportunity to participate in the capital increase must be obtained;
- two-thirds majority requirement: if the new shares issued in connection with the capital increase are subscribed for at market price for the benefit of parties other than the existing shareholders (*i.e.*, a third party or employees of the company), the above-mentioned two-thirds majority requirement applies; and
- nine-tenths majority requirement: if the new shares issued in connection with the capital increase are subscribed for at discount for the benefit of parties other than the existing shareholders or the employees of the company, the voting requirement is at least nine-tenths of the votes cast as well as at least nine-tenths of the share capital represented at the general meeting.

The board of directors may resolve to increase our share capital without pre-emptive subscription rights for existing shareholders pursuant to the authorizations described above under the caption "Authorizations to our Board of Directors."

Unless future issuances of new shares are registered under the Securities Act or with any authority outside Denmark, U.S. shareholders and shareholders in jurisdictions outside Denmark may be unable to exercise their pre-emptive subscription rights under U.S. securities law.

Delaware. Under the Delaware General Corporation Law, stockholders have no pre-emptive rights to subscribe for additional issues of stock or to any security convertible into such stock unless, and to the extent that, such rights are expressly provided for in the certificate of incorporation.

Dividends

Denmark. Under Danish law, the distribution of ordinary and interim dividends requires the approval of a company's shareholders at a company's general meeting. In addition the shareholders may authorize the board of directors to distribute interim dividends. The shareholders may not resolve to the distribution of dividends in excess of the recommendation from the board of directors and we may only pay out dividends from our distributable reserves, which are defined as results from operations carried forward and reserves that are not bound by law after deduction of loss carried forward. It is possible under Danish law to pay out interim dividends. The decision to pay out interim dividends shall be accompanied by a balance sheet, and the board of directors determines whether it will be sufficient to use the statement of financial position from the annual report or if an interim statement of financial position for the period from the annual report period until the interim dividend payment shall be prepared. If interim dividends are paid out later than six months following the end of the financial year for the latest annual report, an audited interim balance sheet showing that there are sufficient funds shall always be prepared.

Delaware. Under the Delaware General Corporation Law, a Delaware corporation may pay dividends out of its surplus (the excess of net assets over capital), or in case there is no surplus, out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year (provided that the amount of the capital of the corporation is not less than the aggregate amount of the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets). In determining the amount of surplus of a Delaware corporation, the assets of the corporation, including stock of subsidiaries owned by the corporation, must be valued at their fair market value as determined by the board of directors, without regard to their historical book value. Dividends may be paid in the form of shares, property or cash.

Shareholder Vote on Certain Reorganizations

Denmark. Under Danish law, all amendments to the articles of association shall be approved by the general meeting of shareholders with a minimum of two-thirds of the votes cast and two-thirds of the share capital represented at the general meeting. The same applies to solvent liquidations, mergers with the company as the discontinuing entity, mergers with the company as the continuing entity if shares are issued in connection therewith and demergers. Under Danish law, it is debatable whether the shareholders must approve a decision to sell all or virtually all of the company's business/assets.

Delaware. Under the Delaware General Corporation Law, the vote of a majority of the outstanding shares of capital stock entitled to vote thereon generally is necessary to approve a merger or consolidation or the sale of all or substantially all of the assets of a corporation. The Delaware General Corporation Law permits a corporation to include in its certificate of incorporation a provision requiring for any corporate action the vote of a larger portion of the stock or of any class or series of stock than would otherwise be required. However, under the Delaware General Corporation Law, no vote of the stockholders of a surviving corporation to a merger is needed, unless required by the certificate of incorporation, if (1) the agreement of merger does not amend in any respect the certificate of incorporation of the surviving corporation, (2) the shares of stock of the surviving corporation are not changed in the merger and (3) the number of shares of common stock of the surviving corporation into which any other shares, securities or obligations to be issued in the merger may be converted does not exceed 20% of the surviving corporation's common stock outstanding immediately prior to the effective date of the merger. In addition, stockholders may not be entitled to vote in certain mergers with other corporations that own 90% or more of the outstanding shares of each class of stock of such corporation, but the stockholders will be entitled to appraisal rights.

Amendments to Governing Documents

Denmark. All resolutions made by the general meeting may be adopted by a simple majority of the votes, subject only to the mandatory provisions of the DCA and the articles of association. Resolutions concerning all amendments to the articles of association must be passed by two-thirds of the votes cast as well as two-thirds of the share capital represented at the general meeting. Certain resolutions, which limit a shareholder's ownership or voting rights, are subject to approval by a nine-tenth majority of the votes cast and the share capital represented at the general meeting. Decisions to impose any or increase any obligations of the shareholders towards the company require unanimity.

Delaware. Under the Delaware General Corporation Law, a corporation's certificate of incorporation may be amended only if adopted and declared advisable by the board of directors and approved by a majority of the outstanding shares entitled to vote, and the bylaws may be amended with the approval of a majority of the outstanding shares entitled to vote and may, if so provided in the certificate of incorporation, also be amended by the board of directors.

Issuing Agent and Registrar

The issuing agent and registrar for our shares is VP Securities A/S, Weidekampsgade 14, DK-2300 Copenhagen S, Denmark. Deutsche Bank Trust Company Americas will serve as the depositary for the ADSs.

DESCRIPTION OF AMERICAN DEPOSITARY SHARES

American Depositary Shares

Deutsche Bank Trust Company Americas, as depositary, will register and deliver the ADSs. Each ADS will represent ownership of _____ of one share, deposited with Danske Bank A/S, as custodian for the depositary. Each ADS will also represent ownership of any other securities, cash or other property which may be held by the depositary in respect of such shares. The depositary's corporate trust office at which the ADSs will be administered is located at 60 Wall Street, New York, NY 10005, USA. The principal executive office of the depositary is located at 60 Wall Street, New York, NY 10005, USA.

The Direct Registration System, or DRS, is a system administered by The Depository Trust Company, or DTC, pursuant to which the depositary may register the ownership of uncertificated ADSs, which ownership shall be evidenced by periodic statements issued by the depositary to the ADS holders entitled thereto.

We will not treat ADS holders as our shareholders and accordingly, you, as an ADS holder, will not have shareholders' rights. Danish law and our articles of association govern our shareholders' rights. The depositary will be the holder of the shares underlying your ADSs. As a holder of ADSs, you will have ADS holder rights. A deposit agreement among us, the depositary and you, as an ADS holder, and the beneficial owners of ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. The laws of the State of New York govern the deposit agreement and the ADSs. See "—Jurisdiction and Arbitration."

The following is a summary of the material provisions of the deposit agreement. For more complete information, you should read the entire deposit agreement and the form of American Depositary Receipt. For directions on how to obtain copies of those documents, see "Where You Can Find More Information."

Holding the ADSs

How will you hold your ADSs?

You may hold ADSs either (1) directly (a) by having an American Depositary Receipt, or ADR, which is a certificate evidencing a specific number of ADSs, registered in your name, or (b) by holding ADSs in DRS, or (2) indirectly through your broker or other financial institution. If you hold ADSs directly, you are an ADS holder. This description assumes you hold your ADSs directly. ADSs will be issued through DRS, unless you specifically request certificated ADRs. If you hold the ADSs indirectly, you must rely on the procedures of your broker or other financial institution to assert the rights of ADS holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

Dividends and Other Distributions

How will you receive dividends and other distributions on the shares?

The depositary has agreed to pay to you the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, after deducting its fees and expenses. You will receive these distributions in proportion to the number of shares your ADSs represent as of the record date (which will be as close as practicable to the record date for our shares) set by the depositary with respect to the ADSs.

- *Cash.* The depositary will convert or cause to be converted any cash dividend or other cash distribution we pay on the shares or any net proceeds from the sale of any shares, rights, securities or other entitlements under the terms of the deposit agreement into U.S. dollars if it

can do so on a practicable basis, and can transfer the U.S. dollars to the United States and will distribute promptly the amount thus received. If the depositary shall determine in its judgment that such conversions or transfers are not practical or lawful or if any government approval or license is needed and cannot be obtained at a reasonable cost within a reasonable period or otherwise sought, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold or cause the custodian to hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid and such funds will be held for the respective accounts of the ADS holders. It will not invest the foreign currency and it will not be liable for any interest for the respective accounts of the ADS holders.

Before making a distribution, any taxes or other governmental charges, together with fees and expenses of the depositary, that must be paid, will be deducted. See "Material U.S. Federal Income Tax Considerations" and "Material Danish Income Tax Considerations." It will distribute only whole U.S. dollars and cents and will round down fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, you may lose some or all of the value of the distribution.*

- **Shares.** For any shares we distribute as a dividend or free distribution (such shares considered bonus shares under the DCA), either (1) the depositary will distribute additional ADSs representing such shares or (2) existing ADSs as of the applicable record date will represent rights and interests in the additional shares distributed, to the extent reasonably practicable and permissible under law, in either case, net of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. The depositary will only distribute whole ADSs. It will try to sell shares which would require it to deliver a fractional ADS and distribute the net proceeds in the same way as it does with cash. The depositary may sell a portion of the distributed shares sufficient to pay its fees and expenses and any taxes and governmental charges in connection with that distribution.
- **Elective Distributions in Cash or Shares.** If we offer our shareholders the option to receive dividends in either cash or shares (such shares considered bonus shares under the DCA), the depositary, after consultation with us and having received timely notice as described in the deposit agreement of such elective distribution by us, has discretion to determine to what extent such elective distribution will be made available to you as a holder of the ADSs. We must timely first instruct the depositary to make such elective distribution available to you and furnish it with satisfactory evidence that it is legal to do so. However, the depositary could decide it is not legal or reasonably practicable to make such elective distribution available to you. In such case, the depositary shall, on the basis of the same determination as is made in respect of the shares for which no election is made, distribute either cash in the same way as it does in a cash distribution, or additional ADSs representing shares in the same way as it does in a share distribution. The depositary is not obligated to make available to you a method to receive the elective distribution in shares rather than in ADSs. There can be no assurance that you will be given the opportunity to receive elective distributions on the same terms and conditions as our shareholders.
- **Rights to Purchase Additional Shares.** If we offer our shareholders any rights to subscribe for additional shares, the depositary shall, having received timely notice as described in the deposit agreement of such distribution by us, consult with us, and we must determine whether it is lawful and reasonably practicable to make these rights available to you. We must first instruct the depositary to make such rights available to you and furnish the depositary with satisfactory evidence that it is legal to do so. However, if the depositary decides it is not legal or reasonably practicable to make the rights available but that it is lawful and reasonably practicable to sell the rights, the depositary will endeavor to sell the rights and, in a riskless principal capacity or

otherwise, at such place and upon such terms (including public or private sale) as it may deem proper distribute the net proceeds in the same way as it does with cash. The depositary will allow rights that are not distributed or sold to lapse. In that case, you will receive no value for them.

If the depositary makes rights available to you, it will establish procedures to distribute such rights and enable you to exercise the rights upon your payment of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. The Depositary shall not be obliged to make available to you a method to exercise such rights to subscribe for shares (rather than ADSs).

U.S. securities laws may restrict transfers and cancellation of the ADSs represented by shares purchased upon exercise of rights. For example, you may not be able to trade these ADSs freely in the United States. In this case, the depositary may deliver restricted depositary shares that have the same terms as the ADSs described in this section except for changes needed to put the necessary restrictions in place.

There can be no assurance that you will be given the opportunity to exercise rights on the same terms and conditions as our shareholders or be able to exercise such rights.

- *Other Distributions.* Subject to receipt of timely notice, as described in the deposit agreement, from us with the request to make any such distribution available to you, and provided the depositary has determined such distribution is lawful and reasonably practicable and feasible and in accordance with the terms of the deposit agreement, the depositary will distribute to you anything else we distribute on deposited securities by any means it may deem practicable, upon your payment of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. If any of the conditions above are not met, the depositary will endeavor to sell, or cause to be sold, the property we distributed and distribute the net proceeds in the same way as it does with cash; or, if it is unable to sell such property, the depositary may dispose of such property in any way it deems reasonably practicable under the circumstances for nominal or no consideration, such that you may have no rights to or arising from such property.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or any other property to ADS holders. This means that you may not receive the distributions we make on our shares or any value for them if we and/or the depositary determines that it is illegal or not practicable for us or the depositary to make them available to you.

Deposit, Withdrawal and Cancellation

How are ADSs issued?

The depositary will deliver ADSs if you or your broker deposit shares or evidence of rights to receive shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names you request and will deliver the ADSs to or upon the order of the person or persons entitled thereto.

Except for shares deposited by us in connection with this offering, no shares will be accepted for deposit during a period of 90 days after the date of this prospectus. The 90 day lock up period is subject to adjustment under certain circumstances as described in the section entitled "Shares and American Depositary Shares Eligible for Future Sale—Lock-up Agreements."

How do ADS holders cancel an American Depositary Share?

You may turn in your ADSs at the depository's corporate trust office or by providing appropriate instructions to your broker. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depository will deliver the shares and any other deposited securities underlying the ADSs to you or a person you designate at the office of the custodian. Or, at your request, risk and expense, the depository will deliver the deposited securities at its corporate trust office, to the extent permitted by law.

How do ADS holders interchange between Certificated ADSs and Uncertificated ADSs?

You may surrender your ADR to the depository for the purpose of exchanging your ADR for uncertificated ADSs. The depository will cancel that ADR and will send you a statement confirming that you are the owner of uncertificated ADSs. Alternatively, upon receipt by the depository of a proper instruction from a holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depository will execute and deliver to you an ADR evidencing those ADSs.

Voting Rights

How do you vote?

You may instruct the depository to vote the shares or other deposited securities underlying your ADSs at any meeting at which you are entitled to vote pursuant to any applicable law, the provisions of our articles of association, and the provisions of or governing the deposited securities. *Otherwise, you could exercise your right to vote directly if you withdraw the shares. However, you may not know about the meeting sufficiently enough in advance to withdraw the shares.*

If we ask for your instructions and upon timely notice from us by regular, ordinary mail delivery, or by electronic transmission, as described in the deposit agreement, the depository will notify you of the upcoming meeting at which you are entitled to vote pursuant to any applicable law, the provisions of our articles of association, and the provisions of or governing the deposited securities, and arrange to deliver our voting materials to you. The materials will include or reproduce (a) such notice of meeting or solicitation of consents or proxies; (b) a statement that the ADS holders at the close of business on the ADS record date will be entitled, subject to any applicable law, the provisions of our articles of association, and the provisions of or governing the deposited securities, to instruct the depository as to the exercise of the voting rights, if any, pertaining to the shares or other deposited securities represented by such holder's ADSs; and (c) a brief statement as to the manner in which such instructions may be given to the depository. Voting instructions may be given only in respect of a number of ADSs representing an integral number of shares or other deposited securities. For instructions to be valid, the depository must receive them in writing on or before the date specified. The depository will try, as far as practical, subject to applicable law and the provisions of our articles of association, to vote or to have its agents vote the shares or other deposited securities (in person or by proxy) as you instruct. The depository will only vote or attempt to vote as you instruct.

We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depository to vote the shares underlying your ADSs. In addition, there can be no assurance that ADS holders and beneficial owners generally, or any holder or beneficial owner in particular, will be given the opportunity to vote or cause the depository or the custodian, as applicable, to vote on the same terms and conditions as our shareholders.

The depository and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. *This means that you may not be able to exercise your right to vote and you may have no recourse if the shares underlying your ADSs are not voted as you requested.*

In order to give you a reasonable opportunity to instruct the depositary as to the exercise of voting rights relating to deposited securities, if we request the depositary to act, we will give the depositary notice of any such meeting and details concerning the matters to be voted at least 30 days in advance of the meeting date.

Compliance with Regulations

Information Requests

Each ADS holder and beneficial owner shall (a) provide such information as we or the depositary may request pursuant to law, including, without limitation, relevant Danish law, any applicable law of the United States, our articles of association, any resolutions of our board of directors adopted pursuant to such articles of association, the requirements of any markets or exchanges upon which the shares, ADSs or ADRs are listed or traded, or to any requirements of any electronic book-entry system by which the ADSs or ADRs may be transferred, regarding the capacity in which they own or owned ADRs, the identity of any other persons then or previously interested in such ADRs and the nature of such interest, and any other applicable matters, and (b) be bound by and subject to applicable provisions of the laws of the Kingdom of Denmark, our articles of association, and the requirements of any markets or exchanges upon which the ADSs, ADRs or shares are listed or traded, or pursuant to any requirements of any electronic book-entry system by which the ADSs, ADRs or shares may be transferred, to the same extent as if such ADS holder or beneficial owner held shares directly, in each case irrespective of whether or not they are ADS holders or beneficial owners at the time such request is made.

Disclosure of Interests

Each ADS holder and beneficial owner shall comply with our requests pursuant to Danish law, the rules and requirements of the Nasdaq Global Select Market, Nasdaq Copenhagen and any other stock exchange on which the shares are, or will be, registered, traded or listed or our articles of association, which requests are made to provide information, *inter alia*, as to the capacity in which such ADS holder or beneficial owner owns ADS and regarding the identity of any other person interested in such ADS and the nature of such interest and various other matters, whether or not they are ADS holders or beneficial owners at the time of such requests.

Fees and Expenses

As an ADS holder, you will be required to pay the following service fees to the depositary bank and certain taxes and governmental charges (in addition to any applicable fees, expenses, taxes and other governmental charges payable on the deposited securities represented by any of your ADSs):

Service	Fees
• To any person to which ADSs are issued or to any person to which a distribution is made in respect of ADS distributions pursuant to stock dividends or other free distributions of stock, bonus distributions, stock splits or other distributions (except where converted to cash)	Up to \$0.05 per ADS issued
• Cancellation of ADSs, including the case of termination of the deposit agreement	Up to \$0.05 per ADS cancelled
• Distribution of cash dividends	Up to \$0.05 per ADS held
• Distribution of cash entitlements (other than cash dividends) and/or cash proceeds from the sale of rights, securities and other entitlements	Up to \$0.05 per ADS held
• Distribution of ADSs pursuant to exercise of rights.	Up to \$0.05 per ADS held
• Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to \$0.05 per ADS held
• Depositary services	Up to \$0.05 per ADS held on the applicable record date(s) established by the depositary bank

As an ADS holder, you will also be responsible to pay certain fees and expenses incurred by the depositary bank and certain taxes and governmental charges (in addition to any applicable fees, expenses, taxes and other governmental charges payable on the deposited securities represented by any of your ADSs) such as:

- Fees for the transfer and registration of shares charged by the registrar and issuing agent for the shares in the Kingdom of Denmark (i.e., upon deposit and withdrawal of shares).
- Expenses incurred for converting foreign currency into U.S. dollars.
- Expenses for cable, telex and fax transmissions and for delivery of securities.
- Taxes and duties upon the transfer of securities, including any applicable stamp duties, any stock transfer charges or withholding taxes (i.e., when shares are deposited or withdrawn from deposit).
- Fees and expenses incurred in connection with the delivery or servicing of shares on deposit.
- Fees and expenses incurred in connection with complying with exchange control regulations and other regulatory requirements applicable to shares, deposited securities, ADSs and ADRs.
- Any applicable fees and penalties thereon.

The depositary fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary bank by the brokers (on behalf of their clients) receiving the newly issued ADSs from the depositary bank and by the brokers (on behalf of their clients) delivering the ADSs to the depositary bank for cancellation. The brokers in turn charge these fees to their clients. Depositary fees payable in

connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary bank to the holders of record of ADSs as of the applicable ADS record date.

The depositary fees payable for cash distributions are generally deducted from the cash being distributed or by selling a portion of distributable property to pay the fees. In the case of distributions other than cash (i.e., share dividends, rights), the depositary bank charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or uncertificated in direct registration), the depositary bank sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via DTC), the depositary bank generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary banks.

In the event of refusal to pay the depositary fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary fees from any distribution to be made to the ADS holder.

The depositary may make payments to us or reimburse us for certain costs and expenses, by making available a portion of the ADS fees collected in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time.

Payment of Taxes

You will be responsible for any taxes or other governmental charges payable, or which become payable, on your ADSs or on the deposited securities represented by any of your ADSs. The depositary may refuse to register or transfer your ADSs or allow you to withdraw the deposited securities represented by your ADSs until such taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by your ADSs to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to you any net proceeds, or send to you any property, remaining after it has paid the taxes. You agree to indemnify us, the depositary, the custodian and each of our and their respective agents, directors, employees and affiliates for, and hold each of them harmless from, any claims with respect to taxes (including applicable interest and penalties thereon) arising from any refund of taxes, reduced rate of withholding at source or other tax benefit obtained for you. Your obligations under this paragraph shall survive any transfer of ADRs, any surrender of ADRs and withdrawal of deposited securities or the termination of the deposit agreement.

Reclassifications, Recapitalizations and Mergers

<u>If we:</u>	<u>Then:</u>
Change the nominal or par value of our shares	The cash, shares or other securities received by the depositary will become deposited securities.
Reclassify, split up or consolidate any of the deposited securities	Each ADS will automatically represent its equal share of the new deposited securities.
Distribute securities on the shares that are not distributed to you, or	The depositary may distribute some or all of the cash, shares or other securities it received. It may also deliver new ADSs or ask you to surrender your outstanding ADRs in exchange for new ADRs identifying the new deposited securities.
Recapitalize, reorganize, merge, liquidate, sell all or substantially all of our assets, or take any similar action	

Amendment and Termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the form of ADR without your consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depositary for registration fees, facsimile costs, delivery charges or similar items, including expenses incurred in connection with foreign exchange control regulations and other charges specifically payable by ADS holders under the deposit agreement, or materially prejudices a substantial existing right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depositary notifies ADS holders of the amendment. *At the time an amendment becomes effective, you are considered, by continuing to hold your ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended.* If any new laws are adopted which would require the deposit agreement to be amended in order to comply therewith, we and the depositary may amend the deposit agreement in accordance with such laws and such amendment may become effective before notice thereof is given to ADS holders.

How may the deposit agreement be terminated?

The depositary will terminate the deposit agreement if we ask it to do so, in which case the depositary will give notice to you at least 90 days prior to termination. The depositary may also terminate the deposit agreement if the depositary has told us that it would like to resign, or if we have removed the depositary, and in either case we have not appointed a new depositary within 90 days. In either such case, the depositary must notify you at least 30 days before termination.

After termination, the depositary and its agents will do the following under the deposit agreement but nothing else: collect distributions on the deposited securities, sell rights and other property and deliver shares and other deposited securities upon cancellation of ADSs after payment of any fees, charges, taxes or other governmental charges. Six months or more after the date of termination, the depositary may sell any remaining deposited securities by public or private sale. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement, for the *pro rata* benefit of the ADS holders that have not surrendered their ADSs. It will not invest the money and has no liability for interest. After such sale, the depositary's only obligations will be to account for the money and other cash. After termination, we shall be discharged from all obligations under the deposit agreement except for our obligations to the depositary thereunder.

Books of Depositary

The depositary will maintain ADS holder records at its depositary office. You may inspect such records at such office during regular business hours but solely for the purpose of communicating with other holders in the interest of business matters relating to the Company, the ADRs and the deposit agreement.

The depositary will maintain facilities in the Borough of Manhattan, The City of New York to record and process the issuance, cancellation, combination, split-up and transfer of ADRs.

These facilities may be closed at any time or from time to time when such action is deemed necessary or advisable by the depositary in connection with the performance of its duties under the deposit agreement or at our reasonable written request.

Limitations on Obligations and Liability

Limits on our Obligations and the Obligations of the Depository and the Custodian; Limits on Liability to Holders of ADSs

The deposit agreement expressly limits our obligations and the obligations of the depository and the custodian. It also limits our liability and the liability of the depository. The depository and the custodian:

- are only obligated to take the actions specifically set forth in the deposit agreement without gross negligence or willful misconduct;
- are not liable if any of us or our respective controlling persons or agents are prevented or forbidden from, or subjected to any civil or criminal penalty or restraint on account of, or delayed in, doing or performing any act or thing required by the terms of the deposit agreement and any ADR, by reason of any provision of any present or future law or regulation of the United States or any state thereof, the Kingdom of Denmark or any other country, or of any other governmental authority or regulatory authority or stock exchange, or on account of the possible criminal or civil penalties or restraint, or by reason of any provision, present or future, of our articles of association or any provision of or governing any deposited securities, or by reason of any act of God or war or other circumstances beyond its control (including, without limitation, nationalization, expropriation, currency restrictions, work stoppage, strikes, civil unrest, revolutions, rebellions, explosions and computer failure);
- are not liable by reason of any exercise of, or failure to exercise, any discretion provided for in the deposit agreement or in our articles of association or provisions of or governing deposited securities;
- are not liable for any action or inaction of the depository, the custodian or us or their or our respective controlling persons or agents in reliance upon the advice of or information from legal counsel, any person presenting shares for deposit or any other person believed by it in good faith to be competent to give such advice or information;
- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement;
- are not liable for any special, consequential, indirect or punitive damages for any breach of the terms of the deposit agreement, or otherwise;
- may rely upon any documents we believe in good faith to be genuine and to have been signed or presented by the proper party;
- disclaim any liability for any action or inaction or inaction of any of us or our respective controlling persons or agents in reliance upon the advice of or information from legal counsel, accountants, any person presenting shares for deposit, holders and beneficial owners (or authorized representatives) of ADSs, or any person believed in good faith to be competent to give such advice or information; and
- disclaim any liability for inability of any holder to benefit from any distribution, offering, right or other benefit made available to holders of deposited securities but not made available to holders of ADS.

The depository and any of its agents also disclaim any liability (i) for any failure to carry out any instructions to vote, the manner in which any vote is cast or the effect of any vote or failure to determine that any distribution or action may be lawful or reasonably practicable or for allowing any rights to lapse in accordance with the provisions of the deposit agreement, (ii) the failure or timeliness

of any notice from us, the content of any information submitted to it by us for distribution to you or for any inaccuracy of any translation thereof, (iii) any investment risk associated with the acquisition of an interest in the deposited securities, the validity or worth of the deposited securities, the credit-worthiness of any third party, (iv) for any tax consequences that may result from ownership of ADSs, shares or deposited securities, or (v) for any acts or omissions made by a successor depository whether in connection with a previous act or omission of the depository or in connection with any matter arising wholly after the removal or resignation of the depository, provided that in connection with the issue out of which such potential liability arises the depository performed its obligations without gross negligence or willful misconduct while it acted as depository.

In the deposit agreement, we agree to indemnify the depository under certain circumstances.

Jurisdiction and Arbitration

The laws of the State of New York govern the deposit agreement and the ADSs and we have agreed with the depository that the federal or state courts in the City of New York shall have non-exclusive jurisdiction to hear and determine any dispute arising from or in connection with the deposit agreement and that the depository will have the right to refer any claim or dispute arising from the relationship created by the deposit agreement to arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The arbitration provisions of the deposit agreement do not preclude you from pursuing claims under the Securities Act or the Exchange Act in federal courts.

Jury Trial Waiver

The deposit agreement provides that each party to the deposit agreement (including each holder, beneficial owner and holder of interests in the ADRs) irrevocably waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any lawsuit or proceeding against us or the depository arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws. If we or the depository opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable law.

No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depository of compliance with any substantive provision of, or a disclaimer of liability under, the U.S. federal securities laws and the rules and regulations promulgated thereunder.

Requirements for Depository Actions

Before the depository will issue, deliver or register a transfer of an ADS, split-up, subdivide or combine ADSs, make a distribution on an ADS, or permit withdrawal of shares, the depository may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities and payment of the applicable fees, expenses and charges of the depository;
- satisfactory proof of the identity and genuineness of any signature or any other matters contemplated in the deposit agreement; and
- compliance with (A) any laws or governmental regulations relating to the execution and delivery of ADRs or ADSs or to the withdrawal or delivery of deposited securities and (B) such reasonable regulations and procedures as the depository may establish, from time to time,

consistent with the deposit agreement and applicable laws, including presentation of transfer documents.

The depositary may refuse to issue and deliver ADSs or register transfers of ADSs generally when the register of the depositary or our transfer books are closed or at any time if the depositary or we determine that it is necessary or advisable to do so.

Your Right to Receive the Shares Underlying Your ADSs

You have the right to cancel your ADSs and withdraw the underlying shares at any time except:

- when temporary delays arise because: (1) the depositary has closed its transfer books or we have closed our transfer books; (2) the transfer of shares is blocked to permit voting at a shareholders' meeting; or (3) we are paying a dividend on our shares;
- when you owe money to pay fees, taxes and similar charges;
- 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 shares or other deposited securities, or
- other circumstances specifically contemplated by Section I.A.(l) of the General Instructions to Form F-6 (as such General Instructions may be amended from time to time); or
- for any other reason if the depositary or we determine, in good faith, that it is necessary or advisable to prohibit withdrawals.

The depositary shall not knowingly accept for deposit under the deposit agreement any shares or other deposited securities required to be registered under the provisions of the Securities Act, unless a registration statement is in effect as to such shares.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Direct Registration System

In the deposit agreement, all parties to the deposit agreement acknowledge that the DRS and Profile Modification System, or Profile, will apply to uncertificated ADSs upon acceptance thereof to DRS by DTC. DRS is the system administered by DTC pursuant to which the depositary may register the ownership of uncertificated ADSs, which ownership shall be evidenced by periodic statements issued by the depositary to the ADS holders entitled thereto. Profile is a required feature of DRS which allows a DTC participant, claiming to act on behalf of an ADS holder, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register such transfer.

SHARES AND AMERICAN DEPOSITARY SHARES ELIGIBLE FOR FUTURE SALE

Our shares are admitted to trading and official listing on Nasdaq Copenhagen. Future sales of our shares or ADSs, including shares issued upon the exercise of outstanding warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for the ADSs to fall or impair our ability to raise equity capital in the future.

Upon the closing of this offering, based on the number of shares outstanding as of December 31, 2018, and assuming (1) no exercise of the underwriters' option to purchase additional ADSs and (2) no exercise of any of our outstanding warrants, we will have outstanding an aggregate of _____ shares. All of our outstanding shares are freely tradable on Nasdaq Copenhagen. All of the ADSs to be sold in this offering (representing shares), and any ADSs sold upon exercise of the underwriters' option to purchase additional ADSs, will be freely tradable in the U.S. public market without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless the ADSs are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act (subject, in each case, to the terms of the lock-up agreements referred to below, as applicable). The number of ADSs available for sale immediately after this offering will be the number sold in this offering plus the number of ADSs available prior to this offering (reflecting any split or combination effected in conjunction with this offering) less any ADSs held by our directors and members of senior management, who will be subject to lock-up agreements for 90 days after the date of this prospectus.

Lock-Up Agreements

In connection with this offering, we and all of our directors and members of senior management have agreed, subject to certain exceptions, with the underwriters not to dispose of or hedge any of our or their ADSs, shares or securities convertible into or exchangeable for ADSs or shares during the period from the date of the lock-up agreement continuing through the date that is 90 days after the date of this prospectus, except with the prior written consent of the representatives of the underwriters. See "Underwriting." Following the lock-up periods set forth in the agreements described above, and assuming that the underwriters do not release any parties from these agreements, all of the ADSs and shares that are held by these parties as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 and Regulation S under the Securities Act.

Rule 144

Rule 144 provides an exemption from the registration requirements of the Securities Act for restricted securities and securities held by certain affiliates of an issuer being sold in the United States, to U.S. persons or through U.S. securities markets. In general, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, a person (or persons whose securities are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell such securities in the U.S. public market without complying with the manner of sale, volume limitation or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the securities proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such securities in the public market without complying with any of the requirements of Rule 144. In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the securities proposed to be sold for at least six months are

entitled to sell in the public market, and within any three-month period, a number of those securities that does not exceed the greater of:

- 1% of the number of shares then outstanding, which will equal approximately immediately after this offering; or
- the average weekly trading volume of the ADSs on the Nasdaq Global Select Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling ADSs on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us.

Regulation S

Regulation S under the Securities Act provides that shares owned by any person may be sold without registration in the United States, provided that the sale is effected in an offshore transaction and no directed selling efforts are made in the United States (as these terms are defined in Regulation S), subject to certain other conditions. In general, this means that our shares may be sold outside the United States without registration in the United States being required.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

General

The following discussion is a summary of the material U.S. federal income tax consequences relating to the acquisition, ownership and disposition of the ADSs. This summary does not purport to be a comprehensive description of all of the U.S. federal income tax considerations that may be relevant to a particular person's decision to acquire the ADSs. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, and U.S. Treasury regulations promulgated thereunder, or the Treasury Regulations, as well as judicial and administrative interpretations thereof as in effect as of the date of this prospectus. All of the foregoing authorities are subject to change, which change could apply retroactively and could affect the tax consequences described below, and there can be no assurance that the U.S. Internal Revenue Service, or the IRS, or U.S. courts will agree with the tax consequences described in this summary. The Company undertakes no obligation to publicly update or otherwise revise this summary whether as a result of new Treasury Regulations, Code sections, judicial and administrative interpretations or otherwise.

This summary applies only to U.S. Holders (as defined below) that purchase ADSs in this offering and hold the ADSs as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). This summary does not address any U.S. federal estate and gift tax, alternative minimum tax or Medicare tax on net investment income consequences, or any U.S. state or local or non-U.S. tax consequences. This summary also does not address the tax considerations that may be relevant to certain types of investors subject to special treatment under U.S. federal income tax laws, such as:

- banks and other financial institutions;
- insurance companies;
- regulated investment companies or real estate investment trusts;
- dealers or traders in securities or currencies that use a mark-to-market method of accounting;
- broker-dealers;
- tax exempt organizations, retirement plans, individual retirement accounts and other tax deferred accounts;
- persons holding the ADSs as part of a straddle, hedging, conversion or integrated transaction for U.S. federal income tax purposes;
- U.S. expatriates;
- U.S. Holders whose functional currency is not the U.S. dollar;
- any entity or arrangement classified as partnership for U.S. federal income tax purposes or investors therein;
- persons who own or are deemed to own, directly or constructively, 10% or more of the total combined voting power of all classes of the Company's voting stock or 10% or more of the total value of shares of all classes of the Company's stock;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the ADSs being taken into account in an applicable financial statement;
- persons holding the ADSs in connection with a trade or business conducted outside the United States; or

- persons that held, directly, indirectly or by attributions, ownership interest in us prior to this offering.

THE SUMMARY OF U.S. FEDERAL INCOME TAX CONSEQUENCES SET OUT BELOW IS FOR GENERAL INFORMATION ONLY. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL TAX RULES TO THEIR PARTICULAR CIRCUMSTANCES AS WELL AS THE STATE, LOCAL, NON-U.S. AND OTHER TAX CONSEQUENCES TO THEM OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE ADSs.

As used in this discussion, the term "U.S. Holder" means a beneficial owner of the ADSs that is for U.S. federal income tax purposes:

- a citizen or individual resident of the United States;
- a corporation (or other entity treated as a corporation) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions of the trust or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

The U.S. federal income tax treatment of a partner in an entity or arrangement treated as a partnership for U.S. federal income tax purposes that holds ADSs generally will depend on the status of the partner and the activities of the partnership. Partnerships considering an investment in the ADSs and partners in such partnerships should consult their tax advisors regarding the specific U.S. federal income tax consequences to them of the acquisition, ownership and disposition of the ADSs.

The discussion below assumes that the representations contained in the deposit agreement and any related agreement are true and that the obligations in such agreements will be complied with in accordance with their terms.

ADSs

For U.S. federal income tax purposes, U.S. Holders of ADSs generally will be treated as the beneficial owners of the underlying shares represented by the ADSs and an exchange of ADSs for our shares generally will not be subject to U.S. federal income tax.

The U.S. Treasury Department and the IRS have expressed concerns that U.S. Holders of ADSs may be claiming foreign tax credits in situations where an intermediary in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS has taken actions that are inconsistent with the U.S. Holder of the ADS being treated as the beneficial owner of the underlying security. Such actions (for example, a pre-release of an ADS by a depository) also may be inconsistent with the claiming of the reduced rate of tax applicable to certain dividends received by non-corporate U.S. Holders of ADSs, including individual U.S. Holders. Accordingly, the availability of foreign tax credits or the reduced U.S. federal income tax rate for "qualified dividend income," each discussed below, could be affected by actions taken by intermediaries in the chain of ownership between the holder of an ADS and the Company, if as a result of such actions the U.S. Holder of an ADS is not properly treated as the beneficial owner of the underlying share.

Dividends and Other Distributions

Subject to the passive foreign investment company, or PFIC, rules discussed below, the gross amount of any distribution made by the Company to a U.S. Holder with respect to the ADSs (including the amount of any taxes withheld therefrom) generally will be included in such holder's gross income as non-U.S. source dividend income in the year actually or constructively received by the depository, but only to the extent that the distribution is paid out of the Company's current or accumulated earnings and profits (as determined under U.S. federal income tax principles). As a non-U.S. company, the Company does not maintain calculations of its earnings and profits under U.S. federal income tax principles. Therefore, it is expected that any distributions generally will be reported to U.S. Holders as dividends. Any dividends that the Company pays will not be eligible for the dividends-received deduction allowed to qualifying corporations under Section 243 of the Code.

With respect to certain non-corporate U.S. Holders, including individual U.S. Holders, dividends paid on the ADSs may be eligible to be taxed at favorable rates applicable to "qualified dividend income," provided that (1) the ADSs are readily tradable on an established securities market in the United States, (2) the Company is not a PFIC (as discussed below) with respect to the relevant U.S. Holder for either its taxable year in which the dividend is paid or the preceding taxable year and (3) certain minimum holding period and other requirements are met.

Under a published IRS Notice, common or ordinary shares, or ADSs representing such shares, are considered to be readily tradable on an established securities market in the United States if they are listed on the Nasdaq Global Select Market, as our ADSs are expected to be. However, based on existing guidance, it is unclear whether the shares will be considered to be readily tradable on an established securities market in the United States, because only the ADSs, and not the underlying shares, will be listed on a securities market in the United States. U.S. Holders should consult their tax advisors regarding the availability of the favorable rate applicable to qualified dividend income for any dividends the Company pays with respect to the ADSs.

The amount of any distribution paid in Danish kroner will be included in a U.S. Holder's income in an amount equal to the U.S. dollar value of such Danish kroner calculated by reference to the exchange rate in effect on the date the distribution is actually or constructively received by the depository, regardless of whether the payment is in fact converted into U.S. dollars at that time. If the distribution is converted into U.S. dollars on the date of receipt, a U.S. Holder generally should not be required to recognize foreign currency gain or loss in respect of the distribution. A U.S. Holder may have foreign currency gain or loss if the distribution is converted into, or exchanged for, U.S. dollars after the date of receipt.

Any dividends the Company pays to U.S. Holders generally will constitute non-U.S. source "passive category" income for U.S. foreign tax credit limitation purposes. If any Danish taxes are withheld with respect to dividends paid to a U.S. Holder with respect to the ADSs, subject to certain conditions and limitations provided in the Code and the applicable Treasury Regulations (including a minimum holding period requirement), such taxes may be treated as non-U.S. taxes eligible for credit against such U.S. holder's U.S. federal income tax liability (to the extent not exceeding the withholding rate applicable to the U.S. Holder). In lieu of claiming a foreign tax credit, U.S. Holders may, at their election, deduct non-U.S. taxes, including any Danish taxes withheld from dividends on the ADSs, in computing their taxable income, subject to generally applicable limitations under U.S. federal income tax law. An election to deduct non-U.S. taxes instead of claiming foreign tax credits applies to all non-U.S. taxes paid or accrued in the taxable year. If a refund of the tax withheld is available under the laws of Denmark or under an applicable income tax treaty, the amount of tax withheld that is refundable will not be eligible for such credit against a U.S. Holder's U.S. federal income tax liability (and will not be eligible for the deduction against U.S. federal taxable income). If the dividends constitute qualified dividend income as discussed above, the amount of the dividend taken into account

for purposes of calculating the U.S. foreign tax credit limitation generally will be limited to the gross amount of the dividend, multiplied by the reduced rate applicable to the qualified dividend income, divided by the highest rate of tax normally applicable to dividends.

The rules relating to the determination of the U.S. foreign tax credit and the deduction of non-U.S. taxes are complex, and U.S. Holders should consult their tax advisors to determine whether and to what extent a credit or deduction may be available in their particular circumstances.

Taxable Dispositions of the ADSs

Subject to the PFIC rules discussed below, a U.S. Holder generally will recognize taxable gain or loss on any sale, exchange or other taxable disposition of an ADS in an amount equal to the difference between the sum of the fair market value of any property and the amount of cash received in such disposition and the holder's tax basis in the ADS. The U.S. Holder's tax basis in the ADSs generally will equal the cost of the ADSs to the U.S. Holder. The gain or loss generally will be capital gain or loss, and generally will be a long term capital gain or loss if the U.S. Holder has held the ADS for more than one year at the time of disposition. For certain non-corporate taxpayers (including individuals), long term capital gains are subject to tax at favorable rates. The deductibility of capital losses is subject to limitations.

Any gain or loss that a U.S. Holder recognizes on a sale or other taxable disposition of an ADS generally will be treated as U.S. source income or loss for U.S. foreign tax credit limitation purposes. U.S. Holders should consult their tax advisors regarding the proper treatment of any gain or loss in their particular circumstances, including the effects of any applicable income tax treaties.

Passive Foreign Investment Company Considerations

Based on the current and anticipated value of our assets and the nature and composition of the Company's income and assets, the Company does not expect to be a PFIC for our current taxable year ending December 31, 2018, or in the foreseeable future. However, the determination of PFIC status is based on an annual determination that cannot be made until the close of a taxable year, involves extensive factual investigation, including ascertaining the fair market value of all of our assets on a quarterly basis and the active or passive character of each item of income that we earn, and is subject to uncertainty in several respects. Changes in the nature or composition of our income or assets, the structure of our operation or the value of our assets may cause us to become a PFIC. The determination of the value of our assets may depend in part upon the value of our goodwill not reflected on our balance sheet (which may depend upon the market value of the ADSs from time to time, which may be volatile). Accordingly, we cannot assure you that we will not be a PFIC for our current taxable year ending December 31, 2018, or for any future taxable year. If we are a PFIC for any year during which a U.S. Holder holds the ADSs, we generally would continue to be treated as a PFIC with respect to that U.S. Holder for all succeeding years during which the U.S. Holder holds the ADSs, even if we ceased to meet the threshold requirements for PFIC status in any particular year, unless the U.S. Holder has made a "deemed sale" election under the PFIC Rules when we cease to be a PFIC.

A non-U.S. corporation such as the Company will be treated as a PFIC for U.S. federal income tax purposes for any taxable year if, applying applicable look-through rules, either:

- at least 75% of its gross income for such year is "passive income" for purposes of the PFIC rules; or
- at least 50% of the value of its assets (determined based on a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income.

For this purpose, passive income generally includes dividends, interest, royalties and rents other than certain royalties and rents derived in the active conduct of a trade or business and not derived from a related person. The Company will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% by value of the stock.

For purposes of the income test, we believe that we are engaged in an active trade or business of discovering and developing antibody therapeutics and that the royalties and milestone payments we receive from unrelated parties should be treated as derived in the active conduct of a trade or business and not characterized as passive income. However, we have no assurance that these anticipated milestone payments and royalties will be paid when expected. If any such payments are delayed or not received then, depending on the amount of passive income we receive from other sources, the relative percentage of our income that is passive could increase and potentially cause us to be classified as a PFIC. There can be no assurances that we will not be classified as a PFIC for the current taxable year or for any future taxable year.

If we were a PFIC for any taxable year during which a U.S. Holder holds ADSs, then, unless such U.S. Holder makes a "mark-to-market" election (as discussed below), such U.S. Holder generally would be subject to special adverse tax rules with respect to any "excess distribution" that it receives from the Company and any gain that it recognizes from a sale or other disposition, including, in certain circumstances, a pledge, of ADSs. For this purpose, distributions that a U.S. Holder receives in a taxable year that are greater than 125% of the average annual distributions that it received during the shorter of the three preceding taxable years or your holding period for the ADSs will be treated as an excess distribution. Under these rules:

- the excess distribution or recognized gain would be allocated ratably over the U.S. Holder's holding period for the ADSs;
- the amount of the excess distribution or recognized gain allocated to the taxable year of distribution or gain, and to any taxable years in the U.S. Holder's holding period prior to the first taxable year in which the Company was treated as a PFIC, would be treated as ordinary income; and
- the amount of the excess distribution or recognized gain allocated to each other taxable year would be subject to the highest tax rate in effect for individuals or corporations, as applicable, for each such year and the resulting tax will be subject to the interest charge generally applicable to underpayments of tax.

If the Company were a PFIC for any taxable year during which a U.S. Holder holds ADSs and any of our non-U.S. subsidiaries or other corporate entities in which we own equity interests is also a PFIC, the U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of each such non-U.S. entity classified as a PFIC, each such entity referred to as a lower-tier PFIC, for purposes of the application of these rules. U.S. Holders should consult their own tax advisor regarding the application of the PFIC rules to any of the Company's lower-tier PFICs.

If the Company were a PFIC for any taxable year during which a U.S. Holder holds ADSs, then in lieu of being subject to the tax and interest-charge rules discussed above, the U.S. Holder may make an election to include gain on the ADSs as ordinary income under a mark-to-market method, provided that our ADSs constitute "marketable stock." Marketable stock is stock that is regularly traded on a qualified exchange or other market, as defined in applicable Treasury Regulations. The Company expects that the ADSs, but not our shares, will be listed on the Nasdaq Global Select Market, which is a qualified exchange or other market for these purposes.

Consequently, if the ADSs are listed on the Nasdaq Global Select Market and are regularly traded, we expect that the mark-to-market election would be available to U.S. Holders of ADSs if the Company were to become a PFIC, but no assurances are given in this regard.

Because a mark-to-market election cannot be made for any lower-tier PFICs that the Company may own (unless the shares in such lower-tier PFIC are themselves treated as marketable stock), if the Company were a PFIC for any taxable year, a U.S. Holder that makes the mark-to-market election may continue to be subject to the tax and interest charges under the general PFIC rules with respect to such U.S. Holder's indirect interest in any investments held by the Company that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

In certain circumstances, a shareholder in a PFIC may avoid the adverse tax and interest-charge regime described above by making a "qualified electing fund" election to include in income its share of the corporation's income on a current basis. However, a U.S. Holder may make a qualified electing fund election with respect to the ADSs only if the Company agrees to furnish such U.S. Holder annually with a PFIC annual information statement as specified in the applicable Treasury Regulations. There is no assurance that we will provide such information that would enable a U.S. Holder to make a qualified electing fund election.

If a U.S. Holder owns ADSs during any year in which the Company is a PFIC, such U.S. Holder (including, potentially, indirect holders) generally will be required to file an IRS Form 8621 with such holder's U.S. federal income tax return for that year.

U.S. Holders should consult their own tax advisors regarding the application of the PFIC rules to their ownership of the ADSs.

Information Reporting and Backup Withholding

Dividend payments with respect to the ADSs and proceeds from a sale, exchange, redemption or other taxable disposition of the ADSs made within the United States or through certain U.S. related financial intermediaries may be subject to information reporting to the IRS and possible U.S. backup withholding. Backup withholding will not apply, however, to a U.S. Holder that furnishes a correct taxpayer identification number and makes any other required certification on IRS Form W-9 or that is otherwise exempt from backup withholding. U.S. Holders of the ADSs should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against such U.S. Holder's U.S. federal income tax liability, and such holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing an appropriate claim for refund with the IRS and furnishing any required information in a timely manner.

Certain U.S. Holders may be required to comply with certain reporting requirements relating to the ADSs, including filing IRS Form 8938, with respect to the holding of certain foreign financial assets, including stock of foreign issuers (such as the Company), either directly or through certain foreign financial institutions, if the aggregate value of all such assets exceeds U.S. \$50,000 on the last day of the tax year or U.S. \$75,000 at any time during the tax year. U.S. Holders who fail to report the required information could be subject to substantial penalties. U.S. Holders should consult their own tax advisors regarding the application of these rules to their ownership of the ADSs.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE IMPORTANT TO YOU. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL TAX RULES TO THEIR PARTICULAR CIRCUMSTANCES AS WELL AS THE STATE, LOCAL, NON-U.S. AND OTHER TAX CONSEQUENCES TO THEM OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE ADSs.

MATERIAL DANISH INCOME TAX CONSIDERATIONS

The following is a summary of material Danish tax considerations relating to the ownership and disposition of ADSs. The summary is for general information purposes only and does not constitute exhaustive tax or legal advice.

It is noted specifically that the summary does not address all possible tax consequences relating to the ownership and disposition of ADSs. The summary does accordingly not apply to investors to whom special tax rules apply, and, therefore, may not be relevant, for example, to investors subject to the Danish Tax on Pension Yields Act (i.e., pension savings), professional investors, certain institutional investors, insurance companies, pension companies, banks, stockbrokers and investors with tax liability on return on pension investments. The summary does further not apply to non-Danish tax resident investors that carry on business activities in Denmark through a permanent establishment.

In the context of the following section, "companies" mean entities that are treated as separate taxable entities under domestic tax laws of their jurisdiction of incorporation.

The summary is based solely on the tax laws of Denmark in effect on the date of this prospectus. Danish tax laws may be subject to change, potentially with retroactive effect.

Potential investors in the ADSs are advised to consult their tax advisors regarding the applicable tax consequences of ownership and disposition of the ADSs based on their particular circumstances.

Tax Treatment of ADSs Under Danish Tax Law

It is currently not clear under Danish tax legislation or case law how ADSs are to be treated for Danish tax purposes.

This summary assumes that the ADS holder in respect of the ADSs is treated as the direct owner of the shares underlying the ADSs and accordingly as the shareholder for Danish domestic tax law purposes, and that the ADS holder is deemed the beneficial owner of any dividend distributed on the underlying shares for Danish domestic tax law purposes as well as under any applicable tax treaty.

Accordingly, the following deals with material Danish tax considerations relating to the ownership and disposition of listed shares.

Danish Tax Resident Individuals

Sale of Shares

Capital gains from the sale of shares realized by Danish tax resident individuals are taxed as share income at a rate of 27% on the first DKK 54,000 (\$8,700) (for cohabiting spouses, a total of DKK 108,000 (\$17,401)) and at a rate of 42% on share income exceeding DKK 54,000 (\$8,700) (for cohabiting spouses over DKK 108,000 (\$17,401)) (all 2019 amounts and thresholds). The threshold is subject to annual adjustments and include all share income included in the calculation (i.e., all capital gains on shares and dividends derived by the individual or cohabiting spouses, respectively).

Gains and losses on the sale of shares are calculated as the difference between the purchase price and the sales price. The purchase price is based on the average purchase price paid for the shares in the company (i.e., not the purchase price paid for each share).

Losses on the sale of listed shares can only be offset against other share income deriving from listed shares (i.e., dividends and capital gains on the sale of listed shares) and subject to the Danish tax authorities having received certain information concerning the ownership of the shares in due time. Unused losses will automatically be offset against a cohabiting spouse's share income deriving from listed shares and any additional losses can be carried forward and offset against future share income deriving from listed shares.

Dividends

Dividends paid to Danish tax resident individuals are included in the individual's share income and taxed as such, as outlined above. Dividends paid to Danish tax resident individuals are generally subject to withholding tax at the rate of 27%.

Non-Danish Tax Resident Individuals

Sale of Shares

Non-Danish tax resident individuals, including individuals tax resident in the United States, are generally not taxed in Denmark on gains realized on the sale of shares, subject to certain anti-avoidance rules (see below).

Dividends

Dividends paid to non-Danish tax resident individuals, including individuals tax resident in the United States, are generally subject to withholding tax at the rate of 27%. No additional tax will be imposed.

In the event that the shareholder is tax resident in a state with which Denmark has entered into a tax treaty and is entitled to benefits under such tax treaty, the shareholder may seek a refund from the Danish Tax Agency of the tax withheld in excess of the applicable treaty rate (Danish tax treaties typically provide for a 15% tax rate). Denmark has entered into tax treaties with approximately 80 countries, including the United States and almost all EU member states. The treaty between Denmark and the United States generally provides for a 15% tax rate.

Similarly, Danish domestic tax law provides for a 15% tax rate, if the shareholder holds less than 10% of the nominal share capital in the company and is tax resident in a state that is obligated to exchange information with Denmark under a tax treaty or an international agreement, convention or other administrative agreement on assistance in tax matters. If the shareholder is tax resident outside the EU, it is an additional requirement for application of the 15% tax rate that the shareholder together with related shareholders holds less than 10% of the share capital of the company.

Any reduced tax rate according to an applicable tax treaty and/or Danish domestic tax law will not affect the withholding rate (27%). In order to receive a refund (from 27% to *e.g.*, 15%), the shareholder must make a claim for such refund through certain certification procedures.

As a general rule, the refund shall be paid within six months following the Danish Tax Agency's receipt of the refund claim. If the refund is paid later than six months after the receipt of the claim, interest will in general be calculated on the amount of refund. For 2016 and subsequent years, the rate per month will be 0.4% plus a premium fixed annually. The six-month deadline is suspended by the Danish Tax Agency, if the Tax Agency is unable to determine whether the taxpayer is entitled to a refund based on the taxpayer's affairs. If the deadline is suspended accordingly, computation of interest is also suspended.

The Danish Tax Agency has recently published new guidance on the documentation necessary for processing refund claims. The guidance is available in English from the Danish tax authorities' website, <https://skat.dk/skat.aspx?old=2244931&vId=0&lang=US>. The information on, or information that can be accessed through, such website is not part of and should not be incorporated by reference into this prospectus. We have included such website address as an inactive textual reference only.

Danish Tax Resident Companies

Sale of Shares

For the purpose of taxation of sales of shares made by corporate shareholders (and dividends received by corporate shareholders, see below), a distinction is made between:

"Subsidiary Shares," which are generally defined as shares owned by a shareholder holding at least 10% of the share capital of the issuing company;

"Group Shares," which are generally defined as shares in a company in which the shareholder of the company and the issuing company are subject to Danish joint taxation or satisfy the requirements for international joint taxation under Danish law;

"Tax-Exempt Portfolio Shares," which are generally defined as unlisted shares owned by a shareholder holding less than 10% of the share capital of the issuing company; and

"Taxable Portfolio Shares," which are defined as shares that do not qualify as Subsidiary Shares, Group Shares or Tax-Exempt Portfolio Shares.

Gains and losses on disposal of Subsidiary Shares, Group Shares and Tax-Exempt Portfolio Shares realized by Danish tax resident companies are generally not included in the taxable income of the shareholder, subject to certain anti-avoidance rules (see below).

Capital gains on listed Taxable Portfolio Shares are taxable at the general corporate tax rate of 22% and losses on such shares are generally deductible. Gains and losses on listed Taxable Portfolio Shares are taxed under the mark-to-market principle irrespective of realization.

Dividends

Dividends received on Subsidiary Shares and Group Shares are generally tax-exempt, subject to certain anti-avoidance rules (see below).

Dividends received on Taxable Portfolio Shares are taxable at the general corporate tax rate of 22% and tax is generally withheld similarly at 22%.

Non-Danish Tax Resident Companies

Sale of Shares

Non-Danish tax resident companies, including companies tax resident in the United States, are generally not taxed in Denmark on gains realized on the sale of shares, subject to certain anti-avoidance rules (see below).

Dividends

Dividends received on Subsidiary Shares are exempt from Danish withholding tax provided that taxation shall be waived or reduced under the Parent-Subsidiary Directive (2011/96/EU) or under an applicable tax treaty. Similarly, dividends received on Group Shares, which are not Subsidiary Shares, are exempt from Danish withholding tax if the shareholder is resident in the EU or the EEA and provided that taxation shall be waived or reduced under the Parent-Subsidiary Directive (2011/96/EU) or under an applicable tax treaty had the shares been Subsidiary Shares.

In other cases, dividends will generally be subject to tax at a rate of 22% effective for dividends distributed on or after July 1, 2016. However, the withholding rate is 27%, meaning that all foreign corporate shareholders receiving taxable dividends distributed from Danish companies on or after July 1, 2016 will be able to ask for a refund of at least 5% of the total dividend.

Further, in the event that the shareholder is tax resident in a state with which Denmark has entered into a tax treaty and is entitled to the benefits under such tax treaty, the shareholder may seek a refund from the Danish Tax Agency of the tax withheld in excess of the applicable treaty rate (Danish tax treaties typically provide for a 15% tax rate). Denmark has entered into tax treaties with approximately 80 countries, including the United States and almost all EU member states. The treaty between Denmark and the United States generally provides for a 15% tax rate.

Similarly, Danish domestic tax law provides for an applicable 15% tax rate, if the shareholder holds less than 10% of the share capital in the company and is tax resident in a state that is obligated to exchange information with Denmark under a tax treaty or an international agreement, convention or other administrative agreement on assistance in tax matters. If the shareholder is tax resident outside the EU, it is an additional requirement for eligibility for the 15% tax rate that the shareholder together with related shareholders holds less than 10% of the nominal share capital of the company.

Any reduced tax rate according to an applicable tax treaty (and/or the 15% tax rate provided for under Danish domestic tax law) will not affect the withholding rate (27%). In order to receive a refund (from 27% to *e.g.*, 15%), the shareholder must make a claim for such refund through certain certification procedures.

As a general rule, the refund shall be paid within six months following the Danish Tax Agency's receipt of the refund claim. If the refund is paid later than six months after the receipt of the claim, interest will be calculated on the amount of refund. For 2016 and subsequent years, the rate per month will be 0.4% plus a premium fixed annually. The six-month deadline can be suspended by the Danish Tax Agency, if the Tax Agency is unable to determine whether the taxpayer is entitled to a refund based on the taxpayer's affairs. If the deadline is suspended accordingly, computation of interest is also suspended.

The Danish Tax Agency has recently published new guidance on the documentation necessary for processing refund claims. The guidance is available in English from the Danish tax authorities' website, <https://skat.dk/skat.aspx?old=2244931&vId=0&lang=US>. The information on, or information that can be accessed through, such website is not part of and should not be incorporated by reference into this prospectus. We have included such website address as an inactive textual reference only.

Danish anti-avoidance rules

Payments may be subject to Danish withholding tax irrespective of the above, if the ADS holder is not the beneficial owner of the shares and dividend (e.g. if the ADS holder reassigns the payments to a person or entity not itself entitled to the above exemptions).

Further, Danish law has certain general anti-avoidance rules, or the GAAR, which focus on substance over form. Under these rules the Danish tax authorities can set aside a setup, which constitutes a fictitious arrangement, which is carried out for the main purposes (or with one of the main purposes) of tax avoidance and resulting in no taxes being paid. This is the case where the relevant scheme presents a number of unusual features which suggest that it had not been entered into for commercial business reasons but to unduly obtain tax benefits. Subject to the conditions of the GAAR an investor might be denied the benefits of the Parent-Subsidiary Directive (2011/96/EU) or a tax treaty, and Danish withholding tax of 27% will in such cases be levied.

Finally, it should be noted that it is the shareholder who owns the share, i.e. the ADS, at the time of the general meeting where the decision to distribute dividend is passed who is shareholder, who is subject to Danish taxation on the dividend, and thereby is entitled to make a tax reclaim if any.

UNDERWRITING

BofA Securities, Inc., Morgan Stanley & Co. LLC and Jefferies LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to issue shares which the underwriters will subscribe for and, upon issuance, deposit with the depository, allowing the depository to issue the ADSs which are subject to this offering. Consequently, the underwriters have agreed, severally and not jointly, to subscribe for the shares equivalent to the number of ADSs set forth opposite its name below.

<u>Underwriter</u>	<u>Number of ADSs</u>
BofA Securities, Inc.	
Morgan Stanley & Co. LLC	
Jefferies LLC	
Total	<u><u> </u></u>

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to subscribe for all of the shares issued by us under the underwriting agreement if any of such shares are subscribed for. If an underwriter defaults, the underwriting agreement provides that the subscription commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the ADSs, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the ADSs, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Fees

The representatives have advised us that the underwriters propose initially to offer the ADSs to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ per ADS. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting commission and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional ADSs.

	<u>Per ADS</u>	<u>Without Option</u>	<u>With Option</u>
Public offering price	\$	\$	\$
Underwriting commission	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The expenses of the offering, not including the underwriting commission, are estimated at \$ and are payable by us.

Option to Purchase Additional ADSs

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to subscribe for up to _____ additional shares representing _____ ADSs at the public offering price, less the underwriting commission. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to subscribe for a number of additional shares representing the number of ADSs proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our senior management and our directors have agreed not to sell or transfer any shares or ADSs or securities convertible into, exchangeable for, exercisable for, or repayable with shares or ADSs, for 90 days after the date of this prospectus without first obtaining the written consent of the representatives. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any shares or ADSs,
- sell any option or contract to purchase any shares or ADSs,
- purchase any option or contract to sell any shares or ADSs,
- grant any option, right or warrant for the sale of shares or ADSs,
- otherwise dispose of or transfer any shares or ADSs,
- request or demand that we file or make a confidential submission of a registration statement related to the shares or ADSs, or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any shares or ADSs whether any such swap or transaction is to be settled by delivery of shares or ADSs or other securities, in cash or otherwise.

This lock-up provision applies to shares or ADSs and to securities convertible into, or exchangeable or exercisable for, or repayable with shares or ADSs owned now or acquired later by the person executing the agreement, including such shares, ADSs or securities for which the person executing the agreement has or later acquires the power of disposition.

Nasdaq Global Select Market Listing

We intend to apply to list our ADSs on the Nasdaq Global Select Market under the symbol "GMAB."

Before this offering, neither our shares nor our ADSs have been listed for trading on an exchange in the United States. However, our shares are listed on Nasdaq Copenhagen under the symbol "GEN," and our existing ADSs are traded on the U.S. over-the-counter market under the symbol "GMXAY." The initial public offering price of our ADSs will be determined through negotiations between us and the representatives and based in large part on the closing price of our shares on Nasdaq Copenhagen. In addition to the closing price of our shares on Nasdaq Copenhagen, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,

- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the ADSs may not develop. It is also possible that after the offering the ADSs will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the ADSs in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the ADSs is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our ADSs. However, the representatives may engage in transactions that stabilize the price of the ADSs, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our ADSs in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of ADSs than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional ADSs described above. The underwriters may close out any covered short position by either exercising their option to purchase additional ADSs or purchasing ADSs in the open market. In determining the source of ADSs to close out the covered short position, the underwriters will consider, among other things, the price of ADSs available for purchase in the open market as compared to the price at which they may purchase ADSs through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing ADSs in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our ADSs in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of ADSs made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting commission received by it because the representatives have repurchased ADSs sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our ADSs or preventing or retarding a decline in the market price of our ADSs. As a result, the price of our ADSs may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Select Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our ADSs. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area, each a "Member State", no offer of ADSs which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of ADSs referred to in (a) to (c) above shall result in a requirement for the Company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of ADSs is made or who receives any communication in respect of an offer of ADSs, or who initially acquires any ADSs will be deemed to have represented, warranted, acknowledged and agreed to and with the representatives and the Company that (1) it is a "qualified investor" within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any ADSs acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the ADSs acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where ADSs have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those ADSs to it is not treated under the Prospectus Directive as having been made to such persons.

The Company, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus has been prepared on the basis that any offer of ADSs in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of ADSs. Accordingly any person making or intending to make an offer in that Member State of ADSs which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for the Company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the Company nor the representatives have authorized, nor do they authorize, the making of any offer of ADSs in circumstances in which an obligation arises for the Company or the representatives to publish a prospectus for such offer.

For the purposes of this provision, the expression an "offer to the public" in relation to any ADSs in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the ADSs to be offered so as to enable an investor to decide to purchase or subscribe the ADSs, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The ADSs may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the ADSs or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the ADSs have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of ADSs will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, or FINMA, and the offer of ADSs has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of ADSs.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The ADSs to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the ADSs offered should conduct their own due diligence on the ADSs. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or the Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the ADSs may only be made to persons, the "Exempt Investors," who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the ADSs without disclosure to investors under Chapter 6D of the Corporations Act.

The ADSs applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring ADSs must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The ADSs have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the ADSs has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to ADSs which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The ADSs have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of ADSs may not be circulated or distributed, nor may the ADSs be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the ADSs are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the ADSs pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law;
- (d) as specified in Section 276(7) of the SFA; or
- (e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The ADSs may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale

of the ADSs must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

EXPENSES OF THIS OFFERING

The following table sets forth the costs and expenses, other than the underwriting commission, payable by us in connection with the sale of the ADSs being registered. All amounts are estimates except for the SEC registration fee, the Financial Industry Regulatory Authority, or FINRA, filing fee and the Nasdaq Global Select Market listing fee.

<u>Item</u>	<u>Amount to be Paid</u>
SEC registration fee	\$ *
FINRA filing fee	*
Nasdaq Global Select Market listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Miscellaneous expenses	*
Total	<u>\$ *</u>

* To be completed by amendment.

LEGAL MATTERS

The validity of the issuance of the shares underlying the ADSs offered in this prospectus and certain other matters of Danish law will be passed upon for us by Kromann Reumert, Copenhagen, Denmark. Certain matters of U.S. law will be passed upon for us by Shearman & Sterling LLP, New York, New York. Certain matters of U.S. law will be passed upon for the underwriters by Latham & Watkins LLP, and certain matters of Danish law will be passed upon for the underwriters by Bech-Bruun Law Firm P/S, Copenhagen, Denmark.

EXPERTS

The consolidated financial statements as of December 31, 2018 and 2017 and for each of the two years in the period ended December 31, 2018 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. The offices of PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab are located at Strandvejen 44, 2900 Hellerup, Denmark.

ENFORCEMENT OF CIVIL LIABILITIES

We are organized under the laws of Denmark, with a domicile in the municipality of Copenhagen, Denmark.

A majority of the members of our board of directors and senior management are residents of Denmark or other jurisdictions outside the United States. A substantial portion of ours and such persons' assets are located in Denmark or other jurisdictions outside the United States. As a result, it may not be possible for investors to effect service of process upon such persons or us with respect to litigation that may arise under U.S. law or to enforce against them or our company judgments obtained in U.S. courts, whether or not such judgments were made pursuant to civil liability provisions of the federal or state securities laws of the United States or any other laws of the United States.

The United States and Denmark do not have a treaty providing for reciprocal recognition and enforceability of judgments rendered in connection with civil and commercial disputes and, accordingly, a final judgment (other than an arbitration award) rendered by a U.S. court based on civil liability would not be enforceable in Denmark. However, if the party in whose favor such final judgment is rendered brings the lawsuit in a competent court in Denmark, that party may submit to the Danish court the final judgment that has been rendered in the United States. A judgment by a federal or state court in the United States against the Company will neither be recognized nor enforced by a Danish court, but such judgment may serve as evidence in a similar action in a Danish court.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement (including amendments and exhibits to the registration statement) on Form F-1 under the Securities Act with respect to the ADSs offered in this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to Genmab A/S and the ADSs offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address is www.sec.gov. We currently make available to the public our annual and interim reports, as well as certain information regarding our corporate governance and other matters, on the Investors page of our website, www.genmab.com. The reference to our website address does not constitute incorporation by reference of the information contained on or available through our website, and you should not consider it to be a part of this prospectus.

After this offering, we will be subject to the reporting requirements of the Exchange Act applicable to foreign private issuers. Because we are a foreign private issuer, the SEC's rules do not require us to deliver proxy statements or to file quarterly reports on Form 10-Q, among other things. However, we plan to produce quarterly financial reports and furnish them to the SEC after the end of each of the first three quarters of our fiscal year and to file our annual report on Form 20-F within four months after the end of our fiscal year. Our annual consolidated financial statements will be prepared in accordance with IFRS as issued by the IASB and certified by an independent public accounting firm.

As a foreign private issuer, we are also exempt from the requirements of Regulation FD (Fair Disclosure) which, generally, are meant to ensure that select groups of investors are not privy to specific information about an issuer before other investors. We are, however, still subject to the anti-fraud and anti-manipulation rules of the SEC, such as Rule 10b-5 of the Exchange Act. Since many of the disclosure obligations required of us as a foreign private issuer are different than those required by U.S. domestic reporting companies, our shareholders, potential shareholders and the investing public in general should not expect to receive information about us in the same amount and at the same time as information is received from, or provided by, U.S. domestic reporting companies.

We will send the depositary a copy of all notices of shareholders meetings and other reports, communications and information that are made generally available to shareholders. The depositary will, if we so request, mail to all registered holders of ADSs a notice containing the information (or a summary of the information) contained in any notice of a meeting of our shareholders received by the depositary from us or will make available to all registered holders of ADSs such notices and all such other reports and communications received by the depositary from us.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Genmab A/S

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Genmab A/S and its subsidiaries (the "Company") as of December 31, 2018 and 2017 and the related consolidated statements of comprehensive income, cash flows and changes in equity for each of the two years in the period ended December 31, 2018, including 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 as of December 31, 2018 and 2017 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 of these consolidated financial statements 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 consolidated 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 consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers
Statsautoriseret Revisionspartnerselskab
Hellerup, Denmark
April 1, 2019

We have served as the Company's auditor since 2000.

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Consolidated Statements of Comprehensive Income

	<u>Note</u>	<u>2018</u> DKK'000	<u>2017</u> DKK'000
Revenue	2.1, 2.2	3,025,137	2,365,436
Research and development expenses	2.3, 3.1, 3.2	(1,431,159)	(874,278)
General and administrative expenses	2.3, 3.2	(213,695)	(146,987)
Operating expenses		(1,644,854)	(1,021,265)
Operating result		1,380,283	1,344,171
Financial income	4.5	242,975	71,699
Financial expenses	4.5	(11,287)	(352,150)
Net result before tax		1,611,971	1,063,720
Corporate tax	2.4	(139,830)	39,831
Net result		1,472,141	1,103,551
Basic net result per share	2.5	24.03	18.14
Diluted net result per share	2.5	23.73	17.77
Statement of Comprehensive Income			
Net result		1,472,141	1,103,551
Other comprehensive income:			
<i>Amounts which will be re-classified to the income statement:</i>			
Adjustment of foreign currency fluctuations on subsidiaries		9,627	(16,631)
<i>Fair value adjustments of cash flow hedges:</i>			
Fair value adjustments during the period		—	15,879
Fair value adjustments reclassified to the income statement to financial income		—	(20,051)
Total comprehensive income		1,481,768	1,082,748

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets

	Note	December 31, 2018 DKK'000	December 31, 2017 DKK'000
ASSETS			
Intangible assets	2.2, 3.1	470,359	124,395
Property, plant and equipment	2.2, 3.2	161,545	113,415
Receivables	3.3	9,621	8,756
Deferred tax assets	2.4	386,449	296,949
Total non-current assets		<u>1,027,974</u>	<u>543,515</u>
Receivables	3.3	1,326,931	579,002
Corporate tax receivable	2.4	—	57,688
Marketable securities	4.4	5,573,187	4,075,192
Cash and cash equivalents		532,907	1,347,545
Total current assets		<u>7,433,025</u>	<u>6,059,427</u>
Total assets		<u>8,460,999</u>	<u>6,602,942</u>
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital	4.7	61,498	61,186
Share premium	4.7	8,058,614	7,983,652
Other reserves		91,707	82,080
Accumulated deficit		(197,459)	(1,854,726)
Total shareholders' equity		<u>8,014,360</u>	<u>6,272,192</u>
Provisions	3.4	1,430	1,200
Other payables	3.5	1,860	2,429
Total non-current liabilities		<u>3,290</u>	<u>3,629</u>
Deferred income	1.2	—	150,648
Corporate tax payable	2.4	126,964	—
Other payables	3.5	316,385	176,473
Total current liabilities		<u>443,349</u>	<u>327,121</u>
Total liabilities		<u>446,639</u>	<u>330,750</u>
Total shareholders' equity and liabilities		<u>8,460,999</u>	<u>6,602,942</u>

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

	<u>Note</u>	<u>2018</u> DKK'000	<u>2017</u> DKK'000
Cash flows from operating activities:			
Net result before tax		1,611,971	1,063,720
Reversal of financial items, net	4.5	(231,688)	280,451
Adjustment for non-cash transactions	5.7	178,598	145,895
Change in working capital	5.7	(634,372)	239,646
Cash generated by operating activities before financial items		924,509	1,729,712
Financial interest received		44,333	42,943
Financial expenses paid		(417)	(2,802)
Corporate taxes received/(paid)		46,361	(180,881)
Net cash generated by operating activities		1,014,786	1,588,972
Cash flows from investing activities:			
Investment in intangible assets	3.1	(405,672)	—
Investment in tangible assets	3.2	(71,694)	(88,510)
Marketable securities bought	4.4	(3,521,212)	(3,425,025)
Marketable securities sold		2,221,025	2,845,961
Net cash used in investing activities		(1,777,553)	(667,574)
Cash flows from financing activities:			
Warrants exercised		74,962	214,075
Shares issued for cash		312	836
Purchase of treasury shares		(146,175)	—
Net cash from financing activities		(70,901)	214,911
Changes in cash and cash equivalents		(833,668)	1,136,309
Cash and cash equivalents at the beginning of the period		1,347,545	307,023
Exchange rate adjustments		19,030	(95,787)
Cash and cash equivalents at the end of the period		532,907	1,347,545
Cash and cash equivalents include:			
Bank deposits and petty cash		532,907	1,347,545
Cash and cash equivalents at the end of the period		532,907	1,347,545

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Equity

	Number of shares	Share capital DKK'000	Share premium DKK'000	Translation reserves DKK'000	Cash flow hedges DKK'000	Accumulated deficit DKK'000	Shareholders' equity DKK'000
Balance at December 31, 2016	60,350,056	60,350	7,769,577	98,711	4,172	(3,106,114)	4,826,696
Net result	—	—	—	—	—	1,103,551	1,103,551
Other comprehensive income	—	—	—	(16,631)	(4,172)	—	(20,803)
Total comprehensive income	—	—	—	(16,631)	(4,172)	1,103,551	1,082,748
Transactions with owners:							
Exercise of warrants	835,618	836	214,075	—	—	—	214,911
Share-based compensation expenses	—	—	—	—	—	75,985	75,985
Tax on items recognized directly in equity	—	—	—	—	—	71,852	71,852
Balance at December 31, 2017	61,185,674	61,186	7,983,652	82,080	—	(1,854,726)	6,272,192
Change in accounting policy: Adoption of IFRS 15	—	—	—	—	—	150,648	150,648
Adjusted total equity at January 1, 2018	61,185,674	61,186	7,983,652	82,080	—	(1,704,078)	6,422,840
Net result	—	—	—	—	—	1,472,141	1,472,141
Other comprehensive income	—	—	—	9,627	—	—	9,627
Total comprehensive income	—	—	—	9,627	—	1,472,141	1,481,768
Transactions with owners:							
Exercise of warrants	311,897	312	74,962	—	—	—	75,274
Purchase of treasury shares	—	—	—	—	—	(146,175)	(146,175)
Share-based compensation expenses	—	—	—	—	—	90,759	90,759
Tax on items recognized directly in equity	—	—	—	—	—	89,894	89,894
Balance at December 31, 2018	61,497,571	61,498	8,058,614	91,707	—	(197,459)	8,014,360

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

SECTION 1—BASIS OF PRESENTATION

1.1—Nature of the Business and Accounting Policies

Genmab A/S is a publicly traded, international biotechnology company specializing in the creation and development of differentiated antibody therapeutics for the treatment of cancer and other diseases. Founded in 1999, the company has two approved antibodies, a broad clinical and pre clinical product pipeline and proprietary next generation antibody technologies.

The financial statements have been prepared in accordance with IFRS as issued by the International Accounting Standards Board (IASB). Except as outlined in note 1.2, the financial statements have been prepared using the same accounting policies as 2017. These consolidated financial statements were approved by our Board of Directors on March 29, 2019.

Section 2—Results for the Year

2.1 Revenue

2.2 Information about Geographical Areas

2.3 Staff Costs

2.4 Corporate and Deferred Tax

2.5 Result per Share

Section 3—Operating Assets and Liabilities

3.1 Intangible Assets

3.2 Property, Plant and Equipment

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Section 4—Capital Structure, Financial Risk and Related Items

4.3 Financial Assets and Liabilities

4.4 Marketable Securities

4.5 Financial Income and Expenses

Section 5—Other Disclosures

5.3 Company Overview

5.4 Commitments

5.5 Contingent Assets, Contingent Liabilities and Subsequent Events

Materiality

The group's annual report is based on the concept of materiality and the group focuses on information that is considered material and relevant to the users of the consolidated financial statements. The consolidated financial statements consist of a large number of transactions. These transactions are aggregated into classes according to their nature or function and presented in classes of similar items in the consolidated financial statements as required by IFRS and Danish disclosure requirements for listed companies. If items are individually immaterial, they are aggregated with other items of similar nature in the financial statements or in the notes.

The disclosure requirements are substantial in IFRS and the group provides these specific required disclosures unless the information is considered immaterial to the economic decision-making of the readers of the financial statements or not applicable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

Consolidated Financial Statements

The consolidated financial statements include Genmab A/S (the parent company) and subsidiaries over which the parent company has control. The parent controls a subsidiary when the parent is exposed to, or has rights to, variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power to direct the activities of the subsidiary. A group overview is included in note 5.3.

The group's consolidated financial statements have been prepared on the basis of the financial statements of the parent company and subsidiaries—prepared under the group's accounting policies—by combining similar accounting items on a line-by-line basis. On consolidation, intercompany income and expenses, intercompany receivables and payables, and unrealized gains and losses on transactions between the consolidated companies are eliminated. There was no change in the scope of consolidation during 2018 and 2017.

The recorded value of the equity interests in the consolidated subsidiaries is eliminated with the proportionate share of the subsidiaries' equity. Subsidiaries are consolidated from the date when control is transferred to the group.

The income statements for subsidiaries with a different functional currency than the group presentation currency are translated into the group's presentation currency at the year's weighted average exchange rate, and the balance sheets are translated at the exchange rate in effect at the balance sheet date.

Exchange rate differences arising from the translation of foreign subsidiaries shareholders' equity at the beginning of the year and exchange rate differences arising as a result of foreign subsidiaries' income statements being translated at average exchange rates are recorded in translation reserves in shareholders' equity. Translation reserves cannot be used for distribution.

Functional and Presentation Currency

The financial statements have been prepared in Danish Kroner (DKK), which is the functional and presentation currency of the parent company. The financial statements have been rounded to the nearest thousand.

Foreign Currency

Transactions in foreign currencies are translated at the exchange rates in effect at the date of the transaction. Exchange rate gains and losses arising between the transaction date and the settlement date are recognized in the income statement as financial items. Unsettled monetary assets and liabilities in foreign currencies are translated at the exchange rates in effect at the balance sheet date. Exchange rate gains and losses arising between the transaction date and the balance sheet date are recognized in the income statement as financial items.

Classification of Operating Expenses in the Income Statement

Research and Development Expense

Research and development expenses primarily include salaries, benefits and other employee related costs of our research and development staff, license costs, manufacturing costs, pre-clinical costs, clinical trials, contractors and outside service fees, amortization of licenses and rights, and depreciation

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

and impairment of intangible assets and property, plant and equipment, to the extent that such costs are related to the group's research and development activities. Research and development activities are expensed as incurred. Please see note 3.1 for a more detailed description.

General and Administrative Expense

General and administrative expenses relate to the management and administration of the group. This includes salaries, benefits and other headcount costs related to management and support functions including human resources, information technology and the finance departments. In addition, depreciation and impairment of intangible assets and property, plant and equipment, to the extent such expenses are related to administrative functions are also included. General and administrative expenses are recognized in the income statement in the period to which they relate.

Statement of Cash Flow

The cash flow statement is presented using the indirect method with basis in the net result before tax. Cash flow from operating activities is stated as the net result adjusted for net financial items, non-cash operating items such as depreciation, amortization, impairment losses, share-based compensation expenses, provisions, and for changes in working capital, interest paid and received, and corporate taxes paid. Working capital mainly comprises changes in receivables, provisions paid and other payables excluding the items included in cash and cash equivalents. Changes in non-current assets and liabilities are included in working capital, if related to the main revenue-producing activities of Genmab.

Cash flow from investing activities is comprised of cash flow from the purchase and sale of intangible assets and property, plant and equipment and financial assets as well as purchase and sale of marketable securities.

Cash flow from financing activities is comprised of cash flow from the issuance of shares, if any, and payment of long-term loans including installments on lease liabilities.

Finance lease transactions are considered non-cash transactions. Cash and cash equivalents comprise cash, bank deposits, and marketable securities with a maturity of three months or less on the date of acquisition. The cash flow statement cannot be derived solely from the financial statements.

Derivative Financial Instruments and Hedging Activities

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. Genmab designates certain derivatives as either:

- Fair value hedge (hedges of the fair value of recognized assets or liabilities or a firm commitment); or
- Cash flow hedge (hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction).

At the inception of a transaction, Genmab documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. Genmab also documents its assessment, both at hedge inception and on

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Movements on the hedging reserve in other comprehensive income are shown as part of the statement of shareholders' equity. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

Cash Flow Hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion and changes in time value of the derivative instrument is recognized immediately in the income statement within financial income or expenses.

When forward contracts are used to hedge forecast transactions, Genmab generally designates the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognized in the cash flow hedge reserve within equity.

Fair Value Hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk.

Treasury Shares

The total amount paid to acquire treasury shares including directly attributable costs and the proceeds from the sale of treasury shares are recognized in accumulated deficit.

Collaboration Agreements

The group has entered into various collaboration agreements, primarily in connection with the group's research and development projects and the clinical testing of product candidates. The collaboration agreements are structured such that each party contributes its respective skills in the various phases of the development project and contain contractual terms regarding sharing of control over the relevant activities under the agreement. No joint control exists for the group's collaborations with Janssen and Novartis as they retain final decision making authority over the relevant activities.

The group's collaboration agreements with BioNTech may become subject to joint control if product candidates under the agreements are selected for joint clinical development as this would require unanimous consent of both parties on decisions related to the relevant activities. Under these agreements, joint clinical development may be selected on a product by product basis and would result in development cost and product ownership being shared equally going forward. These agreements also include provisions which will allow the parties to opt out of joint development at key points along the development timeline. An opt out by one of the parties would result in loss of joint control by the opt out party and the other party is entitled to continue developing the product on predetermined licensing terms.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

During 2017 Seattle Genetics exercised its option to co-develop and co-commercialize tisotumab vedotin. All costs and profits for tisotumab vedotin will be shared on a 50:50 basis and joint control exists over the relevant activities. Accordingly, only the tisotumab vedotin collaboration with Seattle Genetics is considered a joint operation under IFRS 11, "Joint Arrangements." Revenues, expenses, receivables, and payables in connection with our collaboration agreements are included in the related financial statement lines and footnotes.

1.2—New Accounting Policies and Disclosures

New Accounting Policies and Disclosures

Genmab has, with effect from January 1, 2017, implemented amendments to IAS 7 and IAS 12. The implementation has not impacted the recognition and measurement of Genmab assets and liabilities.

Genmab has, with effect from January 1, 2018, implemented IFRIC 22, amendments to IAS 40, IFRS 2, IFRS 4 and annual improvements to IFRSs 2014-2016. The implementation has not impacted the recognition and measurement of Genmab assets and liabilities.

Genmab has, with effect from January 1, 2018, implemented IFRS 15 and IFRS 9. The impact of the adoption of the standards is described below.

IFRS 15 Revenue from Contracts with Customers

Effective January 1, 2018, we adopted IFRS 15 using the modified retrospective transition method. Under this method, the cumulative effect of initially applying the new revenue standard was recognized as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. IFRS 15 applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, and financial instruments.

Under IFRS 15, Genmab 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 Genmab determines are within the scope of IFRS 15, Genmab performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

Evaluating the criteria for revenue recognition under license and collaboration agreements requires management's judgement to assess and determine the following:

- The nature of performance obligations and whether they are distinct or should be combined with other performance obligations to determine whether the performance obligations are satisfied over time or at a point in time.
- An assessment of whether the achievement of milestone payments is highly probable.
- The stand-alone selling price of each performance obligation identified in the contract using key assumptions which may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

In accordance with the requirements of IFRS 15, the disclosure of the impact of adoption on our consolidated financial statements was as follows:

	12 Months Ended December 31, 2018		
	As Reported	Balances Without Adoption of IFRS 15	Effect of Change Higher/(Lower)
	DKK'000	DKK'000	DKK'000
Income Statement:			
Revenue	3,025,137	3,112,001	(86,864)
Net result before tax	1,611,971	1,698,835	(86,864)
Corporate tax	(139,830)	(159,201)	19,371
Net result	1,472,141	1,539,634	(67,493)
Basic net result per share	24.03	25.13	(1.10)
Diluted net result per share	23.73	24.81	(1.08)

	December 31, 2018		
	As Reported	Balances Without Adoption of IFRS 15	Effect of Change Higher/(Lower)
	DKK'000	DKK'000	DKK'000
Balance Sheet:			
Deferred income	—	63,784	(63,784)
Accumulated deficit	(197,459)	(261,243)	63,784

The impact of the adoption of IFRS 15 on the consolidated financial statements is detailed in the tables above and is due to changes in the accounting policy for revenue recognition compared to prior accounting standards, which is described below:

- Changes in revenue recognition for licenses of functional intellectual property resulted in a timing difference of revenue recognition between prior accounting standards and IFRS 15. For certain of our agreements, the value associated with the licenses and certain other deliverables had been assessed as one unit of accounting and recognized over a period of time pursuant to revenue recognition guidance in effect at the time of such agreements. Under IFRS 15, the licenses of functional intellectual property were determined to be distinct from other deliverables and the customers obtained the right to use the functional intellectual property on the effective date of the agreements when control transferred. This timing difference of revenue recognition resulted in the full deferred revenue balance of DKK 150.6 million as of December 31, 2017 being reclassified to accumulated deficit in the first quarter of 2018.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

IFRS 15 may have an impact on the timing of recognition of milestone payments. Under prior accounting standards, we recognized such payments as revenue in the period that the payment-triggering event occurred or was achieved. IFRS 15 requires Genmab to recognize such payments as revenue before the payment-triggering event is completely achieved, subject to management's assessment of whether it is highly probable that the triggering event will be achieved and that a significant reversal in the amount of cumulative revenue recognized will not occur.

IFRS 15 will not have an impact on revenue recognition for sales-based royalties and commercial sales-based milestone payments and they will continue to be recognized in the period to which the sales relate based on estimates provided by collaboration partners.

Please refer to note 2.1 for additional information regarding revenue.

IFRS 9 Financial Instruments

Effective January 1, 2018 we adopted IFRS 9 which replaces the provisions of IAS 39 that relate to the classification, measurement and derecognition of financial assets and financial liabilities, hedge accounting, and impairment of financial assets. The adoption of IFRS 9 resulted in changes in accounting policies (included below) but did not result in material adjustments to amounts recognized in the consolidated financial statements. In accordance with the transitional provisions of IFRS 9, comparative figures have not been restated.

As of January 1, 2018 Genmab classifies its financial assets held into the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- those to be measured at amortized cost.

The classification depends on the business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. Genmab reclassifies debt investments when and only when its business model for managing those assets changes.

Marketable Securities

Marketable securities consist of investments in securities with a maturity greater than three months at the time of acquisition. Measurement of marketable securities depends on the business model for managing the asset and the cash flow characteristics of the asset. Under IFRS 9, there are two measurement categories into which the group classifies its debt instruments:

- **Amortized cost:** Assets that are held for collection of contractual cash flows, where those cash flows represent solely payments of principal and interest, are measured at amortized cost. Interest income from these financial assets is included in financial income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in other gains/(losses), together with foreign exchange gains and losses. Impairment losses are presented as a separate line item in the statement of profit or loss.
- **Fair value through profit and loss (FVPL):** Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income (FVOCI) are measured at FVPL. A gain

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains/(losses) in the period in which it arises.

Genmab's portfolio is managed and evaluated on a fair value basis in accordance with its investment guidelines and the information provided internally to management. This business model does not meet the criteria for amortized cost or FVOCI and as a result marketable securities are measured at fair value through profit and loss. This classification is consistent with the prior year's classification.

Derivatives and Hedging Activities

As of December 31, 2018, there were no derivatives outstanding. The one foreign currency forward in place as of December 31, 2017 qualified as a cash flow hedge under IFRS 9. The group's risk management strategies and hedge documentation are aligned with the requirements of IFRS 9 and this relationship is therefore treated as a continuing hedge.

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. Genmab designates certain derivatives as either:

- Fair value hedge (hedges of the fair value of recognized assets or liabilities or a firm commitment); or
- Cash flow hedge (hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction).

At the inception of a transaction, Genmab documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. Genmab also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Movements on the hedging reserve in other comprehensive income are shown as part of the statement of shareholders' equity. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion and changes in time value of the derivative instrument is recognized immediately in the income statement within financial income or expenses.

When forward contracts are used to hedge forecast transactions, Genmab generally designates the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognized in the cash flow hedge reserve within equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 1—BASIS OF PRESENTATION (Continued)

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk.

Receivables

Receivables are designated as financial assets measured at amortized cost and are initially measured at fair value or transaction price and subsequently measured in the balance sheet at amortized cost, which generally corresponds to nominal value less expected credit loss provision.

Genmab applied the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all receivables. To measure the expected credit losses, receivables have been grouped based on credit risk characteristics and the days past due. The provision for expected credit losses was not significant given that there have been no credit losses over the last three years and the high quality nature (top tier life science companies) of Genmab's customers are not likely to result in future default risk. Please refer to note 4.3 for additional information regarding financial assets and liabilities.

New Accounting Policies and Disclosures Effective in 2019 or Later

The IASB has issued a number of new standards and updated some existing standards, the majority of which are effective for accounting periods beginning on January 1, 2019 or later. Therefore, they are not incorporated in the consolidated financial statements. Only standards and interpretations of relevance for the Genmab group, and in general are expected to change current accounting regulation most significantly are described below.

The IASB has issued IFRS 16 "*Leasing*", with an effective date of January 1, 2019. The standard requires that all leases be recognized in the balance sheet as an asset with a corresponding lease liability, except for short term assets in which the lease term is 12 months or less, or low value assets. In the income statement, the lease costs are replaced by depreciation recognized over the lease term in operating expenses, and interest expenses are classified in financial items. The standard will primarily affect the accounting for the group's operating leases related to its premises.

Genmab expects to recognize right-of-use assets in property, plant and equipment in the balance sheet of approximately DKK 202 million after adjustments for prepayments and accrued lease payments recognized as of December 31, 2018, and lease liabilities of DKK 205.5 million. Genmab expects that net result after tax will not change significantly in 2019 as a result of adopting IFRS 16. Operating cash flows are expected to increase and financing cash flows will decrease by approximately DKK 32.5 million as repayment of the principal portion of the lease liabilities will be classified as cash flows from financing activities. Furthermore, the implementation of IFRS 16 will require additional disclosures.

The group will apply the standard from its mandatory adoption date of January 1, 2019. The group intends to apply the modified retrospective transition approach and will not restate comparative amounts for the year prior to first adoption.

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 1—BASIS OF PRESENTATION (Continued)****1.3—Management's Judgments and Estimates under IFRS**

In preparing financial statements under IFRS, certain provisions in the standards require management's judgments, including various accounting estimates and assumptions. Such judgments are considered important to understand the accounting policies and Genmab's compliance with the standards.

Determining the carrying amount of some assets and liabilities requires judgments, estimates and assumptions concerning future events that are based on historical experience and other factors, which by their very nature are associated with uncertainty and unpredictability. These assumptions may prove incomplete or incorrect, and unexpected events or circumstances may arise. The Genmab group is also subject to risks and uncertainties which may lead actual results to differ from these estimates, both positively and negatively. Specific risks for the Genmab group are discussed in the relevant section of the management's review and in the notes to the financial statements.

The areas involving a high degree of judgment and estimation that are significant to the financial statements are described in more detail in the related sections/notes.

Section 2—Results for the Year

2.1 Revenue Recognition

2.3 Staff Costs

2.4 Corporate and Deferred Tax

Section 3—Operating Assets and Liabilities

3.1 Intangible Assets - Research and Development

SECTION 2—RESULTS FOR THE YEAR**2.1—Revenue**

	<u>2018</u>	<u>2017</u>
	<u>DKK'000</u>	<u>DKK'000</u>
Revenue:		
Royalties	1,741,458	1,060,700
Milestone payments	687,353	1,133,316
License fees	347,747	90,065
Reimbursement income	248,579	81,355
Total	<u>3,025,137</u>	<u>2,365,436</u>
Revenue split by collaboration partner:		
Janssen (Darzalex/Daratumumab & DuoBody)	2,390,440	2,214,040
Novartis (Arzerra/Ofatumumab)	337,709	48,061
Other collaboration partners	296,988	103,335
Total	<u>3,025,137</u>	<u>2,365,436</u>

Revenue may vary from period to period as revenue comprises royalties, milestone payments, license fees and reimbursement of certain research and development costs under Genmab's collaboration agreements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 2—RESULTS FOR THE YEAR (Continued)*****Accounting Policies***

Genmab 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 Genmab determines are within the scope of IFRS 15, Genmab performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Royalties: License and collaboration agreements include sales-based royalties, including commercial milestone payments based on the level of sales, and the license has been deemed to be the predominant item to which the royalties relate. As a result, Genmab recognizes revenue when the related sales occur.

Milestone Payments: At the inception of each arrangement that includes milestone payments, Genmab evaluates whether the achievement of milestones are considered highly probable and estimates the amount to be included in the transaction price using the most likely amount method. If it is highly probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of Genmab or the license and collaboration partner, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which Genmab recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, Genmab re-evaluates the probability of achievement of such development milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenue and earnings in the period of adjustment. Under all of Genmab's existing license and collaboration agreements, milestone payments have been allocated to the license transfer performance obligation.

License Fees for Intellectual Property: If the license to Genmab's functional intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, Genmab recognizes revenues from non-refundable upfront fees allocated to the license at the point in time the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, Genmab utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, upfront fees. Under all of Genmab's existing license and collaboration agreements the license to functional intellectual property has been determined to be distinct from other performance obligations identified in the agreement.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 2—RESULTS FOR THE YEAR (Continued)**

Reimbursement Income for R&D Services: License and collaboration agreements include the reimbursement or cost sharing for research and development services and payment for FTEs at contractual rates. R&D services are performed and satisfied over time given that the customer simultaneously receives and consumes the benefits provided by Genmab and revenue for R&D services is recognized over time rather than a point in time.

Management's Judgments and Estimates

Evaluating the criteria for revenue recognition under license and collaboration agreements requires management's judgement to assess and determine the following:

- The nature of performance obligations and whether they are distinct or should be combined with other performance obligations to determine whether the performance obligations are satisfied over time or at a point in time.
- An assessment of whether the achievement of milestone payments is highly probable.
- The stand-alone selling price of each performance obligation identified in the contract using key assumptions which may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

2.2—Information about Geographical Areas

The Genmab group is managed and operated as one business unit, which is reflected in the organizational structure and internal reporting. No separate lines of business or separate business entities have been identified with respect to any of the product candidates or geographical markets and no segment information is currently disclosed in the internal reporting.

	2018		2017	
	Revenue	Non-current assets	Revenue	Non-current assets
	DKK'000	DKK'000	DKK'000	DKK'000
Denmark	3,025,137	454,165	2,365,436	105,235
Netherlands	—	167,020	—	126,886
USA	—	10,719	—	5,688
Total	3,025,137	631,904	2,365,436	237,809

Accounting Policies

Geographical information is presented for the Genmab group's revenue and non-current assets. Revenue is attributed to countries on the basis of the location of the legal entity holding the contract with the counterparty and operations. Non-current assets comprise intangible assets and property, plant and equipment.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 2—RESULTS FOR THE YEAR (Continued)

2.3—Staff Costs

	2018	2017
	DKK'000	DKK'000
Wages and salaries	307,670	230,720
Share-based compensation	90,759	75,985
Defined contribution plans	24,498	18,763
Other social security costs	22,923	17,723
Government grants	(85,684)	(64,007)
Total	360,166	279,184
Staff costs are included in the income statement as follows:		
Research and development expenses	323,944	248,970
General and administrative expenses	121,906	94,221
Government grants related to research and development expenses	(85,684)	(64,007)
Total	360,166	279,184
Average number of FTE	313	235
Number of FTE at year-end	377	257

Please refer to note 5.1 for additional information regarding the remuneration of the Board of Directors and Executive Management.

Government grants, which are a reduction of payroll taxes in the Netherlands, amounted to DKK 85.7 million in 2018 and DKK 64.0 million in 2017. These amounts are an offset to wages and salaries and research and development costs in the table above. The increase in 2018 was primarily due to increased research activities in the Netherlands combined with a higher level of grants provided by the Dutch government.

Accounting Policies*Share-Based Compensation Expenses*

Genmab has granted restricted stock units (RSUs) and warrants to the Board of Directors, Executive Management and employees under various share-based compensation programs. The group applies IFRS 2, according to which the fair value of the warrants and RSUs at grant date is recognized as an expense in the income statement over the vesting period. Such compensation expenses represent calculated values of warrants and RSUs granted and do not represent actual cash expenditures. A corresponding amount is recognized in shareholders' equity as both the warrant and RSU programs are designated as equity-settled share-based payment transactions.

Government Grants

The Dutch Research and Development Act "WBSO" provides compensation for a part of research and development wages and other costs through a reduction in payroll taxes. WBSO grant amounts are offset against wages and salaries and research and development costs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 2—RESULTS FOR THE YEAR (Continued)***Management's Judgments and Estimates**Share-Based Compensation Expenses*

In accordance with IFRS 2 "Share-based Payment," the fair value of the warrants and RSUs at grant date is recognized as an expense in the income statement over the vesting period, the period of delivery of work. Subsequently, the fair value is not remeasured.

The fair value of each warrant granted during the year is calculated using the Black-Scholes pricing model. This pricing model requires the input of subjective assumptions such as:

- The expected stock price volatility, which is based upon the historical volatility of Genmab's stock price;
- The risk-free interest rate, which is determined as the interest rate on Danish government bonds (bullet issues) with a maturity of five years;
- The expected life of warrants, which is based on vesting terms, expected rate of exercise and life terms in the current warrant program.

These assumptions can vary over time and can change the fair value of future warrants granted.

Valuation Assumptions for Warrants Granted in 2018 and 2017

The fair value of each warrant granted during the year is calculated using the Black-Scholes pricing model with the following assumptions:

Weighted average	2018	2017
Fair value per warrant on grant date	386.61	366.78
Share price	1,034.66	1,123.91
Exercise price	1,034.66	1,123.91
Expected dividend yield	0%	0%
Expected stock price volatility	41.7%	38.5%
Risk-free interest rate	(0.01)%	(0.38)%
Expected life of warrants	5 years	5 years

Based on a weighted average fair value per warrant of DKK 386.61 (2017: DKK 366.78) the total fair value of warrants granted amounted to DKK 102.6 million (2017: DKK 67.0 million) on the grant date.

The fair value of each RSU granted during the year is equal to the closing market price on the date of grant of one Genmab A/S share. Based on a weighted average fair value per RSU of DKK 1,033.95 (2017: DKK 1,128.30) the total fair value of RSUs granted amounted to DKK 106.1 million (2017: DKK 74.4 million) on the grant date.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 2—RESULTS FOR THE YEAR (Continued)

2.4—Corporate and Deferred Tax

Taxation—Income Statement & Shareholders' Equity

	2018	2017
	DKK'000	DKK'000
Current tax on result	161,370	132,881
Adjustment to prior years	—	(798)
Adjustment to deferred tax	457,730	625,895
Adjustment to valuation allowance	(479,270)	(797,809)
Total tax for the period in the income statement	139,830	(39,831)

A reconciliation of Genmab's effective tax rate relative to the Danish statutory tax rate is as follows:

	2018	2017
	DKK'000	DKK'000
Net result before tax	1,611,971	1,063,720
Computed 22% (2017: 22%)	354,634	234,018
Tax effect of:		
Recognition of previously unrecognized tax losses and deductible temporary differences	(267,656)	(285,697)
Non-deductible expenses/non-taxable income and other permanent differences, net	53,442	14,049
All other	(590)	(2,201)
Total tax effect	(214,804)	(273,849)
Total tax for the period in the income statement	139,830	(39,831)
Total tax for the period in shareholders' equity	(89,894)	(71,852)

Corporate tax consists of current tax and the adjustment of deferred taxes during the year. The corporate tax expense for 2018 was DKK 139.8 million compared to an income of DKK 39.8 million in 2017. The corporate tax expense in 2018 was due to current and deferred tax expense of DKK 407.4 million partially offset by the reversal of valuation allowances on deferred tax assets related to future taxable income, resulting in a discrete tax benefit of DKK 267.6 million. The corporate tax income in 2017 was due to the partial reversal of valuation allowances on deferred tax assets related to future taxable income, resulting in a discrete tax benefit of DKK 285.7 million, which more than offset current and deferred tax expense of DKK 245.9 million. In 2018, a current tax benefit of DKK 23.8 million and a deferred tax benefit of DKK 66.1 million (2017: DKK 71.9 million current tax benefit) was recorded directly in shareholders' equity, which was related to excess tax benefits share-based instruments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 2—RESULTS FOR THE YEAR (Continued)

Taxation—Balance Sheet

Significant components of the deferred tax asset are as follows:

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Tax deductible losses	652,820	1,049,118
Share-Based Instruments	118,812	144,476
Deferred income	—	27,443
Capitalized R&D Costs	4,160	11,091
Other temporary differences	8,345	9,740
	<u>784,137</u>	<u>1,241,868</u>
Valuation allowance	(397,688)	(944,919)
Total deferred tax assets	<u>386,449</u>	<u>296,949</u>

Genmab records a valuation allowance to reduce deferred tax assets to reflect the net amount that is more likely than not to be realized. Realization of our deferred tax assets is dependent upon the generation of future taxable income, the amount and timing of which are uncertain. The valuation allowance requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable; such assessment is required on a jurisdiction by jurisdiction basis. Based upon the weight of available evidence at December 31, 2018, Genmab determined that it was more likely than not that a portion of our deferred tax assets would be realizable and consequently released a portion of the valuation allowance against net deferred tax assets and during 2018 recorded a discrete tax benefit of DKK 267.6 million (DKK 285.7 million). The decision to reverse a portion of the valuation allowance was made after management considered all available evidence, both positive and negative, including but not limited to our historical operating results, income or loss in recent periods, cumulative income in recent years, forecasted earnings, future taxable income, and significant risk and uncertainty related to forecasts. The release of the valuation allowance resulted in the recognition of certain deferred tax assets and a decrease to corporate tax expense.

As of December 31, 2018, the group had gross tax loss carry-forwards of DKK 2.6 billion (2017: DKK 4.4 billion) for income tax purposes, of which DKK 1.2 billion (2017: DKK 3.3 billion) can be carried forward without limitation and the remaining amount can be carried forward through various periods up through 2028. In 2018, DKK 1.0 billion, related to Genmab's U.S. subsidiary expired as this amount related to the capital loss on sale of Genmab's former manufacturing facility in 2013 which was limited to a 5 year carryforward period and could only be utilized to offset specific types of capital income.

*Accounting Policies**Corporate Tax*

Corporate tax, which consists of current tax and the adjustment of deferred taxes for the year, is recognized in the income statement, except to the extent that the tax is attributable to items which directly relate to shareholders' equity or other comprehensive income. Current tax assets and liabilities for current and prior periods are measured at the amounts expected to be recovered from or paid to the tax authorities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 2—RESULTS FOR THE YEAR (Continued)

Deferred Tax

Deferred tax is accounted for under the liability method which requires recognition of deferred tax on all temporary differences between the carrying amount of assets and liabilities and the tax base of such assets and liabilities. This includes the tax value of tax losses carried forward. Deferred tax is calculated in accordance with the tax regulations in the individual countries and the tax rates expected to be in force at the time the deferred tax is utilized. Changes in deferred tax as a result of changes in tax rates are recognized in the income statement. Deferred tax assets resulting from temporary differences, including the tax value of losses to be carried forward, are recognized only to the extent that it is probable that future taxable profit will be available against which the differences can be utilized.

*Management's Judgments and Estimates**Deferred Tax*

Genmab recognizes deferred tax assets, including the tax base of tax loss carry-forwards, if management assesses that these tax assets can be offset against positive taxable income within a foreseeable future. This judgment is made on an ongoing basis and is based on actual results, budgets, and business plans for the coming years.

Realization of deferred tax assets is dependent upon a number of factors, including future taxable earnings, the timing and amount of which is highly uncertain. A significant portion of Genmab's future taxable income will be driven by future events that are highly susceptible to factors outside the control of the group including commercial growth of DARZALEX, specific clinical outcomes, regulatory approval, advancement of our product pipeline, and others. At December 31, 2018, Genmab has recognized deferred tax assets for probable future taxable income and fully released the remaining valuation allowance on deferred tax assets for Genmab A/S. Genmab intends to continue maintaining a valuation allowance against a significant portion of its deferred tax assets related to its subsidiaries until there is sufficient evidence to support the reversal of all or some additional portion of these allowances. The Company may release an additional part of its valuation allowance against its deferred tax assets related to its subsidiaries. This release would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period such release is recorded.

2.5—Result Per Share

	2018	2017
	DKK'000	DKK'000
Net result	1,472,141	1,103,551
	Shares'000	Shares'000
Average number of shares outstanding	61,384	60,934
Average number of treasury shares	(116)	(100)
Average number of shares excl. treasury shares	61,268	60,834
Average number of share-based instruments, dilution	777	1,260
Average number of shares, diluted	62,045	62,094
Basic net result per share	24.03	18.14
Diluted net result per share	23.73	17.77

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 2—RESULTS FOR THE YEAR (Continued)

In the calculation of the diluted net result per share for 2018, 177,369 warrants (of which 64,703 were vested) have been excluded as these share-based instruments are out of the money, compared to 43,019 warrants (of which none were vested) for 2017.

Accounting Policies*Basic Net Result Per Share*

Basic net result per share is calculated as the net result for the year divided by the weighted average number of outstanding ordinary shares, excluding treasury shares.

Diluted Net Result Per Share

Diluted net result per share is calculated as the net result for the year divided by the weighted average number of outstanding ordinary shares, excluding treasury shares adjusted for the dilutive effect of share equivalents.

SECTION 3—OPERATING ASSETS AND LIABILITIES

3.1—Intangible Assets

<u>2018</u>	<u>Licenses, Rights, and Patents</u>	<u>Total Intangible Assets</u>
	DKK'000	DKK'000
Cost per January 1	391,971	391,971
Additions for the year	405,684	405,684
Disposals for the year	—	—
Exchange rate adjustment	135	135
Cost at December 31	797,790	797,790
Accumulated amortization and impairment per January 1	(267,576)	(267,576)
Amortization for the year	(59,801)	(59,801)
Disposals for the year	—	—
Exchange rate adjustment	(54)	(54)
Accumulated amortization and impairment per December 31	(327,431)	(327,431)
Carrying amount at December 31	470,359	470,359

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

<u>2017</u>	<u>Licenses, Rights, and Patents DKK'000</u>	<u>Total Intangible Assets DKK'000</u>
Cost per January 1	391,905	391,905
Additions for the year	—	—
Disposals for the year	—	—
Exchange rate adjustment	66	66
Cost at December 31	391,971	391,971
Accumulated amortization and impairment per January 1	(210,010)	(210,010)
Amortization for the year	(35,328)	(35,328)
Impairment for the year	(22,221)	(22,221)
Disposals for the year	—	—
Exchange rate adjustment	(17)	(17)
Accumulated amortization and impairment per December 31	(267,576)	(267,576)
Carrying amount at December 31	124,395	124,395
	<u>2018</u>	<u>2017</u>
	<u>DKK'000</u>	<u>DKK'000</u>
Depreciation, amortization, and impairments are included in the income statement as follows:		
Research and development expenses	59,801	57,549
General and administrative expenses	—	—
	59,801	57,549

There were no impairment losses recognized in 2018. Impairment losses of DKK 22.2 million related to licensed assets were recognized as part of research and development costs in 2017 as certain programs were discontinued.

In July 2018, Genmab entered into a research collaboration and exclusive license agreement with Immatics Biotechnologies GmbH (Immatics) to discover and develop next-generation bispecific immunotherapies to target multiple cancer indications. Genmab received an exclusive license to three proprietary targets from Immatics, with an option to license up to two additional targets at predetermined economics. The companies will conduct joint research, funded by Genmab, on multiple antibody and/or T-cell receptor-based bispecific therapeutic product concepts. Genmab may elect to progress any resulting product candidates, and will be responsible for development, manufacturing and worldwide commercialization. For any products that are commercialized by Genmab, Immatics will have an option to limited co-promotion efforts in selected countries in the EU. Under the terms of the agreement, Genmab paid Immatics an upfront fee of USD 54.0 million and Immatics is eligible to receive up to USD 550.0 million in development, regulatory and commercial milestone payments for each product, as well as tiered royalties on net sales. The carrying amount of the intangible asset related to the Immatics agreements was DKK 323.2 million as of December 31, 2018. The intangible asset is being amortized on a straight line basis through July 2025.

In June 2018, Genmab paid a USD 7.0 million milestone payment to Seattle Genetics which was triggered by the initiation of expansion cohorts in the ongoing Phase I/II trial of enapotamab vedotin in

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

solid tumors. The carrying amount of the intangible asset related to the Seattle Genetics agreement was DKK 39.3 million as of December 31, 2018. The milestone payment was added to the existing intangible asset and amortized over the remaining amortization period through September 2021. There were no acquisitions of licenses and rights in 2017.

The group has previously acquired licenses and rights to technology at a total cost of DKK 152.0 million, which have been fully amortized during the period from 2000 to 2005. The licenses and rights are still in use by the group and contribute to our research and development activities.

Accounting Policies

Research and Development

The group currently has no internally generated intangible assets from development, as the criteria for recognition of an asset are not met as described below.

Licenses and Rights

Licenses, rights, and patents are initially measured at cost and include the net present value of any future payments. The net present value of any future payments is recognized as a liability. Milestone payments are accounted for as an increase in the cost to acquire licenses, rights, and patents. Genmab acquires licenses and rights primarily to get access to targets and technologies identified by third parties.

Depreciation

Licenses, rights, and patents are amortized using the straight-line method over the estimated useful life of five to seven years. Amortization, impairment losses, and gains or losses on the disposal of intangible assets are recognized in the income statement as research and development costs, general and administrative expenses or discontinued operations, as appropriate.

Impairment

If circumstances or changes in Genmab's operations indicate that the carrying amount of non-current assets in a cash-generating unit may not be recoverable, management reviews the asset for impairment.

Management's Judgments and Estimates

Research and Development

Internally Generated Intangible Assets

According to the IAS 38, "Intangible Assets," intangible assets arising from development projects should be recognized in the balance sheet. The criteria that must be met for capitalization are that:

- the development project is clearly defined and identifiable and the attributable costs can be measured reliably during the development period;
- the technological feasibility, adequate resources to complete and a market for the product or an internal use of the product can be documented; and

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

- management has the intent to produce and market the product or to use it internally.

Such an intangible asset should be recognized if sufficient certainty can be documented that the future income from the development project will exceed the aggregate cost of production, development, and sale and administration of the product.

A development project involves a single product candidate undergoing a high number of tests to illustrate its safety profile and its effect on human beings prior to obtaining the necessary final approval of the product from the appropriate authorities. The future economic benefits associated with the individual development projects are dependent on obtaining such approval. Considering the significant risk and duration of the development period related to the development of biological products, management has concluded that the future economic benefits associated with the individual projects cannot be estimated with sufficient certainty until the project has been finalized and the necessary final regulatory approval of the product has been obtained. Accordingly, the group has not recognized such assets at this time and therefore all research and development costs are recognized in the income statement when incurred. Total research and development costs amounted to DKK 1,431.2 million in 2018, compared to DKK 874.3 million in 2017.

Antibody Clinical Trial Material Purchased for Use in Clinical Trials

According to our accounting policies, antibody clinical trial material (antibodies) for use in clinical trials that are purchased from third parties will only be recognized in the balance sheet at cost and expensed in the income statement when consumed, if all criteria for recognition as an asset are fulfilled. During both 2018 and 2017, no antibodies purchased from third parties for use in clinical trials have been capitalized, as these antibodies do not qualify for being capitalized as inventory under either the "Framework" to IAS/IFRS or IAS 2, "Inventories."

Management has concluded that the purchase of antibodies from third parties cannot be capitalized as the technical feasibility is not proven and no alternative use exists. Expenses in connection with purchase of antibodies are treated as described under "Research and Development Expense" in note 1.1.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

3.2—Property, Plant and Equipment

	Leasehold improvements DKK'000	Equipment, furniture and fixtures DKK'000	Assets under construction DKK'000	Total property, plant and equipment DKK'000
2018				
Cost per January 1	10,748	169,929	67,521	248,198
Additions for the year	6,886	40,926	27,644	75,456
Transfers between the classes	83,105	12,215	(95,320)	—
Disposals for the year	(5,641)	(6,478)	—	(12,119)
Exchange rate adjustment	193	694	202	1,089
Cost at December 31	95,291	217,286	47	312,624
Accumulated depreciation and impairment at January 1	(5,704)	(129,079)	—	(134,783)
Depreciation for the year	(7,864)	(20,035)	—	(27,899)
Disposals for the year	5,641	6,465	—	12,106
Exchange rate adjustment	(18)	(485)	—	(503)
Accumulated depreciation and impairment at December 31	(7,945)	(143,134)	—	(151,079)
Carrying amount at December 31	87,346	74,152	47	161,545
2017				
Cost at January 1	9,597	148,854	5,495	163,946
Additions for the year	5,166	26,370	62,018	93,554
Disposals for the year	(4,023)	(5,108)	—	(9,131)
Exchange rate adjustment	8	(187)	8	(171)
Cost at December 31	10,748	169,929	67,521	248,198
Accumulated depreciation and impairment at January 1	(9,371)	(122,381)	—	(131,752)
Depreciation for the year	(242)	(11,967)	—	(12,209)
Disposals for the year	3,917	5,055	—	8,972
Exchange rate adjustment	(8)	214	—	206
Accumulated depreciation and impairment at December 31	(5,704)	(129,079)	—	(134,783)
Carrying amount at December 31	5,044	40,850	67,521	113,415

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Depreciation, amortization, and impairments are included in the income statement as follows:		
Research and development expenses	26,159	11,753
General and administrative expenses	1,740	456
	<u>27,899</u>	<u>12,209</u>

Capital expenditures in 2018 and 2017 were primarily related to leasehold improvements in the new facility in the Netherlands for the continued expansion of our product pipeline.

Accounting Policies

Property, plant and equipment is mainly comprised of leasehold improvements, assets under construction, and equipment, furniture and fixtures, which are measured at cost less accumulated depreciation, and any impairment losses.

The cost is comprised of the acquisition price and direct costs related to the acquisition until the asset is ready for use. The present value of estimated liabilities related to the restoration of our offices in connection with the termination of the lease is added to the cost if the liabilities are provided for. Costs include direct costs, salary related expenses, and costs to subcontractors.

Depreciation

Depreciation, which is stated at cost net of any residual value, is calculated on a straight-line basis over the expected useful lives of the assets, which are as follows:

Equipment, furniture and fixtures	3 - 5 years
Computer equipment	3 years
Leasehold improvements	5 years or the lease term, if shorter

The useful lives and residual values are reviewed and adjusted if appropriate on a yearly basis. Assets under construction are not depreciated.

Impairment

If circumstances or changes in Genmab's operations indicate that the carrying amount of non-current assets in a cash-generating unit may not be recoverable, management reviews the asset for impairment. The basis for the review is the recoverable amount of the assets, determined as the greater of the fair value less cost to sell or its value in use. Value in use is calculated as the net present value of future cash inflow generated from the asset. If the carrying amount of an asset is greater than the recoverable amount, the asset is written down to the recoverable amount. An impairment loss is recognized in the income statement when the impairment is identified.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

3.3—Receivables

	<u>Note</u>	<u>2018</u> <u>DKK'000</u>	<u>2017</u> <u>DKK'000</u>
Receivables related to collaboration agreements		1,266,056	519,009
Interest receivables		17,860	11,863
Derivatives	4.2	—	12,223
Other receivables		33,333	26,634
Prepayments		19,303	18,029
Total		1,336,552	587,758
Non-current receivables		9,621	8,756
Current receivables		1,326,931	579,002
Total		1,336,552	587,758

During 2018 and 2017, there were no losses related to receivables and the credit risk on receivables is considered to be limited. The provision for expected credit losses was not significant given that there have been no credit losses over the last three years and the high quality nature (top tier life science companies) of Genmab's customers are not likely to result in future default risk.

The receivables are mainly comprised of royalties and milestones from our collaboration agreements and non-interest bearing receivables which are due less than one year from the balance sheet date. Please refer to note 4.2 for additional information about interest receivables and derivatives and related credit risk.

Accounting Policies

Receivables are designated as financial assets measured at amortized cost and are initially measured at fair value or transaction price and subsequently measured in the balance sheet at amortized cost, which generally corresponds to nominal value less expected credit loss provision.

Genmab utilizes a simplified approach to measuring expected credit losses and uses a lifetime expected loss allowance for all receivables. To measure the expected credit losses, receivables have been grouped based on credit risk characteristics and the days past due. Prepayments include expenditures related to a future financial year. Prepayments are measured at nominal value.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

3.4—Provisions

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Provisions per January 1	1,200	1,433
Additions during the year	230	1,200
Used during the year	—	(552)
Released during the year	—	(881)
Total at December 31	<u>1,430</u>	<u>1,200</u>
Non-current provisions	1,430	1,200
Current provisions	—	—
Total at December 31	<u>1,430</u>	<u>1,200</u>

Provisions include contractual restoration obligations related to our lease of offices. In determining the fair value of the restoration obligation, assumptions and estimates are made in relation to discounting, the expected cost to restore the offices and the expected timing of those costs. The majority of non-current provisions are expected to be settled in 2022.

Accounting Policy

Provisions are recognized when the group has an existing legal or constructive obligation as a result of events occurring prior to or on the balance sheet date, and it is probable that the utilization of economic resources will be required to settle the obligation. Provisions are measured at management's best estimate of the expenses required to settle the obligation.

A provision for onerous contracts is recognized when the expected benefits to be derived by the group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. When the group has a legal obligation to restore our office lease in connection with the termination, a provision is recognized corresponding to the present value of expected future costs. The present value of a provision is calculated using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as an interest expense.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 3—OPERATING ASSETS AND LIABILITIES (Continued)

3.5—Other Payables

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Liabilities related to collaboration agreements	5,913	3,082
Staff cost liabilities	30,134	22,012
Other liabilities	212,584	112,861
Accounts payable	69,614	40,947
Total at December 31	<u>318,245</u>	<u>178,902</u>
Non-current other payables	1,860	2,429
Current other payables	316,385	176,473
Total at December 31	<u>318,245</u>	<u>178,902</u>

Accounting Policies

Other payables are initially measured at fair value and subsequently measured in the balance sheet at amortized cost. The current other payables are comprised of liabilities that are due less than one year from the balance sheet date and are in general not interest bearing and settled on an ongoing basis during the financial year. Non-current payables are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the liability due to passage of time is recognized as interest expense.

Staff Costs Liabilities

Wages and salaries, social security contributions, paid leave and bonuses, and other employee benefits are recognized in the financial year in which the employee performs the associated work.

Termination benefits are recognized as an expense, when the Genmab group is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to terminate employment.

The group's pension plans are classified as defined contribution plans, and, accordingly, no pension obligations are recognized in the balance sheet. Costs relating to defined contribution plans are included in the income statement in the period in which they are accrued and outstanding contributions are included in other payables.

Accounts Payable

Accounts payable are measured in the balance sheet at amortized cost.

Other Liabilities

Other liabilities primarily includes accrued expenses related to our research and development project costs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS

4.1—Capital Management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence, and a continuous advancement of Genmab's product pipeline and business in general. Genmab is primarily financed through partnership collaboration income and had, as of December 31, 2018, a cash position of DKK 6,106.1 million compared to DKK 5,422.7 million as of December 31, 2017. The cash position supports the advancement of our product pipeline and operations.

The adequacy of our available funds will depend on many factors, including continued growth of DARZALEX sales, progress in our research and development programs, the magnitude of those programs, our commitments to existing and new clinical collaborators, our ability to establish commercial and licensing arrangements, our capital expenditures, market developments, and any future acquisitions. Accordingly, we may require additional funds and may attempt to raise additional funds through equity or debt financings, collaborative agreements with partners, or from other sources.

The Board of Directors monitors the share and capital structure to ensure that Genmab's capital resources support the strategic goals. There was no change in the group's approach to capital management procedures in 2018. Neither Genmab A/S nor any of its subsidiaries are subject to externally imposed capital requirements.

4.2—Financial Risk

The financial risks of the Genmab group are managed centrally. The overall risk management guidelines have been approved by the Board of Directors and include the group's foreign exchange and investment policy related to our marketable securities. The group's risk management guidelines are established to identify and analyze the risks faced by the Genmab group, to set the appropriate risk limits and controls and to monitor the risks and adherence to limits. It is Genmab's policy not to actively speculate in financial risks. The group's financial risk management is directed solely against monitoring and reducing financial risks which are directly related to the group's operations.

The primary objective of Genmab's investment activities is to preserve capital and ensure liquidity with a secondary objective of maximizing the income derived from security investments without significantly increasing risk. Therefore, our investment policy includes among other items, guidelines and ranges for which investments (all of which are shorter-term in nature) are considered to be eligible investments for Genmab and which investment parameters are to be applied, including maturity limitations and credit ratings. In addition, the policy includes specific diversification criteria and investment limits to minimize the risk of loss resulting from over concentration of assets in a specific class, issuer, currency, country, or economic sector.

Currently, our marketable securities are administrated by two external investment managers. The guidelines and investment managers are reviewed regularly to reflect changes in market conditions, the group's activities and financial position. In 2016, the investment policy was amended to increase the investment limits for individual securities and reduce the percent of the total portfolio required to have a maturity of less than one year. The changes were made as a result of the higher value of our marketable securities portfolio and reduced need for short duration securities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)**

In addition to the capital management and financing risk mentioned in note 4.1, the group has identified the following key financial risk areas, which are mainly related to our marketable securities portfolio:

- credit risk;
- currency risk; and
- interest rate risk

All our marketable securities are traded in established markets. Given the current market conditions, all future cash inflows including re-investments of proceeds from the disposal of marketable securities are invested in highly liquid and conservative investments. Please refer to note 4.4 for additional information regarding marketable securities.

Credit Risk

Genmab is exposed to credit risk and losses on our marketable securities and bank deposits. The credit risk related to our other receivables is not significant. The maximum credit risk related to financial assets corresponds to the carrying amounts recognized in the balance sheet.

Marketable Securities

To manage and reduce credit risks on our securities, only securities from investment grade issuers are eligible for our portfolios. No issuer of marketable securities can be accepted if it is not assumed that the credit quality of the issuer would be at least equal to the rating shown below:

<u>Category</u>	<u>S&P</u>	<u>Moody's</u>	<u>Fitch</u>
Short-term	A-1	P-1	F-1
Long-term	A-	A3	A-

Our current portfolio is spread over a number of different securities and is conservative with a focus on liquidity and security. As of December 31, 2018, 90% of our marketable securities had a triple A-rating from Moody's, S&P, or Fitch compared to 91% at December 31, 2017. The total value of marketable securities including interest receivables amounted to DKK 5,591.1 million at the end of 2018 compared to DKK 4,087.1 million at the end of 2017.

Bank Deposits

To reduce the credit risk on our bank deposits, Genmab only invests its cash deposits with highly rated financial institutions. Currently, these financial institutions have a short-term Fitch and S&P rating of at least F-1 and A-1, respectively. In addition, Genmab maintains bank deposits at a level necessary to support the short-term funding requirements of the Genmab group. The total value of bank deposits amounted to DKK 532.9 million as of December 31, 2018 compared to DKK 1,347.5 million at the end of 2017. The decrease at December 31, 2018 was due to milestones received in late December 2017.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

Derivative Financial Instruments

Genmab has established derivative financial instruments under an International Swaps and Derivatives Association master agreement (see below). We are exposed to credit loss in the event of non-performance by our counterpart which is a financial institution with the following short term ratings: Moody's (P-1) and S&P (A-1). The total value of receivables related to derivative financial instruments amounted to DKK 12.2 million at the end of 2017. There were no outstanding receivables related to derivative financial instruments as of December 31, 2018.

Currency Risk

Genmab is exposed to currency exposure, and as Genmab incurs income and expenses in a number of different currencies, the group is subject to currency risk. Increases or decreases in the exchange rate of such foreign currencies against our functional currency, the DKK, can affect the group's results and cash position negatively or positively. The foreign subsidiaries are not significantly affected by currency risks as both income and expenses are primarily settled in the foreign subsidiaries' functional currencies.

Assets and Liabilities in Foreign Currency

The most significant cash flows of the group are DKK, EUR, USD and GBP and Genmab hedges its currency exposure by maintaining cash positions in these currencies. Our total marketable securities were invested in EUR (16%), DKK (30%), USD (53%) and GBP (1%) denominated securities as of December 31, 2018, compared to 21%, 42%, 35%, and 2%, as of December 31, 2017. In addition, Genmab uses derivatives (future contracts) as part of its overall strategy to hedge foreign currency exposure.

Based on the amount of assets and liabilities denominated in EUR, USD and GBP as of December 31, 2018, a 1% change in the EUR to DKK exchange rate and a 10% change in both USD to DKK exchange rate and GBP to DKK exchange rate will impact our net financial items by approximately:

DKK'000	Cash	Marketable Securities	Receivables	Liabilities	Net Exposure	Percentage change in exchange rate*	Impact of change in exchange rate
2018							
EUR	4,285.1	875,585.2	66,895.7	(31,059.3)	915,706.7	1%	9,157.1
USD	449,675.3	2,937,947.8	477,420.7	(24,021.8)	3,621,022.0	10%	362,102.2
GBP	3,082.4	74,762.6	—	(28,506.2)	49,338.8	10%	4,933.9
2017							
EUR	170,737.3	876,152.0	26,981.3	(140,156.1)	933,714.5	1%	9,337.1
USD	1,058,842.5	1,437,678.5	476,510.7	(124,283.5)	2,848,748.2	10%	284,874.8
GBP	1,385.7	75,411.6	—	(25,068.3)	51,729.0	10%	5,172.9

* The analysis assumes that all other variables, in particular interest rates, remain constant.

Accordingly, significant changes in exchange rates could cause our net result to fluctuate significantly as gains and losses are recognized in the income statement. Our EUR exposure is mainly related to our marketable securities, contracts and other costs denominated in EUR. Since the

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)**

introduction of EUR in 1999, Denmark has committed to maintaining a central rate of 7.46 DKK to the EUR. This rate may fluctuate within a +/- 2.25% band. Should Denmark's policy towards the EUR change, the DKK values of our EUR denominated assets and costs could be materially different compared to what is calculated and reported under the existing Danish policy towards the DKK/EUR. The USD currency exposure was mainly related to cash deposits, marketable securities, and receivables related to our collaborations with Janssen and Novartis. The GBP currency exposure is mainly related to contracts and marketable securities denominated in GBP.

Hedging of Expected Future Cash Flows (Cash Flow Hedges)

Genmab entered into derivative contracts during the fourth quarter of 2016 to hedge a portion of the associated currency exposure of royalty payments from net sales of DARZALEX by Janssen. The foreign exchange forward contracts were purchased to match the anticipated timing of quarterly royalty payments from Janssen in May 2017, August 2017, November 2017, and February 2018. The total notional amount of the forward contracts was USD 42.0 million with the USD/EUR forward contract rate ranging from 1.0469 to 1.0640. Due to their lower cost and Denmark's fixed exchange rate policy against the EUR, USD/EUR forward contracts were utilized instead of USD/DKK forward contracts.

The total notional amount of foreign exchange forward contracts that matured was USD 15 million in 2018 compared to USD 27.0 million in 2017. Genmab recognized a gain of DKK 2.0 million in the income statement as part of financial income related to these contracts in 2018 compared to DKK 18.0 million in 2017. As of December 31, 2018, there were no derivatives outstanding. As of December 31, 2017, one forward exchange contract remained outstanding with a notional amount of USD 15.0 million and a fair value of DKK 12.2 million.

A 10% change in the USD to EUR forward exchange rate will impact the valuation of the derivatives as outlined below. The analysis assumes that all other variables remain constant.

	Impact of Change in Exchange Rate in DKK'000					
	2018			2017		
	-10%	Base	+10%	-10%	Base	+10%
() = debt or income						
Fair value	—	—	—	21,533.4	12,223.3	(2,913.3)
Income statement	—	—	—	(21,533.4)	(12,223.3)	2,913.3
Statement of comprehensive income	—	—	—	—	—	—

Interest Rate Risk

Genmab's exposure to interest rate risk is primarily related to the marketable securities, as we currently do not have significant interest bearing debts.

Marketable Securities

The securities in which the group has invested bear interest rate risk, as a change in market derived interest rates may cause fluctuations in the fair value of the investments. In accordance with the objective of the investment activities, the portfolio of securities is monitored on a total return basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

To control and minimize the interest rate risk, the group maintains an investment portfolio in a variety of securities with a relatively short effective duration. As of December 31, 2018, the portfolio has an average effective duration of approximately 1.4 years (2017: 1.6 years) and no securities have an effective duration of more than 8 years (2017: 8 years), which means that a change in the interest rates of one percentage point will cause the fair value of the securities to change by approximately 1.4% (2017: 1.6%). Due to the short-term nature of the current investments and to the extent that we are able to hold the investments to maturity, we consider our current exposure to changes in fair value due to interest rate changes to be insignificant compared to the fair value of the portfolio.

As of December 31, 2018 and December 31, 2017, the maturity profile of our marketable securities is as follows:

DKK'000 Year of Maturity	2018	2017
2018	—	1,423,542
2019	2,879,710	1,119,042
2020	1,574,002	617,631
2021	505,352	498,507
2022	137,633	60,029
2023+	476,490	356,441
Total	5,573,187	4,075,192

4.3—Financial Assets and Liabilities

Categories of Financial Assets and Liabilities

DKK'000 Category	Note	2018	2017
Financial assets measured at fair value through profit or loss			
Marketable securities	4.4	5,573,187	4,075,192
Financial assets designated as hedging instruments			
Derivatives designated as fair value hedges	3.3	—	12,223
Financial assets measured at amortized cost			
Receivables ex. prepayments	3.3	1,317,249	569,729
Cash and cash equivalents		532,907	1,347,545
Financial liabilities measured at amortized cost:			
Other payables	3.5	(318,245)	(178,902)

*Fair Value Measurement**Marketable Securities*

All fair market values are determined by reference to external sources using unadjusted quoted prices in established markets for our marketable securities (Level 1).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

Derivative Financial Instruments

Genmab entered into derivative instruments (forward contracts) to hedge currency exposure associated with future royalties on net sales of DARZALEX by Janssen. The derivatives are not traded on an active market based on quoted prices. The fair value is determined using valuation techniques that utilize market based data such as currency rates, yield curves and implied volatility (Level 2).

DKK'000	Note	2018			2017		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets Measured at Fair Value							
Marketable securities	4.4	5,573,187	—	—	4,075,192	—	—
Receivables—derivatives	3.3	—	—	—	—	12,223	—

*Accounting Policies**Classification of Categories of Financial Assets and Liabilities*

Genmab classifies its financial assets held into the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- those to be measured at amortized cost.

The classification depends on the business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. Genmab reclassifies debt investments when and only when its business model for managing those assets changes. Further details about the accounting policy for each of the categories are outlined in the respective notes.

Fair Value Measurement

The Genmab group measures financial instruments, such as marketable securities and derivatives, at fair value at each balance sheet date. Management assessed that financial assets and liabilities measured at amortized costs such as bank deposits, receivables and other payables approximate their carrying amounts largely due to the short-term maturities of these instruments.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Genmab group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)**

selling it to another market participant that would use the asset in its highest and best use. The Genmab group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

For financial instruments that are measured in the balance sheet at fair value, IFRS 13 for financial instruments requires disclosure of fair value measurements by level of the following fair value measurement hierarchy for:

- Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2—Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices)
- Level 3—Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

Currently no financial instruments are measured and determined with reference to level 3. Level 3 fair values of financial instruments measured at amortized cost and assumption used are disclosed above.

For assets and liabilities that are recognized in the financial statements on a recurring basis, the group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. Any transfers between the different levels are carried out at the end of the reporting period. There have not been any transfers between the different levels during 2018 and 2017.

4.4—Marketable Securities

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Cost at January 1	4,194,743	3,603,111
Additions for the year	3,521,212	3,425,025
Disposals for the year	(2,221,998)	(2,833,393)
Cost at December 31	5,493,957	4,194,743
Fair value adjustment at January 1	(119,551)	11,831
Fair value adjustment for the year	198,781	(131,382)
Fair value adjustment at December 31	79,230	(119,551)
Net book value at December 31	5,573,187	4,075,192
Net book value in percentage of cost	101%	97%

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

	Market value 2018 DKK'000	Average effective duration	Share %	Market value 2017 DKK'000	Average effective duration	Share %
Kingdom of Denmark bonds and treasury bills	507,864	1.94	9%	472,136	2.02	12%
Danish mortgage-backed securities	1,177,027	2.58	21%	1,213,814	1.93	30%
DKK portfolio	1,684,891	2.39	30%	1,685,950	1.95	42%
EUR portfolio						
European government bonds and treasury bills	875,585	1.38	16%	876,152	1.83	21%
USD portfolio						
US government bonds and treasury bills	2,937,948	0.84	53%	1,437,679	0.93	35%
GBP portfolio						
UK government bonds and treasury bills	74,763	0.55	1%	75,411	1.23	2%
Total portfolio	5,573,187	1.39	100%	4,075,192	1.55	100%
Marketable securities	5,573,187			4,075,192		

Interest Income

Total interest income amounted to DKK 62.9 million in 2018 compared to DKK 41.3 million in 2017. The increase was due to a higher level of investment in marketable securities in 2018 as compared to 2017.

Fair Value Adjustment

The total fair value adjustment for 2018 was an income of DKK 198.8 million, which was driven primarily by foreign exchange adjustments of DKK 194.3 million due the significant strengthening of the USD against the DKK which positively impacted our USD denominated portfolio. In 2017, the total fair value adjustment was a loss of DKK 131.4 million, which was driven primarily by foreign exchange adjustments of DKK 117.6 million due the significant weakening of the USD against the DKK which negative impacted our USD denominated portfolio. Please refer to note 4.2 for additional information regarding the risks related to our marketable securities.

Accounting Policies

Marketable securities consist of investments in securities with a maturity greater than three months at the time of acquisition. Measurement of marketable securities depends on the business model for managing the asset and the cash flow characteristics of the asset. There are two measurement categories into which the group classifies its debt instruments:

- **Amortized cost:** Assets that are held for collection of contractual cash flows, where those cash flows represent solely payments of principal and interest, are measured at amortized cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in other gains/(losses), together with foreign exchange gains and losses. Impairment losses are presented as a separate line item in the statement of profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

- Fair value through profit and loss (FVPL): Assets that do not meet the criteria for amortized cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains/(losses) in the period in which it arises.

Genmab's portfolio is managed and evaluated on a fair value basis in accordance with its investment guidelines and the information provided internally to management. This business model does not meet the criteria for amortized cost or FVOCI and as a result marketable securities are measured at fair value through profit and loss. This classification is consistent with the prior year's classification.

Genmab invests its cash in deposits with major financial institutions, in Danish mortgage bonds, and notes issued by the Danish, European and American governments. The securities can be purchased and sold using established markets. Transactions are recognized at trade date.

4.5—Financial Income and Expenses

	2018 DKK'000	2017 DKK'000
Financial income:		
Interest and other financial income	62,922	41,426
Realized and unrealized gains on fair value hedges, net	2,282	30,273
Realized and unrealized exchange rate gains, net	177,771	—
Total financial income	242,975	71,699
Financial expenses:		
Interest and other financial expenses	417	2,802
Realized and unrealized losses on marketable securities (fair value through the income statement), net	10,870	19,610
Realized and unrealized exchange rate losses, net	—	329,738
Total financial expenses	11,287	352,150
Net financial items	231,688	(280,451)
Interest and other financial income on financial assets measured at amortized cost	8,136	1,744
Interest and other financial expenses on financial liabilities measured at amortized cost	417	2,802

Realized and unrealized exchange rate gains, net of DKK 177.8 million in 2018 were driven by foreign exchange movements, which positively impacted our USD denominated portfolio and cash holdings. The USD strengthened significantly against the DKK during 2018, resulting in realized and unrealized exchange rates gains. More specifically, the USD/DKK foreign exchange rate increased from 6.2067 at December 31, 2017 to 6.5194 at December 31, 2018. Please refer to note 4.2 for additional information on foreign currency risk.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)*****Accounting Policies***

Financial income and expenses include interest as well as realized and unrealized exchange rate adjustments and realized and unrealized gains and losses on marketable securities (designated as fair value through the income statement), realized gains and losses and write-downs of other securities and equity interests (designated as available-for-sale financial assets), and realized and unrealized gains and losses on derivative financial instruments.

Interest and dividend income are shown separately from gains and losses on marketable securities and other securities and equity interests.

Gains or losses relating to the ineffective portion of a cash flow hedge and changes in time value are recognized immediately in the income statement as part of the financial income or expenses.

4.6—Share-Based Instruments***Restricted Stock Unit Program***

Genmab A/S has established an RSU program (equity-settled share-based payment transactions) as an incentive for all the Genmab group's employees, members of the Executive Management, and members of the Board of Directors. RSUs are granted by the Board of Directors in accordance with authorizations given to it by Genmab A/S' shareholders and are subject to the incentive guidelines (Remuneration Principles) adopted by the general meeting.

Under the terms of the RSU program, RSUs are subject to a cliff vesting period and become fully vested on the first banking day of the month following a period of three years from the date of grant. If an employee, member of Executive Management, or member of the Board of Directors ceases their employment or board membership prior to the vesting date, all RSUs that are granted, but not yet vested, shall lapse automatically. However, if an employee, a member of the Executive Management or a member of the Board of Directors ceases employment or board membership due to retirement or age limitation in Genmab A/S' articles of association, death, serious sickness or serious injury then all RSUs that are granted, but not yet vested shall remain outstanding and will be settled in accordance with their terms.

In addition, for an employee or a member of the Executive Management, RSUs that are granted, but not yet vested shall remain outstanding and will be settled in accordance with their terms in instances where the employment relationship is terminated by Genmab without cause. Within 30 days of the vesting date, the holder of an RSU receives one share in Genmab A/S for each RSU. Genmab A/S may at its sole discretion in extraordinary circumstances choose to make cash settlement instead of delivering shares. The RSU program contains anti-dilution provisions if changes occur in Genmab's share capital prior to the vesting date and provisions to accelerate vesting of RSUs in the event of change of control as defined in the RSU program.

Genmab A/S intends to purchase its own shares in order to cover its obligations in relation to the RSUs. Authorization to purchase Genmab A/S' own shares up to a nominal value of DKK 500,000 (500,000 shares) was given at the Annual General Meeting in March 2016. Genmab acquired 125,000 of its own shares, approximately 0.2% of share capital, to cover its obligations under the RSU program in 2018. The total amount paid to acquire the shares, including directly attributable costs, was DKK 146.2 million and has been recognized as a deduction to shareholders' equity. These shares are classified as treasury shares and are presented within accumulated deficit as of December 31, 2018.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

There were no acquisitions of treasury shares in 2017. The shares were acquired in accordance with the authorization granted by the Annual General Meeting in March 2016 and the acquisition was carried out in compliance with applicable laws, the Nasdaq Copenhagen issuer rules and Genmab's internal policies on trading with shares of Genmab A/S.

RSU Activity in 2018 and 2017

	Number of RSUs held by the Board of Directors	Number of RSUs held by the Executive Management	Number of RSUs held by employees	Number of RSUs held by former members of the Board of Directors and employees	Total outstanding RSUs
Outstanding at January 1, 2017	18,688	64,258	18,291	1,150	102,387
Granted*	7,661	19,599	38,691	—	65,951
Settled	—	—	—	—	—
Transferred	(2,021)	—	(1,484)	3,505	—
Cancelled	—	—	(23)	(271)	(294)
Outstanding at December 31, 2017	24,328	83,857	55,475	4,384	168,044
Outstanding at January 1, 2018	24,328	83,857	55,475	4,384	168,044
Granted*	5,224	18,020	79,395	—	102,639
Settled	(9,425)	(35,725)	—	(2,300)	(47,450)
Transferred	—	—	(3,358)	3,358	—
Cancelled	—	—	(1,466)	(2,865)	(4,331)
Outstanding at December 31, 2018	20,127	66,152	130,046	2,577	218,902

* RSUs held by the Board of Directors includes RSUs granted to employee-elected Board Members as employees of Genmab A/S or its subsidiaries.

The weighted average fair value of RSUs granted was DKK 1,033.95 and DKK 1,128.30 in 2018 and 2017, respectively. Please refer to note 5.1 for additional information regarding the number of RSUs held by the Executive Management and the Board of Directors.

Warrant Program

Genmab A/S has established warrant programs (equity-settled share-based payment transactions) as an incentive for all the Genmab group's employees, and members of the Executive Management. Warrants are granted by the Board of Directors in accordance with authorizations given to it by Genmab A/S' shareholders. Warrant grants to Executive Management are subject to the incentive guidelines (Remuneration Principles) adopted by the general meeting.

Under the terms of the warrant programs, warrants are granted at an exercise price equal to the share price on the grant date. According to the warrant programs, the exercise price cannot be fixed at a lower price than the market price at the grant date. In connection with exercise, the warrants shall be settled with the delivery of shares in Genmab A/S. The warrant programs contain anti-dilution provisions if changes occur in Genmab's share capital prior to the warrants being exercised.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

Warrants Granted from August 2004 until April 2012

Under the August 2004 warrant program, warrants can be exercised starting from one year after the grant date. As a general rule, the warrant holder may only exercise 25% of the warrants granted per full year of employment or affiliation with Genmab after the grant date. However, the warrant holder will be entitled to continue to be able to exercise all warrants on a regular schedule in instances where the employment relationship is terminated by Genmab without cause.

In case of a change of control event as defined in the warrant programs, the warrant holder will immediately be granted the right to exercise all of his/her warrants regardless of the fact that such warrants would otherwise only become fully vested at a later point in time. Warrant holders who are no longer employed by or affiliated with Genmab will, however, only be entitled to exercise such percentages as would otherwise have vested under the terms of the warrant program.

Warrants Granted from April 2012 until March 2017

Following the Annual General Meeting in April 2012, a new warrant program was adopted by the Board of Directors. Whereas warrants granted under the August 2004 warrant program will lapse on the tenth anniversary of the grant date, warrants granted under the new April 2012 warrant program will lapse at the seventh anniversary of the grant date. All other terms in the warrant programs are identical.

Warrants Granted from March 2017

In March 2017, a new warrant program was adopted by the Board of Directors. Whereas warrants granted under the April 2012 warrant program vested annually over a four year period, warrants granted under the new March 2017 warrant program are subject to a cliff vesting period and become fully vested three years from the date of grant. All other terms in the warrant programs are identical.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

Warrant Activity in 2018 and 2017

	Number of warrants held by the Board of Directors	Number of warrants held by the Executive Management	Number of warrants held by employees	Number of warrants held by former members of the Executive Management, Board of Directors and employees	Total outstanding warrants	Weighted average exercise price DKK
Outstanding at January 1, 2017	129,742	877,418	644,097	539,054	2,190,311	311.52
Granted*	4,125	59,819	118,745	—	182,689	1,123.91
Exercised	(31,625)	(377,500)	(131,709)	(294,784)	(835,618)	257.19
Expired	—	—	—	(8,200)	(8,200)	348.20
Cancelled	—	—	(73)	(10,923)	(10,996)	722.48
Transfers	(10,000)	—	(56,765)	66,765	—	—
Outstanding at December 31, 2017	92,242	559,737	574,295	291,912	1,518,186	436.01
Exercisable at year end	79,380	472,119	262,414	270,458	1,084,371	233.81
Exercisable warrants in the money at year end	78,400	464,832	241,241	269,313	1,053,786	201.27
Outstanding at January 1, 2018	92,242	559,737	574,295	291,912	1,518,186	436.01
Granted*	3,161	50,464	222,882	—	276,507	1,034.66
Exercised	(20,925)	(130,000)	(46,883)	(114,089)	(311,897)	241.34
Expired	—	—	—	(37,875)	(37,875)	253.76
Cancelled	—	—	(4,582)	(17,129)	(21,711)	940.01
Transfers	—	—	(39,624)	39,624	—	—
Outstanding at December 31, 2018	74,478	480,201	706,088	162,443	1,423,210	592.14
Exercisable at year end	62,647	355,347	297,128	152,743	867,865	295.02
Exercisable warrants in the money at year end	60,688	340,775	257,115	148,701	807,279	230.43

* Warrants held by the Board of Directors includes warrants granted to employee-elected Board Members as employees of Genmab A/S or its subsidiaries.

Please refer to note 5.1 for additional information regarding the number of warrants held by the Executive Management and the Board of Directors.

As of December 31, 2018, the 1,423,210 outstanding warrants amounted to 2% of the share capital (2017: 2%).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

For exercised warrants in 2018 the weighted average share price at the exercise date amounted to DKK 1,206.11 (2017: DKK 1,368.32).

Weighted Average Outstanding Warrants at December 31, 2018

<u>Exercise price</u> DKK	<u>Grant Date</u>	<u>Number of</u> <u>warrants</u> <u>outstanding</u>	<u>Weighted average</u> <u>remaining</u> <u>contractual life</u> <u>(in years)</u>	<u>Number of</u> <u>warrants</u> <u>exercisable</u>
31.75	October 14, 2011	7,525	2.79	7,525
40.41	June 22, 2011	85,975	2.48	85,975
45.24	April 25, 2012	1,000	0.32	1,000
46.74	June 2, 2010	85,000	1.42	85,000
55.85	April 6, 2011	8,500	2.27	8,500
66.60	December 9, 2010	37,750	1.94	37,750
67.50	October 14, 2010	3,250	1.79	3,250
68.65	April 21, 2010	5,450	1.31	5,450
79.25	October 9, 2012	5,000	0.78	5,000
80.55	December 5, 2012	111,750	0.93	111,750
98.00	January 31, 2013	1,375	1.08	1,375
129.75	October 8, 2009	5,075	0.77	5,075
147.50	April 17, 2013	7,750	1.30	7,750
174.00	June 17, 2009	25,000	0.46	25,000
199.00	June 12, 2013	1,000	1.45	1,000
210.00	February 10, 2014	3,088	2.11	3,088
220.40	October 15, 2014	33,800	2.79	33,800
225.30	June 12, 2014	7,975	2.45	7,975
225.90	December 6, 2013	175,047	1.93	175,047
231.50	October 10, 2013	7,850	1.78	7,850
234.00	April 15, 2009	6,100	0.29	6,100
337.40	December 15, 2014	90,945	2.96	90,945
466.20	March 26, 2015	11,061	3.24	6,664
623.50	June 11, 2015	6,350	3.45	3,913
636.50	October 7, 2015	24,500	3.77	16,250
815.50	March 17, 2016	14,837	4.21	6,362
939.50	December 10, 2015	80,874	3.94	57,880
962.00	June 7, 2018	14,714	6.44	—
1,025.00	December 10, 2018	210,437	6.94	—
1,032.00	December 15, 2017	133,637	5.96	—
1,050.00	September 21, 2018	33,226	6.73	—
1,136.00	October 6, 2016	19,450	4.77	9,725
1,145.00	December 15, 2016	86,660	4.96	43,675
1,210.00	April 10, 2018	14,954	6.28	—
1,233.00	June 9, 2016	14,438	4.44	6,713
1,402.00	March 28, 2017	8,736	5.24	—
1,408.00	June 8, 2017	5,224	5.44	—
1,424.00	February 10, 2017	1,606	5.11	478
1,427.00	March 29, 2017	8,400	5.25	—
1,432.00	October 5, 2017	17,901	5.76	—
<u>592.14</u>		<u>1,423,210</u>	<u>3.76</u>	<u>867,865</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

Weighted Average Outstanding Warrants at December 31, 2017

<u>Exercise price</u> DKK	<u>Grant Date</u>	<u>Number of</u> <u>warrants</u> <u>outstanding</u>	<u>Weighted average</u> <u>remaining</u> <u>contractual life</u> <u>(in years)</u>	<u>Number of</u> <u>warrants</u> <u>exercisable</u>
31.75	October 14, 2011	7,525	3.79	7,525
40.41	June 22, 2011	86,195	3.48	86,195
45.24	April 25, 2012	1,000	1.32	1,000
46.74	June 2, 2010	88,750	2.42	88,750
55.85	April 6, 2011	8,500	3.27	8,500
66.60	December 9, 2010	38,100	2.94	38,100
67.50	October 14, 2010	3,250	2.79	3,250
68.65	April 21, 2010	7,250	2.31	7,250
79.25	October 9, 2012	5,000	1.78	5,000
80.55	December 5, 2012	116,300	1.93	116,300
98.00	January 31, 2013	1,751	2.08	1,751
129.75	October 8, 2009	5,575	1.77	5,575
147.50	April 17, 2013	20,250	2.30	20,250
174.00	June 17, 2009	85,000	1.46	85,000
199.00	June 12, 2013	3,000	2.45	3,000
210.00	February 10, 2014	5,688	3.11	2,000
215.60	April 9, 2014	2,500	3.28	1,000
220.40	October 15, 2014	34,751	3.79	20,563
225.30	June 12, 2014	8,475	3.45	4,975
225.90	December 6, 2013	281,986	2.93	281,986
231.50	October 10, 2013	12,675	2.78	12,675
234.00	April 15, 2009	10,975	1.29	10,975
234.75	December 17, 2008	5,900	0.96	5,900
246.00	June 4, 2008	15,275	0.43	15,275
254.00	April 24, 2008	52,250	0.32	52,250
272.00	October 8, 2008	41,038	0.77	41,038
337.40	December 15, 2014	106,772	3.96	68,397
466.20	March 26, 2015	14,850	4.24	4,350
623.50	June 11, 2015	6,525	4.45	1,650
636.50	October 7, 2015	27,375	4.77	10,875
815.50	March 17, 2016	19,012	5.21	3,303
939.50	December 10, 2015	87,873	4.94	39,123
1,032.00	December 15, 2017	139,597	6.96	—
1,136.00	October 6, 2016	19,450	5.77	4,864
1,145.00	December 15, 2016	88,629	5.96	22,193
1,233.00	June 9, 2016	16,125	5.44	3,528
1,402.00	March 28, 2017	8,736	6.24	—
1,408.00	June 8, 2017	5,224	6.44	—
1,424.00	February 10, 2017	1,903	6.11	—
1,427.00	March 29, 2017	8,400	6.25	—
1,432.00	October 5, 2017	18,756	6.76	—
436.01		1,518,186	3.57	1,084,366

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)****4.7—Share Capital*****Share Capital***

The share capital comprises the nominal amount of the parent company's ordinary shares, each at a nominal value of DKK 1. All shares are fully paid. On December 31, 2018, the share capital of Genmab A/S comprised 61,497,571 shares of DKK 1 each with one vote. There are no restrictions related to the transferability of the shares. All shares are regarded as negotiable instruments and do not confer any special rights upon the holder, and no shareholder shall be under an obligation to allow his/her shares to be redeemed.

Until April 10, 2023, the Board of Directors is authorized to increase the nominal registered share capital on one or more occasions by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares of Genmab. The capital increase can be made by cash or by non-cash payment and with or without pre-emption rights for the existing shareholders. Within the authorizations to increase the share capital by nominally DKK 7,500,000 shares, the Board of Directors may on one or more occasions and without pre-emption rights for the existing shareholders of Genmab issue up to nominally DKK 2,000,000 shares to employees of Genmab, and Genmab's subsidiaries, by cash payment at market price or at a discount price as well as by the issue of bonus shares. No transferability restrictions or redemption obligations shall apply to the new shares, which shall be negotiable instruments in the name of the holder and registered in the name of the holder in Genmab's Register of Shareholders. The new shares shall give the right to dividends and other rights as determined by the Board in its resolution to increase capital.

Until March 17, 2021, the Board of Directors is authorized by one or more issues to raise loans against bonds or other financial instruments up to a maximum amount of DKK 3 billion with a right for the lender to convert his claim to a maximum of nominally DKK 4,000,000 equivalent to 4,000,000 new shares (convertible loans). Convertible loans may be raised in DKK or the equivalent in foreign currency (including US dollar (USD) or euro (EUR)). The Board of Directors is also authorized to effect the consequential increase of the capital. Convertible loans may be raised against payment in cash or in other ways. The subscription of shares shall be with or without pre-emption rights for the shareholders and the convertible loans shall be offered at a subscription price and conversion price that in the aggregate at least corresponds to the market price of the shares at the time of the decision of the Board of Directors. The time limit for conversion may be fixed for a longer period than five (5) years after the raising of the convertible loan.

By decision of the general meeting on April 17, 2013, the Board of Directors was authorized to issue on one or more occasions warrants to subscribe Genmab A/S' shares up to a nominal value of DKK 600,000. This authorization ended on April 17, 2018. Further, by decision of the general meeting on April 9, 2014, the Board of Directors was authorized to issue on one or more occasions warrants to subscribe Genmab A/S' shares up to a nominal value of DKK 500,000. This authorization shall remain in force for a period ending on April 9, 2019. Moreover, by decision of the general meeting on March 28, 2017, the Board of Directors was authorized to issue on one or more occasions warrants to subscribe Genmab A/S' shares up to a nominal value of DKK 500,000. This authorization shall remain in force for a period ending on March 28, 2022.

Subject to the rules in force at any time, the Board of Directors may reuse or reissue lapsed non-exercised warrants, if any, provided that the reuse or reissue occurs under the same terms and within the time limitations set out in the authorization to issue warrants.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)**

As of December 31, 2018, a total of 600,000 warrants have been issued and a total of 17,750 warrants have been reissued under the April 17, 2013 authorization, a total of 500,000 warrants have been issued and a total of 29,511 warrants have been reissued under the April 9, 2014 authorization, and a total of 333,217 warrants have been issued and a total of 2,933 have been reissued under the March 28, 2017 authorization. A total of 166,783 warrants remain available for issue and a total of 6,862 warrants remain available for reissue as of December 31, 2018.

By decision of the general meeting on March 17, 2016, the Board of Directors was authorized to repurchase Genmab A/S' shares up to a nominal value of DKK 500,000 (500,000 shares). This authorization shall remain in force for a period ending on March 17, 2021.

As of December 31, 2018, a total of 225,000 shares, with a nominal value of DKK 225,000, have been repurchased under the March 17, 2016 authorization. A total of 275,000 shares, with a nominal value of DKK 275,000, remain available to repurchase as of December 31, 2018.

Share Premium

The share premium reserve is comprised of the amount received, attributable to shareholders' equity, in excess of the nominal amount of the shares issued at the parent company's offerings, reduced by any external expenses directly attributable to the offerings. The share premium reserve can be distributed.

Changes in Share Capital During 2013 to 2018

The share capital of DKK 61.5 million at December 31, 2018 is divided into 61,497,571 shares at a nominal value of DKK 1 each.

	<u>Number of shares</u>	<u>Share capital DKK'000</u>
December 31, 2013	51,755,722	51,756
Shares issued for cash	4,600,000	4,600
Exercise of warrants	611,697	611
December 31, 2014	56,967,419	56,967
Exercise of warrants	2,563,844	2,564
December 31, 2015	59,531,263	59,531
Exercise of warrants	818,793	819
December 31, 2016	60,350,056	60,350
Exercise of warrants	835,618	836
December 31, 2017	61,185,674	61,186
Exercise of warrants	311,897	312
December 31, 2018	61,497,571	61,498

During 2018, 311,897 new shares were subscribed at a price of DKK 40.41 to DKK 1,233.00 in connection with the exercise of warrants under Genmab's warrant program.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 4—CAPITAL STRUCTURE, FINANCIAL RISK AND RELATED ITEMS (Continued)

During 2017, 835,618 new shares were subscribed at a price of DKK 31.75 to DKK 1,233.00 in connection with the exercise of warrants under Genmab's warrant program.

During 2016, 818,793 new shares were subscribed at a price of DKK 31.75 to DKK 636.50 in connection with the exercise of warrants under Genmab's warrant program.

During 2015, 2,563,844 new shares were subscribed at a price of DKK 26.75 to DKK 364.00 in connection with the exercise of warrants under Genmab's warrant program.

During 2014, 611,697 new shares were subscribed at a price of DKK 26.75 to DKK 234.00 in connection with the exercise of warrants under Genmab's warrant program.

On January 24, 2014 Genmab completed a private placement with the issuance of 4,600,000 new shares.

Treasury Shares

	Number of shares	Share capital DKK'000	Proportion of share capital %	Cost DKK'000
Shareholding at December 31, 2016	100,000	100	0.2	118,099
Purchase of treasury shares	—	—	—	—
Shareholding at December 31, 2017	100,000	100	0.2	118,099
Purchase of treasury shares	125,000	125	0.2	146,175
Shares used for funding RSU program	(47,450)	(47)	(0.1)	(56,038)
Shareholding at December 31, 2018	177,550	178	0.3	208,236

Genmab acquired 125,000 of its own shares, approximately 0.2% of share capital, to cover its obligations under the RSU program in 2018. The total amount paid to acquire the shares, including directly attributable costs, was DKK 146.2 million and has been recognized as a deduction to shareholders' equity. These shares are classified as treasury shares and are presented within accumulated deficit as of December 31, 2018. There were no acquisitions of treasury shares in 2017.

The shares were acquired in accordance with the authorization granted by the Annual General Meeting in March 2016 and was carried out in compliance with applicable laws, the Nasdaq Copenhagen issuer rules and Genmab's internal policies on trading with shares of Genmab A/S.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES

5.1—Remuneration of the Board of Directors and Executive Management

The total remuneration of the Board of Directors and Executive Management is as follows:

	<u>2018</u>	<u>2017</u>
	DKK'000	DKK'000
Wages and salaries	33,503	38,208
Share-based compensation expenses	32,200	28,103
Defined contribution plans	1,427	1,315
Total	<u>67,130</u>	<u>67,626</u>

The remuneration packages for the Board of Directors and Executive Management are described below in further detail. The remuneration packages are denominated in DKK, EUR, or USD. The Compensation Committee performs an annual review of the remuneration packages. All incentive and variable remuneration shall be considered and adopted at the company's annual general meeting.

In accordance with Genmab's accounting policies, described in note 2.3, share-based compensation is included in the income statement and reported in the remuneration tables in this note. Such share-based compensation expense represents a calculated fair value of instruments granted and does not represent actual cash compensation received by the board members or executives. Please refer to note 4.6 for additional information regarding Genmab's share-based compensation programs.

Remuneration to the Board of Directors*Annual board base fee and fees for committee work*

Purpose and link to strategy: Ensure Genmab can attract qualified individuals to the Board of Directors.

Opportunity: Basic board fee of DKK 400,000—Deputy Chairman receives double and Chairman receives triple; Audit Committee membership basic fee of DKK 100,000 with Chairman receiving fee of DKK 150,000 plus a fee per meeting of DKK 10,000; Compensation Committee membership basic fee of DKK 80,000 with Chairman receiving fee of DKK 120,000 plus a fee per meeting of DKK 10,000; Nominating and Corporate Governance Committee membership basic fee of DKK 70,000 with Chairman receiving fee of DKK 100,000 plus a fee per meeting of DKK 10,000; and Scientific Committee membership basic fee of DKK 100,000 with Chairman receiving fee of DKK 130,000 plus a fee per meeting of DKK 10,000.

Changes compared to 2017: None.

Share-Based Compensation

Purpose and link to strategy: Share-based instruments constitute a common part of the remuneration paid to members of the Board of Directors in competing international biotech and biopharmaceutical companies. The use of share-based instruments enables Genmab to remain competitive in the international market and to be able to attract and retain qualified members of the Board of Directors on a continuous basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)
SECTION 5—OTHER DISCLOSURES (Continued)

Performance metrics: To ensure the Board of Directors' independence and supervisory function, vesting of restricted stock units (RSUs) granted to members of the Board of Directors shall not be subject to fulfilment of forward-looking performance criteria.

Opportunity: A new member of the Board of Directors may be granted RSUs upon election corresponding to a value (at the time of grant) of up to four (4) times the fixed annual base fee. In addition the members of the Board of Directors may be granted RSUs corresponding to a value (at the time of grant) of up to one (1) times the fixed annual base fee, for the Chairman the value shall be of up to two (2) times the fixed annual base fee and for the Deputy Chairman the value shall be of up to one point five (1.5) times the fixed annual base fee on an annual basis. The share-based compensation expense for 2018 of DKK 4.8 million shown below includes the amortization of the non-cash share-based compensation expense relating to warrants granted before 2014 and RSUs granted over several periods. Following an amendment of the guidelines for incentive-based remuneration of the Board of Directors and Executive Management by the general meeting in 2014, share-based compensation granted to board members may only be in the form of RSUs. Please refer to note 4.6 for additional information regarding the "Number of RSUs held" and "Number of warrants held" overviews.

Changes compared to 2017: None.

	Base board fee DKK'000	Committee fees DKK'000	Shared-based compensation expenses DKK'000	2018 DKK'000	Base board fee DKK'000	Committee fees DKK'000	Shared-based compensation expenses DKK'000	2017 DKK'000
Mats Pettersson	1,200	300	866	2,366	1,200	367	1,013	2,580
Anders Gersel Pedersen	500	280	646	1,426	800	263	704	1,767
Pernille Erenbjerg	400	300	538	1,238	400	288	716	1,404
Paolo Paoletti	400	150	538	1,088	400	138	716	1,254
Rolf Hoffmann*	400	280	670	1,350	300	185	411	896
Deirdre P. Connelly*	700	350	674	1,724	300	178	411	889
Peter Storm Kristensen**	400	—	286	686	400	—	154	554
Rick Hibbert**	400	—	286	686	400	—	154	554
Daniel J. Bruno**	400	—	286	686	400	—	154	554
Burton G. Malkiel***	—	—	—	—	100	34	927	1,061
Total	4,800	1,660	4,790	11,250	4,700	1,453	5,360	11,513

* Elected by the Annual General Meeting in March 2017.

** Employee elected board member.

*** Stepped down from the Board of Directors at the Annual General Meeting in March 2017.

Remuneration to the Executive Management
Base Salary

Purpose and link to strategy: Reflect the individual's skills and experience, role and responsibilities.

Performance metrics: Any increase based both on individual and company performance as well as benchmark analysis.

Opportunity: Fixed.

Changes compared to 2017: Effective, January 1, 2018, base salary increased by 3% for the CEO, CFO, and CDO in local currency (2017: 3% for CEO and 3% for CFO, effective January 1, 2017 and 3% for CDO effective July 1, 2017).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

Pension and other benefits

Purpose and link to strategy: Provide a framework to save for retirement; provide customary benefits including car and telephone allowance; provide sign-on bonus for new Executive Management; and provide tax equalization payment for executive management.

Performance metrics: None

Opportunity: With respect to providing a framework to save for retirement, executive management is given a fixed amount or percentage of base salary. With respect to providing a sign-on bonus for new Executive Management, a new member of the Executive Management may receive a sign-on payment upon engagement subject to certain claw-back provisions. With respect to providing tax equalization payment for Executive Management, the CFO received USD 221,046 payment to tax equalize him for the higher tax rate in Denmark versus his resident country of the United States. The CDO received USD 37,677 payment to tax equalize her for the higher tax rate in Denmark versus her resident country of the United States.

Changes compared to 2017: None.

Annual Cash Bonus

Purpose and link to strategy: Incentivize executives to achieve key objectives on an annual basis

Performance metrics: Achievement of predetermined and well-defined annual milestones

Opportunity: Maximum 60% to 100% of annual gross salaries dependent on their position. Extraordinary bonuses are awarded up to a maximum up to 15% of their annual gross salaries, based on the occurrence of certain special events or achievements. The bonus programs may enable the Executive Management members to earn a bonus per calendar year of up to an aggregate amount of approximately DKK 10.0 million (annual) and DKK 1.5 million (extraordinary). In 2018, the current Executive Management team received a total cash bonus of DKK 10.6 million (2017: DKK 10.3 million).

Changes compared to 2017: None.

Share-Based Compensation

Purpose and link to strategy: Incentivize executives over the longer term aligned to strategy and creation of shareholder value.

Performance metrics: Linked to Genmab's financial and strategic priorities as an incentive to increase the future value of the company but also in recognition of past contributions and accomplishments.

Opportunity: As a main rule, the members of the executive management may on an annual basis be granted share-based instruments corresponding to a value (at the time of grant) of up to two (2) times the member's annual base salary, calculated before any pension contribution and bonus payment, in the year of grant. However, in exceptional cases, international, and in particular US based, members of the executive management, may on an annual basis be granted share-based instruments corresponding to a value (at the time of grant) of up to four (4) times the member's annual base salary, calculated before any pension contribution and bonus payment, in the year of grant.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 5—OTHER DISCLOSURES (Continued)**

Notwithstanding the above, in no event may the value (at the time of grant) of share-based instruments granted to a member of the executive management on an annual basis exceed DKK 25.0 million. Annual grant of share-based instruments to members of the executive management is used primarily as an incentive to increase the future value of the company but also in recognition of past contributions and accomplishments.

Furthermore, a new member of the executive management may be granted share-based instruments upon engagement or promotion.

The share-based instruments granted to the members of the executive management may be in the form of restricted stock units or a combination of restricted stock units and warrants (options to subscribe for shares in the company). If members of the executive management are granted a combination of restricted stock units and warrants, the proportional value of the warrants may not exceed 50% of the total value (at the time of grant). Vesting of restricted stock units and warrants granted to members of the executive management may be subject to fulfilment of forward-looking performance criteria as determined by the board of directors.

The share-based compensation expense for 2018 of DKK 27.4 million shown below includes the amortization of the non-cash share-based compensation expense relating to warrants & RSUs granted over several periods. In 2018, 50,464 warrants and 18,020 RSUs were granted to the Executive Management, with a total fair value of DKK 36.9 million (2017: 59,819 warrants and 19,599 RSUs, with a fair value of DKK 42.6 million). Please refer to note 4.6 for additional information regarding the "Number of RSUs held" and "Number of warrants held" overviews.

Changes compared to 2017: None.

Shareholding requirement for members of Executive Management

Purpose and link to strategy: Incentivize executives over the longer term aligned to strategy and creation of shareholder value

Performance metrics: None.

Opportunity: Each member of the Executive Management shall be required to hold a number of Genmab A/S shares corresponding to the value of such member's annual base salary:

- The number of shares shall be fixed at commencement of the employment as, or promotion to, member of the Executive Management
- May be built up over a five (5) year period from the date of employment or promotion
- For current members of the Executive Management, the number of shares is finally fixed at the date of adoption of these Remuneration Principles (April 10, 2018)
- The Board of Directors may diverge from this shareholding requirement

The Company shall be entitled to reclaim in full or in part variable components of remuneration paid to the member of the Executive Management on the basis of data, which proved to be misstated.

Warrants granted to the members of the Executive Management will be subject to an additional two (2) year lock-in period upon vesting.

Changes compared to 2017: New requirement starting in 2018.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

	Genmab Group					
	2018					
	Base Salary DKK'000	Defined Contribution Plans DKK'000	Other Benefits DKK'000	Annual Cash Bonus DKK'000	Share-Based compensation expenses DKK'000	Total DKK'000
Jan van de Winkel	7,087	1,160	242	6,378	13,420	28,287
David A. Eatwell	3,908	155	1,396	2,111	8,121	15,691
Judith Klimovsky	3,552	112	238	2,131	5,870	11,903
Total	14,547	1,427	1,876	10,620	27,411	55,881

	2017					
	2017					
	Base Salary DKK'000	Defined Contribution Plans DKK'000	Other Benefits DKK'000	Annual Cash Bonus DKK'000	Share-Based compensation expenses DKK'000	Total DKK'000
Jan van de Winkel	6,867	1,057	241	6,180	12,635	26,980
David A. Eatwell	3,961	177	1,045	2,139	7,949	15,271
Judith Klimovsky	3,083	81	6,595	1,944	2,159	13,862
Total	13,911	1,315	7,881	10,263	22,743	56,113

Severance Payments

In the event Genmab terminates the service agreements with each member of the Executive Management team without cause, Genmab is obliged to pay the Executive Officer his existing salary for one or two years after the end of the one year notice period. However, in the event of termination by Genmab (unless for cause) or by a member of Executive Management as a result of a change of control of Genmab, Genmab is obliged to pay a member of the Executive Management a compensation equal to his existing total salary (including benefits) for up to two years in addition to the notice period. It furthermore follows from Genmab's warrant and RSU programs, that in certain "good leaver" situations outstanding warrants and RSUs awarded under these programs will continue to vest which could potentially make the termination payments exceed two years of remuneration. In case of the termination of the service agreements of the Executive Management without cause, the total impact on our financial position is estimated to be approximately DKK 42.4 million as of December 31, 2018 (2017: DKK 40.3 million). Please refer to note 5.5 for additional information regarding the potential impact in the event of change of control of Genmab.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

Number of Ordinary Shares Owned and Share-Based Instruments Held

<u>Number of ordinary shares owned</u>	<u>December 31, 2017</u>	<u>Acquired</u>	<u>Sold</u>	<u>Transfers</u>	<u>December 31, 2018</u>	<u>Market value DKK'000*</u>
Board of Directors						
Mats Pettersson	10,000	14,800	—	—	24,800	26,474
Anders Gersel Pedersen	7,000	5,475	(4,475)	—	8,000	8,540
Pernille Erenbjerg	—	2,700	—	—	2,700	2,882
Paolo Paoletti	637	2,700	—	—	3,337	3,562
Rolf Hoffmann	1,050	—	—	—	1,050	1,121
Deirdre P. Connelly	—	2,200	—	—	2,200	2,349
Peter Storm Kristensen	—	—	—	—	—	—
Rick Hibbert	—	—	—	—	—	—
Daniel J. Bruno	—	—	—	—	—	—
	18,687	27,875	(4,475)	—	42,087	44,928
Executive Management						
Jan van de Winkel	640,000	22,400	—	—	662,400	707,112
David A. Eatwell	17,500	13,325	—	—	30,825	32,906
Judith Klimovsky	—	—	—	—	—	—
	657,500	35,725	—	—	693,225	740,018
Total	676,187	63,600	(4,475)	—	735,312	784,946

* Market value is based on the closing price of the parent company's shares on the NASDAQ Copenhagen A/S at the balance sheet date or the last trading day prior to the balance sheet date.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

Number of warrants held	December 31, 2017	Granted	Exercised	Expired	Transfers	December 31, 2018	Black-Scholes value warrants granted in 2018 DKK	Weighted average exercise price outstanding warrants DKK
Board of Directors								
Mats Pettersson	38,750	—	(12,500)	—	—	26,250	—	207.23
Anders Gersel Pedersen	32,750	—	(3,750)	—	—	29,000	—	116.83
Pernille Erenbjerg	—	—	—	—	—	—	—	—
Paolo Paoletti	—	—	—	—	—	—	—	—
Rolf Hoffmann	—	—	—	—	—	—	—	—
Deirdre P. Connelly	—	—	—	—	—	—	—	—
Peter Storm Kristensen*	2,515	—	—	—	—	2,515	—	663.38
Rick Hibbert*	1,451	350	(925)	—	—	876	128,113	998.81
Daniel J. Bruno*	16,776	2,811	(3,750)	—	—	15,837	1,028,927	922.01
	92,242	3,161	(20,925)	—	—	74,478	1,157,040	348.74
Executive Management								
Jan van de Winkel	164,802	23,266	(80,000)	—	—	108,068	8,516,194	748.36
David A. Eatwell	373,056	12,145	(50,000)	—	—	335,201	4,445,507	215.41
Judith Klimovsky	21,879	15,053	—	—	—	36,932	5,509,940	1,118.99
	559,737	50,464	(130,000)	—	—	480,201	18,471,641	404.84
Total	651,979	53,625	(150,925)	—	—	554,679	19,628,681	397.31

* Each employee-elected Board Member was granted warrants as an employee of Genmab A/S or its subsidiaries.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

<u>Number of RSUs held</u>	<u>December 31, 2017</u>	<u>Granted</u>	<u>Settled</u>	<u>Transfers</u>	<u>December 31, 2018</u>	<u>Fair value RSUs granted in 2018 DKK</u>
Board of Directors						
Mats Pettersson	4,818	780	(2,300)	—	3,298	799,500
Anders Gersel Pedersen	3,613	390	(1,725)	—	2,278	399,750
Pernille Erenbjerg	3,959	390	(2,700)	—	1,649	399,750
Paolo Paoletti	3,959	390	(2,700)	—	1,649	399,750
Rolf Hoffmann	1,509	390	—	—	1,899	399,750
Deirdre P. Connelly	1,509	585	—	—	2,094	599,625
Peter Storm Kristensen*	1,091	390	—	—	1,481	399,750
Rick Hibbert*	924	515	—	—	1,439	527,875
Daniel J. Bruno*	2,946	1,394	—	—	4,340	1,428,850
	24,328	5,224	(9,425)	—	20,127	5,354,600
Executive Management						
Jan van de Winkel	47,597	8,308	(22,400)	—	33,505	8,515,700
David A. Eatwell	29,056	4,337	(13,325)	—	20,068	4,445,425
Judith Klimovsky	7,204	5,375	—	—	12,579	5,509,375
	83,857	18,020	(35,725)	—	66,152	18,470,500
Total	108,185	23,244	(45,150)	—	86,279	23,825,100

* Each employee-elected Board Member was granted 390 RSUs as a member of the Board of Directors. The remaining RSUs were granted as an employee of Genmab A/S or its subsidiaries.

Following Genmab A/S' Annual General Meeting on April 10, 2018, the Board of Directors is comprised of five independent directors, one non-independent director, and three employee-elected directors. Mats Pettersson, Dr. Anders Gersel Pedersen, Deirdre P. Connelly, Pernille Erenbjerg, Rolf Hoffmann and Dr. Paolo Paoletti were re-elected to the Board of Directors for a one year period. The Board of Directors convened and constituted itself with Mats Pettersson as Chairman and Deirdre P. Connelly as Deputy Chairman. Other than the remuneration to the Board of Directors and the Executive Management and the transactions detailed in the tables above, no other significant transactions took place during 2018.

5.2—Related Party Disclosures

Genmab's related parties are the parent company's Board of Directors, Executive Management, and close members of the family of these persons.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

The Group's Transactions with the Board of Directors and Executive Management

Genmab has not granted any loans, guarantees, or other commitments to or on behalf of any of the members of the Board of Directors or Executive Management. Other than the remuneration and other transactions relating to the Board of Directors and Executive Management described in note 5.1, no other significant transactions have taken place with the Board of Directors or the Executive Management during 2018 and 2017.

5.3—Company Overview

Genmab A/S (parent company) holds investments either directly or indirectly in the following subsidiaries:

<u>Name</u>	<u>Domicile</u>	<u>Ownership and votes 2018</u>	<u>Ownership and votes 2017</u>
Genmab B.V.	Utrecht, the Netherlands	100%	100%
Genmab Holding B.V.	Utrecht, the Netherlands	100%	100%
Genmab US, Inc.	New Jersey, USA	100%	100%

5.4—Commitments

Guarantees and Collaterals

There were no bank guarantees as of December 31, 2018 or 2017.

Operating Leases

The group has entered into operating lease agreements with respect to office space and office equipment. The leases are non-cancelable for various periods up to 2027. Future minimum payments under our operating leases as of December 31, 2018 and December 31, 2017, are as follows:

	<u>2018 DKK'000</u>	<u>2017 DKK'000</u>
Payment due		
Within 1 year	34,663	30,646
From 1 to 5 years	108,060	106,266
After 5 years	40,988	52,603
Total	183,711	189,515
Expenses recognized in the income statement	31,789	31,687

Other Purchase Obligations

The group has entered into a number of agreements primarily related to research and development activities carried out by Genmab. Under the current development plans, the contractual obligations amounted to DKK 787.1 million (2017: DKK 356.0 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 5—OTHER DISCLOSURES (Continued)*****Accounting Policies******Leasing***

Lease contracts, which in all material respects transfer the significant risks and rewards associated with the ownership of the asset to the lessee, are classified as finance leases. Assets treated as finance leases are recognized in the balance sheet at the inception of the lease term at the lower of the fair value of the asset or the net present value of the future minimum lease payments. A liability equaling the asset is recognized in the balance sheet. Each lease payment is separated between a finance charge, recorded as a financial expense, and a reduction of the outstanding liability.

Assets under finance leases are depreciated in the same manner as owned assets and are subject to regular reviews for impairment. Lease contracts, where the lessor retains the significant risks and rewards associated with the ownership of the asset, are classified as operating leases. Lease payments under operating leases are recognized in the income statement over the lease term. The total lease commitment under operating leases is disclosed in the notes to the financial statements.

5.5—Contingent Assets, Contingent Liabilities and Subsequent Events***Contingent Assets and Liabilities******License and Collaboration Agreements***

We are entitled to potential milestone payments and royalties on successful commercialization of products developed under license and collaboration agreements with our partners. Since the size and timing of such payments are uncertain until the milestones are reached, the agreements may qualify as contingent assets. However, it is impossible to measure the value of such contingent assets, and, accordingly, no such assets have been recognized.

As part of the license and collaboration agreements that Genmab has entered into, once a product is developed and commercialized, Genmab may be required to make milestone and royalty payments. It is impossible to measure the value of such future payments, but Genmab expects to generate future income from such products which will exceed any milestone and royalty payments due, and accordingly no such liabilities have been recognized.

Derivative Financial Instruments

Genmab has entered into an International Swaps and Derivatives Association master agreement; see note 4.2. The master agreement with Genmab's financial institution counterparty also includes a credit support annex which contains provisions that require Genmab to post collateral should the value of the derivative liabilities exceed DKK 50.0 million (2017: DKK 50.0 million). As of December 31, 2018 and 2017, Genmab has not been required to post any collateral.

In addition, the agreement requires Genmab to maintain a cash position of DKK 258.5 million at all times or the counterparty has the right to terminate the agreement. Upon termination, the DKK 50.0 million (2017: DKK 50.0 million) threshold amount is no longer applicable and the value of the derivative liability, if any, could be due to the counterparty upon request.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 5—OTHER DISCLOSURES (Continued)*****Legal Matter—MorphoSys Patent Infringement Complaint***

In April 2016, MorphoSys filed a complaint at the U.S. District Court of Delaware against Genmab and Janssen Biotech, Inc. for patent infringement based on activities relating to the manufacture, use and sale of DARZALEX in the United States, which was subsequently amended to include two additional MorphoSys patents. In addition, a further claim by Janssen and us that the three MorphoSys patents were unenforceable due to inequitable conduct by MorphoSys was included in the case. On January 25, 2019, the District Court ruled on summary judgment that the three MorphoSys patents were invalid for lack of enablement. MorphoSys had the opportunity to appeal the District Court's decision. On January 31, 2019, MorphoSys dismissed its infringement claims against us and Janssen, and we and Janssen, in turn, dismissed our inequitable conduct claims against MorphoSys. As such, there will be no further proceedings in the case.

Change of Control

In the event of a change of control, change of control clauses are included in some of our collaboration, development and license agreements as well as in service agreements for certain employees.

Collaboration, Development and License Agreements

We have entered into collaboration, development and license agreements with external parties, which may be subject to renegotiation in case of a change of control event in Genmab A/S. However, any changes in the agreements are not expected to have significant influence on our financial position.

Service Agreements with Executive Management and Employees

The service agreements with each member of the Executive Management may be terminated by Genmab with no less than 12 months' notice and by the member of the Executive Management with no less than six months' notice. In the event of a change of control of Genmab, the termination notice due to the member of the Executive Management is extended to 24 months. In the event of termination by Genmab (unless for cause) or by a member of Executive Management as a result of a change of control of Genmab, Genmab is obliged to pay a member of Executive Management a compensation equal to his existing total salary (including benefits) for up to two years in addition to the notice period. In case of a change of control event and the termination of service agreements of the Executive Management, the total impact on our financial position is estimated to approximately DKK 97.9 million as of December 31, 2018 (2017: DKK 92.5 million).

In addition, Genmab has entered into service agreements with 26 (2017: 27) current employees according to which Genmab may become obliged to compensate the employees in connection with a change of control of Genmab. If Genmab as a result of a change of control terminates the service agreement without cause, or changes the working conditions to the detriment of the employee, the employee shall be entitled to terminate the employment relationship without further cause with one month's notice in which case Genmab shall pay the employee a compensation equal to one-half, one or two times the employee's existing annual salary (including benefits). In case of the change of control event and the termination of all 26 service agreements the total impact on our financial position is estimated to approximately DKK 80.5 million as of December 31, 2018 (2017: DKK 74.6 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**SECTION 5—OTHER DISCLOSURES (Continued)**

Please refer to note 4.6 for additional information regarding change of control clauses related to share-based instruments granted to the Executive Management and employees.

Subsequent Events

In February 2019, we reported that Janssen's Phase III study comparing the subcutaneous formulation of daratumumab to the intravenous formulation in patients with relapsed/refractory multiple myeloma (MM) met both co-primary endpoints of overall response rate and maximum trough concentration of daratumumab on day 1 of the third treatment cycle. In March 2019, regulatory submissions to the U.S. Food and Drug Administration (U.S. FDA) and European Medicines Agency (EMA) for label expansion to include the use of daratumumab in combination with lenalidomide and dexamethasone for the treatment of patients with newly diagnosed MM who are not candidates for high dose chemotherapy and autologous stem cell transplant (ASCT) was submitted by Janssen. The U.S. FDA plans to review the U.S. application under their Real-Time Oncology Review (RTOR) pilot program. In addition, in March 2019, Janssen made regulatory submissions to the U.S. FDA and the EMA for daratumumab in combination with bortezomib, thalidomide and dexamethasone as a frontline treatment of transplant-eligible patients with MM.

On January 25, 2019, the District Court ruled on summary judgment that the three MorphoSys patents were invalid for lack of enablement. MorphoSys had the opportunity to appeal the District Court's decision. In addition, a further claim by Janssen and us that the three MorphoSys patents were unenforceable due to inequitable conduct by MorphoSys was included in the case. On January 31, 2019, MorphoSys dismissed its infringement claims against us and Janssen, and we and Janssen, in turn, dismissed our inequitable conduct claims against MorphoSys. As such, there will be no further proceedings in the case.

Accounting Policies***Contingent Assets and Liabilities***

Contingent assets and liabilities are assets and liabilities that arose from past events but whose existence will only be confirmed by the occurrence or non-occurrence of future events that are beyond Genmab's control. Contingent assets and liabilities are not to be recognized in the financial statements, but are disclosed in the notes.

5.6—Fees to Auditors Appointed at the Annual General Meeting

	<u>2018</u>	<u>2017</u>
	<u>DKK'000</u>	<u>DKK'000</u>
PricewaterhouseCoopers		
Audit services	1,188	1,133
Audit-related services	56	379
Tax and VAT services	442	686
Other services	38	40
Total	<u>1,724</u>	<u>2,238</u>

Fees for other services than statutory audit of the financial statements provided by PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab amounted to DKK 0.5 million

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

SECTION 5—OTHER DISCLOSURES (Continued)

(DKK 1.1 million in 2017). Other services than statutory audit of the financial statements comprise services relating to tax and VAT compliance, agreed-upon procedures, opinions relating to grants, educational training and accounting advice.

5.7—Adjustments to Cash Flow Statement

	<u>Note</u>	<u>2018</u> <u>DKK'000</u>	<u>2017</u> <u>DKK'000</u>
Adjustments for non-cash transactions:			
Depreciation, amortization and impairment	3.1, 3.2	87,597	69,751
Net loss (gain) on sale of equipment		12	159
Share-based compensation expenses	2.3, 4.6	90,759	75,985
Provisions	3.4	230	—
Total adjustments for non-cash transactions		<u>178,598</u>	<u>145,895</u>
Changes in working capital:			
Receivables		(768,148)	270,352
Deferred income		—	(77,502)
Other payables		133,776	46,796
Total changes in working capital		<u>(634,372)</u>	<u>239,646</u>

**Unaudited Consolidated Statements of Comprehensive Income
for the Three Month Periods Ended March 31, 2019 and 2018**

	Note	Three Months Ended March 31	
		2019 DKK'000	2018 DKK'000
Revenue	2	591,009	681,012
Research and development expenses		(546,080)	(312,551)
General and administrative expenses		(70,853)	(44,416)
Operating expenses		(616,933)	(356,967)
Operating result		(25,924)	324,045
Net financial items	4	119,946	(68,480)
Net result before tax		94,022	255,565
Corporate tax		(21,813)	(56,991)
Net result		72,209	198,574
Basic net result per share		1.18	3.25
Diluted net result per share		1.17	3.20

Statement of Comprehensive Income

Net result	72,209	198,574
Other comprehensive income:		
<i>Amounts which will be re-classified to the income statement:</i>		
Adjustment of foreign currency fluctuations on subsidiaries	3,967	(4,891)
Total comprehensive income	76,176	193,683

The accompanying notes are an integral part of these unaudited consolidated interim financial statements.

Unaudited Consolidated Balance Sheets
as of March 31, 2019 and December 31, 2018

	Note	March 31, 2019 DKK'000	December 31, 2018 DKK'000
ASSETS			
Intangible assets		445,904	470,359
Property, plant and equipment		169,917	161,545
Right-of-use assets	7	197,940	—
Receivables		11,174	9,621
Deferred tax assets		374,257	386,449
Total non-current assets		1,199,192	1,027,974
Receivables		705,253	1,326,931
Marketable securities	3	5,653,459	5,573,187
Cash and cash equivalents		1,176,813	532,907
Total current assets		7,535,525	7,433,025
Total assets		8,734,717	8,460,999
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital		61,524	61,498
Share premium		8,063,977	8,058,614
Other reserves		95,674	91,707
Accumulated deficit		(94,013)	(197,459)
Total shareholders' equity		8,127,162	8,014,360
Provisions		1,860	1,430
Lease liabilities	7	168,274	—
Other payables		1,717	1,860
Total non-current liabilities		171,851	3,290
Corporate tax payable		—	126,964
Lease liabilities	7	31,155	—
Other payables		404,549	316,385
Total current liabilities		435,704	443,349
Total liabilities		607,555	446,639
Total shareholders' equity and liabilities		8,734,717	8,460,999

The accompanying notes are an integral part of these unaudited consolidated interim financial statements.

Unaudited Consolidated Statements of Cash Flows
for the Three Month Periods Ended March 31, 2019 and 2018

	Note	Three Months Ended	
		March 31	
		2019	2018
		DKK'000	DKK'000
Cash flows from operating activities			
Net result before tax		94,022	255,565
Reversal of financial items, net		(119,946)	68,480
Adjustments for non-cash transactions		69,060	33,800
Changes in working capital		732,813	102,768
Cash generated by operating activities before financial items		775,949	460,613
Financial interest received		13,555	8,706
Interest elements of lease payments	7	(1,825)	—
Financial expenses paid		(166)	(136)
Corporate taxes received/(paid)		(140,316)	(5,112)
Net cash generated by operating activities		647,197	464,071
Cash flows from investing activities			
Investments in tangible assets		(21,364)	(28,772)
Marketable securities bought	3	(641,819)	(1,444,625)
Marketable securities sold		649,649	790,630
Net cash used in investing activities		(13,534)	(682,767)
Cash flows from financing activities			
Warrants exercised		5,363	18,267
Shares issued for cash		26	65
Principal elements of lease payments		(7,163)	—
Purchase of treasury shares		—	(146,175)
Payment of withholding taxes on behalf of employees on net settled RSUs		(8,728)	—
Net cash used in financing activities		(10,502)	(127,843)
Changes in cash and cash equivalents		623,161	(346,539)
Cash and cash equivalents at the beginning of the period		532,907	1,347,545
Exchange rate adjustments		20,745	(44,231)
Cash and cash equivalents at the end of the period		1,176,813	956,775
Cash and cash equivalents include:			
Bank deposits and petty cash		1,176,813	956,775
Cash and cash equivalents at the end of the period		1,176,813	956,775

The accompanying notes are an integral part of these unaudited consolidated interim financial statements.

**Unaudited Consolidated Statements of Changes in Equity
for the Three Month Periods Ended March 31, 2019 and 2018**

	Number of shares	Share capital DKK'000	Share premium DKK'000	Translation reserves DKK'000	Accumulated deficit DKK'000	Shareholders' equity DKK'000
December 31, 2017	61,185,674	61,186	7,983,652	82,080	(1,854,726)	6,272,192
Change in accounting policy: Adoption of IFRS 15	—	—	—	—	150,648	150,648
Adjusted total equity at January 1, 2018	61,185,674	61,186	7,983,652	82,080	(1,704,078)	6,422,840
Net result	—	—	—	—	198,574	198,574
Other comprehensive income	—	—	—	(4,891)	—	(4,891)
Total comprehensive income	—	—	—	(4,891)	198,574	193,683
Transactions with owners:						
Exercise of warrants	65,419	65	18,267	—	—	18,332
Purchase of treasury shares	—	—	—	—	(146,175)	(146,175)
Share-based compensation expenses	—	—	—	—	21,430	21,430
Tax on items recognized directly in equity	—	—	—	—	9,993	9,993
March 31, 2018	61,251,093	61,251	8,001,919	77,189	(1,620,256)	6,520,103
December 31, 2018	61,497,571	61,498	8,058,614	91,707	(197,459)	8,014,360
Net result	—	—	—	—	72,209	72,209
Other comprehensive income	—	—	—	3,967	—	3,967
Total comprehensive income	—	—	—	3,967	72,209	76,176
Transactions with owners:						
Exercise of warrants	26,297	26	5,363	—	—	5,389
Share-based compensation expenses	—	—	—	—	35,813	35,813
Net settlement of RSUs	—	—	—	—	(8,728)	(8,728)
Tax on items recognized directly in equity	—	—	—	—	4,152	4,152
March 31, 2019	61,523,868	61,524	8,063,977	95,674	(94,013)	8,127,162

The accompanying notes are an integral part of these unaudited consolidated interim financial statements.

Notes to the Unaudited Consolidated Interim Financial Statements**NOTE 1—BASIS OF PRESENTATION****Nature of the Business**

Genmab A/S is a publicly traded, international biotechnology company specializing in the creation and development of differentiated antibody therapeutics for the treatment of cancer and other diseases. Founded in 1999, the company has two approved antibodies, a broad clinical and pre-clinical product pipeline and proprietary next generation antibody technologies.

Accounting Policies

The unaudited consolidated interim financial statements were prepared in accordance with International Accounting Standard No. 34 (IAS 34), "Interim Financial Reporting".

The unaudited consolidated interim financial statements have been prepared using the same accounting policies as outlined in section 1—Basis of Presentation in the consolidated financial statements as of December 31, 2018, except for the adoption of new accounting standards detailed below. These unaudited consolidated interim financial statements were approved by our Board of Directors on May 8, 2019.

Management Judgments and Estimates under IFRS

In preparing interim reports, certain provisions under IFRS require management to make judgments (various accounting estimates and assumptions) which may significantly impact the group's financial statements. The most significant judgments include, among other things, revenue recognition, share-based compensation, deferred tax assets, and recognition of internally generated intangible assets. For additional descriptions of significant judgments and estimates, refer to note 1.3 in the consolidated financial statements as of December 31, 2018.

Fair Value Measurement

For financial instruments that are measured in the balance sheet at fair value, IFRS 13 for financial instruments requires disclosure of fair value measurements by level of the following fair value measurement hierarchy for:

- Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2—Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices)
- Level 3—Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

DKK'000	Note	March 31, 2019			December 31, 2018		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets Measured at Fair Value							
Marketable securities	3	5,653,459	—	—	5,573,187	—	—

Marketable Securities

All fair market values are determined by reference to external sources using unadjusted quoted prices in established markets for our marketable securities (Level 1).

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 1—BASIS OF PRESENTATION (Continued)*****New Accounting Policies and Disclosures******IFRS 16 Leasing***

Effective January 1, 2019, we adopted IFRS 16 using the modified retrospective transition method. Under this method, all leases are recognized in the balance sheet as a right-of-use ("ROU") asset with a corresponding lease liability, except for short term assets in which the lease term is 12 months or less, or low value assets. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. The ROU asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis over the lease term. In the income statement, lease costs are replaced by depreciation of the ROU asset recognized over the lease term in operating expenses, and interest expenses related to the lease liability are classified in financial items. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

Genmab determines if an arrangement is a lease at inception. Genmab leases various properties and IT equipment. Rental contracts are typically made for fixed periods. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of fixed payments, less any lease incentives. As our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

ROU assets are measured at cost and include the amount of the initial measurement of lease liability, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs, and restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term of 12 months or less and low-value assets comprise IT equipment and small items of office furniture.

On adoption of IFRS 16, the group recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 3.7%.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 1—BASIS OF PRESENTATION (Continued)**

The impact of the adoption of IFRS 16 on the financial statements as of January 1, 2019 is shown in the table and further described below:

	<u>January 1, 2019</u>
	<u>DKK'000</u>
Operating lease commitments disclosed as at December 31, 2018	183,711
Discounted using the group's incremental borrowing rate of 3.7%	(42,461)
(Less): short-term leases recognized on a straight-line basis as expense	(2,874)
Add/(less): adjustments as a result of a different treatment of extension and termination options	66,392
Lease liability recognized at January 1, 2019	<u>204,768</u>

The ROU assets established at January 1, 2019 on the balance sheet was DKK 204.8 million. Net result decreased by DKK 1.5 million as a result of adopting IFRS 16 in the three months ended March 31, 2019. Cash flows from operating activities increased by DKK 8.7 million and cash flows from financing activities decreased by DKK 7.2 million as a result of adopting IFRS 16 in the three months ended March 31, 2019.

For purposes of applying the modified retrospective approach in adoption of IFRS 16, Genmab has used the following practical expedients permitted by the standard:

- applied the exemption not to recognize ROU assets and liabilities for leases with less than 12 months of lease term from January 1, 2019, and
- excluded initial direct costs for the measurement of the ROU assets at the date of initial application

There are no ROU assets that meet the definition of investment property.

NOTE 2—REVENUE

Genmab enters into license and collaboration agreements which are within the scope of IFRS 15, under which it licenses certain rights to its product candidates to third parties and also may participate in the development of the product candidates. The terms of these arrangements typically include payment to Genmab of one or more of the following: non-refundable, upfront license fees; exclusive designation fees; annual license maintenance fees; additional target fees; development, regulatory and commercial milestone payments; payments for research and development services; and royalties on net sales of licensed products. Each of these payments results in revenue from contracts with customers.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)
NOTE 2—REVENUE (Continued)

The table below disaggregates our revenue by type of payment and collaboration partner under our agreements, which provides additional information regarding how the nature, amount, timing and uncertainty of our revenue and cash flows might be affected by economic factors.

	Three Months Ended March 31	
	2019 DKK'000	2018 DKK'000
Revenue:		
Royalties	507,951	317,786
Milestone payments	—	—
License fees	—	304,055
Reimbursement income	83,058	59,171
Total	591,009	681,012
Revenue split by collaboration partner:		
Janssen (Darzalex/Daratumumab & DuoBody)	502,223	309,757
Novartis (Arzaerra/Ofatumumab)	5,796	312,544
Other collaboration partners	82,990	58,711
Total	591,009	681,012

NOTE 3—MARKETABLE SECURITIES

	March 31, 2019	December 31, 2018
	DKK'000	DKK'000 (full year)
Cost at the beginning of the period	5,493,957	4,194,743
Additions for the period	641,819	3,521,212
Disposals and maturities for the period	(645,980)	(2,221,998)
Cost at the end of the period	5,489,796	5,493,957
Fair value adjustment at the beginning of the period	79,230	(119,551)
Fair value adjustment for the period	84,433	198,781
Fair value adjustment at the end of the period	163,663	79,230
Net book value at the end of the period	5,653,459	5,573,187
Net book value in percentage of cost	103.0%	101.4%
Average effective duration	1.11	1.39

In accordance with the group's risk management guidelines, Genmab's marketable securities are administrated by two external investment managers who solely invest in securities from investment grade issuers. Genmab invests its cash in deposits with major financial institutions, Danish mortgage bonds and notes issued by Danish, European, and American governments.

As of March 31, 2019, 88% of our marketable securities had a triple A-rating, compared to 90% as of December 31, 2018.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 3—MARKETABLE SECURITIES (Continued)**

The total fair value adjustment for the three months ended March 31, 2019 was an income of DKK 84 million, which was driven primarily by foreign exchange adjustments of DKK 68 million due to the strengthening of the USD against the DKK which positively impacted our USD denominated portfolio.

NOTE 4—FINANCIAL INCOME AND EXPENSES

	Three Months Ended March 31	
	2019 DKK'000	2018 DKK'000
Financial income:		
Interest and other financial income	21,263	12,413
Realized and unrealized gains on marketable securities, net	16,194	—
Realized and unrealized gains on fair value hedges, net	—	2,282
Realized and unrealized exchange rate gains, net	84,479	—
Total financial income	121,936	14,695
Financial expenses:		
Interest and other financial expenses	1,990	136
Realized and unrealized losses on marketable securities, net	—	8,752
Realized and unrealized exchange rate losses, net	—	74,287
Total financial expenses	1,990	83,175
Net financial items	119,946	(68,480)

Realized and unrealized exchange rate gains, net of DKK 84 million in the three months ended March 31, 2019 were driven by the strengthening of the USD against the DKK which positively impacted our USD denominated portfolio and cash holdings. Realized and unrealized exchange rate losses, net of DKK 74 million in the three months ended March 31, 2018 were driven by foreign exchange movements, which negatively impacted our USD denominated portfolio and cash holdings.

The increase in interest and other financial expenses is driven by the interest expense recognized on the lease liability established as part of the adoption of IFRS 16. See note 1 for details of the adoption of IFRS 16 and note 7 for details of the interest expense related to the lease liability.

NOTE 5—SHARE-BASED INSTRUMENTS**Restricted Stock Unit Program**

Genmab A/S established a Restricted Stock Unit (RSU) program as an incentive for all the Genmab group's employees, members of the Executive Management, and members of the Board of Directors.

Under the terms of the RSU program, RSUs are subject to a cliff vesting period and become fully vested on the first banking day of the month following a period of three years from the date of grant. Within 30 days of the vesting date, the holder of an RSU receives one share in Genmab A/S for each RSU.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 5—SHARE-BASED INSTRUMENTS (Continued)**

Our Board of Directors, under two separate authorizations, is currently authorized to repurchase up to a total of 1,000,000 shares (with a nominal value of DKK 1,000,000) at a price per share that may not deviate by more than 10% from the price quoted on Nasdaq Copenhagen at the time of the acquisition. The first authorization, granted on March 17, 2016, authorizes the Board of Directors to repurchase up to a total of 500,000 shares (with a nominal value of DKK 500,000) and shall lapse on March 17, 2021. The second authorization, granted on March 29, 2019, authorizes the Board of Directors to repurchase up to an additional 500,000 shares (with a nominal value of DKK 500,000) and shall lapse on March 28, 2024. The authorizations are intended to cover obligations in relation to the RSU program and reduce the dilution effect of share capital increases resulting from future exercises of warrants. As of March 31, 2019, we repurchased a total of 225,000 shares (with a nominal value of DKK 225,000) under the first authorization and have not repurchased any shares under the second authorization. As of March 31, 2019, up to a further 275,000 shares (with a nominal value of up to DKK 275,000) can be repurchased under the first authorization.

During the three months ended March 31, 2019, there were no acquisitions of treasury shares. During the three months ended March 31, 2018, Genmab acquired 125,000 of its own shares, approximately 0.2% of share capital, to cover its future obligations under the RSU program. The total amount paid to acquire the shares, including directly attributable costs, was DKK 146 million and has been recognized as a deduction to shareholders' equity. These shares are classified as treasury shares and are presented within accumulated deficit as of March 31, 2019 and March 31, 2018.

The shares were acquired in accordance with the authorization granted by the Annual General Meeting on March 17, 2016 and the acquisition was carried out in compliance with applicable laws, the Nasdaq Copenhagen issuer rules and Genmab's internal policies on trading with shares of Genmab A/S.

RSU Activity

The RSU activity in the three months ended March 31, 2019 and 2018, respectively, is outlined below.

	Three Months Ended March 31	
	2019	2018
Outstanding RSUs at January 1	218,902	168,044
Granted	8,967	—
Vested	(22,189)	(42,050)
Forfeited/Cancelled	(2,318)	(485)
Outstanding RSUs at March 31	203,362	125,509

During the three months ended March 31, 2019, 8,967 RSUs were granted with a weighted average fair value of DKK 1,159.28 per RSU. There were no RSUs granted during the three months ended March 31, 2018.

During the three months ended March 31, 2019, 22,189 RSUs vested and a corresponding amount of treasury shares were issued to cover the obligation. During the three months ended March 31, 2018, 42,050 RSUs vested and a corresponding amount of treasury shares were issued to cover the obligation.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 5—SHARE-BASED INSTRUMENTS (Continued)**

As of March 31, 2019, 163,921 treasury shares were held by Genmab to cover its future obligations in relation to the RSU program.

Genmab settles RSUs using shares issued from treasury stock. A portion of the settlement is withheld to satisfy individual statutory tax withholding obligations which remain in our treasury share account.

Warrant Program

Genmab A/S established warrant programs as an incentive for all the Genmab group's employees, and members of the Executive Management.

Warrants Granted from August 2004 until April 2012

Under the August 2004 warrant program, warrants vest annually over a four year period on the anniversary of the grant date. Warrants granted under the August 2004 warrant program will lapse on the tenth anniversary of the grant date. As a general rule, the warrant holder may only exercise 25% of the warrants granted per full year of employment or affiliation with Genmab after the grant date. However, the warrant holder will be entitled to retain rights to exercise all warrants on a regular schedule in instances where the employment relationship is terminated by Genmab without cause.

Warrants Granted from April 2012 until March 2017

In April 2012, a new warrant program was adopted by the Board of Directors. Whereas warrants granted under the August 2004 warrant program will lapse on the tenth anniversary of the grant date, warrants granted under the April 2012 warrant program will lapse at the seventh anniversary of the grant date. All other terms in the warrant programs are identical.

Warrants Granted from March 2017

In March 2017, a new warrant program was adopted by the Board of Directors. Whereas warrants granted under the April 2012 warrant program vested annually over a four year period, warrants granted under the new March 2017 warrant program are subject to a cliff vesting period and become fully vested three years from the date of grant. All other terms in the warrant programs are identical.

Warrant Activity

The warrant activity in the three months ended March 31, 2019 and 2018 is outlined below.

	Three Months Ended March 31	
	2019	2018
Outstanding warrants at January 1	1,423,210	1,518,186
Granted	28,017	—
Exercised	(26,297)	(65,419)
Expired/lapsed/cancelled	(5,035)	(6,283)
Outstanding warrants at March 31	1,419,895	1,446,484

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)**NOTE 5—SHARE-BASED INSTRUMENTS (Continued)**

During the three months ended March 31, 2019, 28,017 warrants were granted to our employees with a weighted average exercise price of 1,159.28 per warrant and a weighted average Black-Scholes fair market value of DKK 371.12 per warrant. There were no warrants granted during the three months ended March 31, 2018.

During the three months ended March 31, 2019, 26,297 warrants were exercised with a weighted average exercise price of DKK 204.92 with proceeds to Genmab of DKK 5 million. The warrants exercised increased share capital accordingly and corresponded to approximately 0.04% of share capital. During the three months ended March 31, 2018, 65,419 warrants were exercised with a weighted average exercise price of DKK 280.22 with proceeds to Genmab of DKK 18 million. The warrants exercised increased share capital accordingly and corresponded to approximately 0.11% of share capital.

Share-based compensation expenses for the three months ended March 31, 2019 totaled DKK 36 million compared to DKK 21 million for the three months ended March 31, 2018.

NOTE 6—SHAREHOLDINGS BY THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT

The tables below set forth certain information regarding the beneficial ownership of the issued share capital and the outstanding share-based instruments held by the members of the Board of Directors and the Executive Management as of March 31, 2019.

	December 31, 2018	Acquired	Sold	Transferred	March 31, 2019
Number of ordinary shares owned					
Board of Directors					
Mats Pettersson	24,800	957	—	—	25,757
Anders Gersel Pedersen	8,000	718	—	—	8,718
Pernille Erenbjerg	2,700	478	—	—	3,178
Paolo Paoletti	3,337	478	—	—	3,815
Rolf Hoffmann	1,050	—	—	—	1,050
Deirdre P. Connelly	2,200	—	—	—	2,200
Peter Storm Kristensen	—	—	—	—	—
Rick Hibbert	—	—	—	—	—
Mijke Zachariasse	—	—	—	—	—
Daniel Bruno	—	—	—	—	—
	<u>42,087</u>	<u>2,631</u>	<u>—</u>	<u>—</u>	<u>44,718</u>
Executive Management					
Jan van de Winkel	662,400	6,084	—	—	668,484
David A. Eatwell	30,825	4,436	—	—	35,261
Judith Klimovsky	—	—	—	—	—
	<u>693,225</u>	<u>10,520</u>	<u>—</u>	<u>—</u>	<u>703,745</u>
Total	<u>735,312</u>	<u>13,151</u>	<u>—</u>	<u>—</u>	<u>748,463</u>

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)

NOTE 6—SHAREHOLDINGS BY THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT (Continued)

	December 31, 2018	Granted	Exercised	Transferred	March 31, 2019
Number of warrants held					
Board of Directors					
Mats Pettersson	26,250	—	—	—	26,250
Anders Gersel Pedersen	29,000	—	—	—	29,000
Pernille Erenbjerg	—	—	—	—	—
Paolo Paoletti	—	—	—	—	—
Rolf Hoffmann	—	—	—	—	—
Deirdre P. Connelly	—	—	—	—	—
Peter Storm Kristensen	2,515	—	—	—	2,515
Rick Hibbert	876	—	—	(876)	—
Mijke Zachariasse	—	—	—	557	557
Daniel Bruno	15,837	—	—	—	15,837
	74,478	—	—	(319)	74,159
Executive Management					
Jan van de Winkel	108,068	—	—	—	108,068
David A. Eatwell	335,201	—	—	—	335,201
Judith Klimovsky	36,932	—	—	—	36,932
	480,201	—	—	—	480,201
Total	554,679	—	—	(319)	554,360

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)
NOTE 6—SHAREHOLDINGS BY THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT (Continued)

	December 31, 2018	Granted	Settled	Transferred	March 31, 2019
Number of RSUs held					
Board of Directors					
Mats Pettersson	3,298	—	(957)	—	2,341
Anders Gersel Pedersen	2,278	—	(718)	—	1,560
Pernille Erenbjerg	1,649	—	(478)	—	1,171
Paolo Paoletti	1,649	—	(478)	—	1,171
Rolf Hoffmann	1,899	—	—	—	1,899
Deirdre P. Connelly	2,094	—	—	—	2,094
Peter Storm Kristensen	1,481	—	—	—	1,481
Rick Hibbert	1,439	—	—	(1,439)	—
Mijke Zachariasse	—	—	—	188	188
Daniel Bruno	4,340	—	—	—	4,340
	20,127	—	(2,631)	(1,251)	16,245
Executive Management					
Jan van de Winkel	33,505	—	(11,387)	—	22,118
David A. Eatwell	20,068	—	(7,693)	—	12,375
Judith Klimovsky	12,579	—	—	—	12,579
	66,152	—	(19,080)	—	47,072
Total	86,279	—	(21,711)	(1,251)	63,317

Following Genmab A/S' Annual General Meeting on March 29, 2019, the Board of Directors is comprised of five independent directors, one non-independent director, and three employee-elected directors. Mats Pettersson, Dr. Anders Gersel Pedersen, Deirdre P. Connelly, Pernille Erenbjerg, Rolf Hoffmann and Dr. Paolo Paoletti were re-elected to the Board of Directors for a one year period. Peter Storm Kristensen, Mijke Zachariasse and Dan Bruno were elected to the Board of Directors by the employees for a three year period. Dr. Rick Hibbert stepped down from the Board of Directors. The reclassification of the employee elected board members' shares and share-based instruments is shown in the transferred column of the tables above. The Board of Directors convened and constituted itself with Mats Pettersson as Chairman and Deirdre P. Connelly as Deputy Chairman.

Other than the remuneration to the Board of Directors and the Executive Management and the transactions detailed in the tables above, no other significant transactions with the Board of Directors or the Executive Management took place during the three months ended March 31, 2019. For further information on the remuneration of the Board of Directors and the Executive Management, refer to note 5.1 in the 2018 annual report.

Genmab settles RSUs using shares issued from treasury stock. A portion of the settlement is withheld to satisfy individual statutory tax withholding obligations which remain in our treasury share account.

Notes to the Unaudited Consolidated Interim Financial Statements (Continued)

NOTE 7—LEASES

Amounts recognized in the balance sheet

The balance sheet shows the following amounts relating to leases:

	March 31, 2019	December 31, 2018
	DKK'000	DKK'000
Right-of-use assets		
Properties	192,508	—
Equipment	5,432	—
Total right-of-use assets	197,940	—
Lease liabilities		
Current	31,155	—
Non-current	168,274	—
Total lease liabilities	199,429	—

There were no additions to the right-of-use assets in the three months ended March 31, 2019.

Amounts recognized in the statement of comprehensive income

The statement of comprehensive income shows the following amounts relating to leases:

	Three Months Ended March 31	
	2019	2018
	DKK'000	DKK'000
Depreciation charge of right-of-use assets		
Properties	6,574	—
Equipment	320	—
Total depreciation charge of right-of-use assets	6,894	—
Interest expense	1,825	—
Expense relating to short-term leases	718	—

Interest expense is included in net financial items and expenses relating to short-term leases are included in operating expenses in the statement of comprehensive income.

Please refer to note 1 for disclosure of the impact of adoption of IFRS 16 on our unaudited consolidated interim financial statements. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

NOTE 8—SUBSEQUENT EVENTS TO THE BALANCE SHEET DATE

No events have occurred subsequent to the balance sheet date that could significantly affect the financial statements as of March 31, 2019.

Through and including _____, 2019 (the 25th day after the date of this prospectus), all dealers effecting transactions in the ADSs, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

American Depositary Shares



Genmab A/S

Representing Ordinary Shares

P R O S P E C T U S

BofA Merrill Lynch

Morgan Stanley

Jefferies

, 2019

PART II

Information Not Required in Prospectus

Item 6. Indemnification of Directors and Officers.

According to the DCA, shareholders, at the general meeting, are permitted to discharge our board members and registered managers from liability for any particular financial year based on a resolution relating to the period covered by the financial statements for the previous financial year. This discharge means that the shareholders will relieve such board members and registered managers from liability to us. However, shareholders cannot discharge any claims by individual shareholders or other third parties. In addition, the discharge can be set aside in case the general meeting prior to its decision to discharge was not presented with all reasonable information necessary for the general meeting to assess the matter at hand.

In addition, we provide our board members and registered managers with directors' and officers' liability insurance.

The underwriting agreement, a form of which is filed as Exhibit 1.1 to this registration statement will also provide for indemnification of us and our directors and members of senior management upon the terms and subject to the conditions specified therein.

Item 7. Recent Sales of Unregistered Securities.

In the past three years, we have issued shares, warrants and RSUs, which were not registered under the Securities Act, in connection with incentive programs we established for our employees, board members and registered managers. See "Management—Compensation—Warrant Program" for a description of the terms of our Warrant Program and "Management—Compensation—Restricted Stock Unit Program" for a description of the terms of our RSU program.

In 2016, we:

- i. Issued 818,793 new shares pursuant to the exercise of warrants issued under our Warrant Program, at a subscription price of DKK 31.75 to DKK 636.50 per share, for total proceeds of DKK 209.4 million;
- ii. Granted 32,748 RSUs to certain members of our Board, registered managers and employees pursuant to our RSU program; and
- iii. Granted 150,065 warrants, with a weighted average exercise price of DKK 1,100.22, to certain of our employees and registered managers pursuant to our Warrant Program.

In 2017, we:

- i. Issued 835,618 new shares pursuant to the exercise of warrants issued under our Warrant Program, at a subscription price of DKK 31.75 to DKK 1,233.00 per share, for total proceeds of DKK 214.9 million;
- ii. Granted 65,951 RSUs to certain members of our Board, registered managers and employees pursuant to our RSU program; and
- iii. Granted 182,689 warrants, with a weighted average exercise price of DKK 1,123.91, to certain of our employees and registered managers pursuant to our Warrant Program.

In 2018, we:

- i. Issued 311,897 new shares pursuant to the exercise of warrants issued under our Warrant Program, at a subscription price of DKK 40.41 to DKK 1,233.00 per share, for total proceeds of DKK 75.2 million;

- ii. Settled 47,450 RSUs of certain members of our Board, registered managers and employees pursuant to the vesting of such RSUs under the terms of our RSU program, in each case using shares we acquired in the open market;
- iii. Granted 102,639 RSUs to certain members of our Board, registered managers and employees pursuant to our RSU program, and
- iv. Granted 276,507 warrants, with a weighted average exercise price of DKK 1,034.66, to certain of our employees and registered managers pursuant to our Warrant Program.

In the three months ended March 31, 2019, we:

- i. Issued 26,927 new shares pursuant to the exercise of warrants issued under our Warrant Program, at a subscription price of DKK 40.41 to DKK 636.50 per share, for total proceeds of DKK 5.4 million;
- ii. Settled 22,189 RSUs of certain members of our Board and registered managers, and employees pursuant to the vesting of such RSUs under the terms of our RSU program, in each case using shares we acquired in the open market;
- iii. Granted 8,967 RSUs to certain of our employees pursuant to our RSU program, and
- iv. Granted 28,017 warrants, with a weighted average exercise price of DKK 1,159.28, to certain of our employees pursuant to our Warrant Program.

The transactions described above were made outside the United States pursuant to Regulation S, or to U.S. persons pursuant to (i) Rule 701 promulgated under the Securities Act, in that the securities were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701, or (ii) to U.S. persons pursuant to Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering.

Item 8. Exhibits and Financial Statement Schedules.

(a) **Exhibits.** See the Exhibit Index attached to this registration statement, which is incorporated by reference herein.

(b) **Financial Statement Schedules.** Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

Item 9. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
1.1*	Form of Underwriting Agreement.
3.1	English translation of Articles of Association of Genmab A/S, as currently in effect.
4.1**	Form of Deposit Agreement (incorporated by reference to Exhibit 99.(A) of the Company's Form F-6 filed with the SEC on May 22, 2013).
4.2**	Form of Amendment to Deposit Agreement (incorporated by reference to Exhibit 99.(A)(2) of the Company's registration statement on Form F-6 filed with the SEC on April 13, 2018).
4.3**	Form of American Depositary Receipt (included in Exhibit 4.2).
5.1*	Opinion of Kromann Reumert as to the validity of the shares.
10.1†**	License Agreement, dated as of August 30, 2012, by and between Janssen Biotech, Inc. and Genmab A/S, as amended.
10.2†**	Amendment Number 1 to the License Agreement, dated as of January 31, 2013, by and between Janssen Biotech, Inc. and Genmab A/S.
10.3†**	Amendment Number 2 to the License Agreement, dated as of October 10, 2013, by and between Janssen Biotech, Inc. and Genmab A/S.
10.4†**	License and Collaboration Agreement, dated as of October 7, 2011, by and between Seattle Genetics, Inc. and Genmab A/S.
10.5†**	Co-development and Collaboration Agreement, dated as of December 19, 2006, by and between Glaxo Group Limited and Genmab A/S.
10.6†**	Amendment Number 1 to the Co-development and Collaboration Agreement, dated as of June 30, 2008, by and between Glaxo Group Limited and Genmab A/S.
10.7†**	Amendment Number 2 to the Co-development and Collaboration Agreement, dated as of December 18, 2008, by and between Glaxo Group Limited and Genmab A/S.
10.8†**	Amendment Number 3 to the Co-development and Collaboration Agreement, dated as of July 1, 2010, by and between Glaxo Group Limited and Genmab A/S.
10.9†**	Amendment Number 4 to the Co-development and Collaboration Agreement, dated as of December 20, 2010, by and between Glaxo Group Limited and Genmab A/S.
10.10†**	Novation Agreement, dated as of November 3, 2014, by and among Glaxo Group Limited, Novartis Pharma AG and Genmab A/S.
10.11†**	Amendment Number 5 to the Co-development and Collaboration Agreement, dated as of January 22, 2018, by and between Novartis Pharma AG and Genmab A/S.
10.12†**	Amended and Restated Evaluation and Commercialization Agreement, dated as of July 12, 2012, by and among Bristol-Myer Squibb Corporation, Medarex, Inc., GenPharm International, Inc. and Genmab A/S.
21.1**	List of subsidiaries of Genmab A/S.
23.1*	Consent of PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab.
23.2*	Consent of Kromann Reumert (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).

* To be filed by amendment.
** Previously filed.

† Portions of this exhibit, marked by brackets, have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K under the Securities Act of 1933, as amended, because they are both (i) not material and (ii) would likely cause competitive harm to the registrant if publicly disclosed.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this Registration Statement on Form F-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Copenhagen, Denmark, on _____, 2019.

By: _____

Name:

Title:

Each of the undersigned members of the board of directors of the Registrant hereby severally constitutes and appoints _____ and _____ as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any subsequent registration statements pursuant to Rule 462 of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agents, each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Jan G. J. van de Winkel	President & Chief Executive Officer (Principal Executive Officer)	, 2019
_____ David A. Eatwell	Executive Vice President & Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	, 2019
_____ Mats Pettersson	Chairman of the Board of Directors	, 2019
_____ Deirdre P. Connelly	Deputy Chairman of the Board of Directors	, 2019
_____ Anders Gersel Pedersen	Director	, 2019

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Pernille Erenbjerg	Director	, 2019
_____ Paolo Paoletti	Director	, 2019
_____ Rolf Hoffman	Director	, 2019
_____ Peter Storm Kristensen	Director	, 2019
_____ Mijke Zachariasse	Director	, 2019
_____ Daniel J. Bruno	Director	, 2019

Signature of Authorized U.S. Representative of Registrant

Pursuant to the requirements of the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of Genmab A/S, has signed this Registration Statement on _____, 2019.

By: _____

Name:

Title:

II-7

(Unauthorized English translation)

(April 2, 2019)

Articles of Association

of

Genmab A/S
(CVR-nr. 21023884
Formerly A/S registration no.: 248.498)

Name, Registered Office, Objects and Group Language

§ 1.

The name of the Company is Genmab A/S.

§ 2.

The registered office of the Company shall be in the municipality of Copenhagen.

§ 3.

The objects of the Company are to engage in medical research, production and sale of such products and related business.

§ 3A.

The group language of the Company is English.

The Company's Share Capital

§ 4.

The share capital of the Company equals DKK 61,670,829 divided into shares of DKK 1 each or any multiple hereof.

§ 4A.

The Board of Directors is until April 10, 2023 authorized to increase the nominal registered share capital on one or more occasions without pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares of the Company. The capital increase can be made by cash or by non-cash payment. Within the authorization to increase the share capital by nominally DKK 7,500,000 shares, the Board of Directors may on one or more occasions and without pre-emption rights for the existing shareholders of the Company issue up to nominally DKK 2,000,000 shares to employees of the Company and the Company's directly and indirectly owned subsidiaries by cash payment at market price or at a discount price as well as by the issue of bonus shares. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be

negotiable instruments, issued in the name of the holder and registered in the name of the holder in the Company's Register of Shareholders. The new shares shall give right to dividends and other rights as determined by the Board in its resolution to increase the capital.

Further, the Board of Directors is until April 10, 2023 authorized to increase the nominal registered share capital on one or more occasions with pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares of the Company. The capital increase can be made by cash or by non-cash payment. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be negotiable instruments, issued in the name of the holder and registered in the name of the holder in the Company's Register of Shareholders. The new shares shall give right to dividends and other rights as determined by the Board in its resolution to increase the capital.

In connection with the exercise of these authorizations, the Board of Directors may, however, not increase the nominal registered share capital by more than a total of DKK 7,500,000.

Warrants

§ 5.

By decision of the General Meeting on April 9, 2014 the Board of Directors is authorized to issue on one or more occasions warrants to subscribe the Company's shares up to a nominal value of DKK 500,000 and to make the related capital increases in cash up to a nominal value of DKK 500,000. The Board of Directors has issued 500,000 warrants and re-issued 33,197 warrants under this authorization. This authorization shall remain in force for a period ending on April 9, 2019.

Moreover, by decision of the General Meeting on March 28, 2017 the Board of Directors is authorized to issue on one or more occasions additional warrants to subscribe the Company's shares up to a nominal value of DKK 500,000 and to make the related capital increases in cash up to a nominal value of DKK 500,000. The Board of Directors has issued 346,337 warrants and re-issued 6,109

warrants under this authorization. This authorization shall remain in force for a period ending on March 28, 2022.

Furthermore, by decision of the General Meeting on March 29, 2019 the Board of Directors is authorized to issue on one or more occasions additional warrants to subscribe the Company's shares up to a nominal value of DKK 500,000 to the Company's employees as well as employees of the Company's directly and indirectly owned subsidiaries, excluding the Company's executive management, and to make the related capital increases in cash up to a nominal value of DKK 500,000. The Board of Directors has issued 8,035 warrants under this authorization. This authorization shall remain in force for a period ending on March 28, 2024.

The authorizations entitle the Board of Directors to issue warrants to the Company's employees as well as employees of the Company's directly and indirectly owned subsidiaries however, with the authorization of March 29, 2019 not comprising the Company's executive management. Subject to the rules in force at any time, the Board of Directors may re-use or re-issue lapsed nonexercised warrants, if any, provided that the re-use or re-issue occurs under the same terms and within the time limitations set out in this authorization. Re-use is to be construed as the Board of Directors' entitlement to let another party enter into an existing agreement on warrants. Re-issue is to be construed as the Board of Directors' option to re-issue new warrants under the same authorization, if previously issued warrants have lapsed. The existing shareholders of the Company shall not have a right of pre-emption in connection with the issue of warrants based on these authorizations. One warrant shall give the right to subscribe one share with a nominal value of DKK 1 at a subscription price per share determined by the Board of Directors which, however, shall be no less than the market price per share of the Company's shares at the time of issue.

The exercise period for the issued warrants shall be determined by the Board of Directors.

The Board of Directors is authorized to set out more detailed terms for the warrants that are to be issued based on these authorizations.

The existing shareholders of the Company shall not have a right of pre-emption in connection with issue of shares on the basis of warrants. The shares that are issued through the exercise of warrants shall have the same rights as existing shares cf. these Articles of Association.

The Board of Directors has exercised the above authorizations as stipulated in schedule A which is an integral part of these articles.

§ 5A.

The Board of Directors shall be authorized, until March 17, 2021, by one or more issues to raise loans against bonds or other financial instruments up to a maximum amount of DKK 3 billion with a right for the lender to convert his claim to a maximum of nominally DKK 4,000,000 equivalent to 4,000,000 new shares (convertible loans). Convertible loans may be raised in DKK or the equivalent in foreign currency (including US dollar (USD) or euro (EUR)) computed at the rates of exchange ruling at the day of loan. The Board of Directors is also authorized to effect the consequential increase of the capital. Convertible loans may be raised against payment in cash or in other ways. The subscription of shares shall be without pre-emption rights for the shareholders and the convertible loans shall be offered at a subscription price and conversion price that in the aggregate at least corresponds to the market price of the shares at the time of the decision of the Board of Directors. The time limit for conversion may be fixed for a longer period than five (5) years after the raising of the convertible loan. The terms for raising of convertible loans as well as time and terms for the capital increase shall be decided by the Board of Directors in accordance with section 169 of the Companies Act. If the Board of Directors exercises the authorization new shares shall be negotiable instruments, issued in the name of the holder and carry dividend as of a date to be fixed by the Board of Directors. No restrictions shall apply as to the pre-emption right of the new shares, and shall rank pari passu with existing shares with respect to rights, redeemability and negotiability. The Board of Directors is authorized to amend the Articles of Association as necessary in connection with the capital increases being effected.

The Board of Directors shall be authorized, until March 17, 2021, by one or more issues to raise loans against bonds or other financial instruments up to a maximum amount of DKK 3 billion with a right for the lender to convert his claim to a maximum of nominally DKK 4,000,000 equivalent to 4,000,000 new shares (convertible loans). Convertible loans may be raised in DKK or the equivalent in foreign currency (including US dollar (USD) or euro (EUR)) computed at the rates of

exchange ruling at the day of loan. The Board of Directors is also authorized to effect the consequential increase of the capital. Convertible loans may be raised against payment in cash or in other ways. The subscription of shares shall be with pre-emption rights for the shareholders and the convertible loans shall be offered at a subscription price and conversion price that in the aggregate at least corresponds to the market price of the shares at the time of the decision of the Board of Directors. The time limit for conversion may be fixed for a longer period than five (5) years after the raising of the convertible loan. The terms for raising of convertible loans as well as time and terms for the capital increase shall be decided by the Board of Directors in accordance with section 169 of the Companies Act. If the Board of Directors exercises the authorization new shares shall be negotiable instruments, issued in the name of the holder and carry dividend as of a date to be fixed by the Board of Directors. No restrictions shall apply as to the pre-emption right of the new shares, and shall rank pari passu with existing shares with respect to rights, redeemability and negotiability. The Board of Directors is authorized to amend the Articles of Association as necessary in connection with the capital increases being effected.

In connection with the exercise of these authorizations, the Board of Directors may, however, not raise loans against bonds or other financial instruments up to more than a total of DKK 3 billion and increase the nominal registered share capital by more than a total of DKK 4,000,000, equivalent to 4,000,000 new shares.

§ 6.

The shares are issued in the name of the holder and are entered in the name of their holders in the Company's Register of Shareholders. Until the board decides otherwise the register of shareholders shall be kept by VP Services A/S (CVR no. 30201183), which has been designated as the Company's registrar.

No restrictions shall apply to the transferability of the shares. The shares shall be negotiable instruments.

No shares shall confer any special rights upon the holder, and no shareholder shall be under an obligation to allow his shares to be redeemed.

§ 7.

The shares shall be issued through VP Securities A/S. The distribution of dividends etc. shall be subject to the rules of VP Securities A/S.

The General Meeting

§ 8.

The Company's General Meetings shall be held in the municipality of Copenhagen or in the greater Copenhagen area.

Annual General Meetings shall be held each year not later than four (4) months after the end of the financial year.

Extraordinary General Meetings shall be held when resolved by the Board of Directors or one of the Company's auditors appointed by the General Meeting, or when the Board of Directors is so requisitioned in writing and by shareholders holding not less than one-twentieth of the Company's share capital who wishes to have a specific subject discussed on the General Meeting. When so requisitioned the Board of Directors shall within two (2) weeks convene an extraordinary General Meeting by giving the shortest possible notice.

The Board of Directors shall call the General Meeting with no less than three (3) weeks' notice and not more than five (5) weeks' notice by notification to Nasdaq Copenhagen and by posting on the Company's website (www.genmab.com). The length of the notice shall be reckoned from the first advertisement. General meetings shall moreover be convened by sending a notice to all shareholders entered in the Company's Register of Shareholders having so requested, to the address, including the e-mail address, cf. § 16, indicated to the Company.

The notice calling the general meeting as well as other documents prepared for and in connection with the general meeting shall be prepared in English and, if decided by the Board of Directors, also in Danish.

In order to be transacted at the Annual General Meeting, resolutions proposed by the shareholders shall be submitted in writing to the Board of Directors no less than six (6) weeks prior to the date of the Annual General Meeting.

§ 9.

The information referred to in section 99 (1) of the Danish Companies Act must be available for inspection on the Company's website for a period of at least three (3) consecutive weeks before the date of the General Meeting.

As a minimum, this information shall include:

1. The notice.
2. The total share capital and the total number of voting rights on the date of the notice.
3. The documents to be submitted at the General Meeting, including with respect to the Annual General Meeting the audited Annual Report.
4. The agenda and the complete proposals.
5. The forms to be used for voting by proxy or postal voting, unless these forms have been sent directly to the shareholders.

§ 10.

Each share of DKK 1 entitles the shareholder to one vote.

Shareholders who are registered in the Company's Register of Shareholders one week before the date of the General Meeting or shareholders from whom the Company no later than one week before the General Meeting has received a request for registration in the Register of Shareholders may attend and vote at the General Meeting. In order to attend General Meetings, shareholders must also obtain an admission card from the Company no later than three (3) days before the date of the meeting.

Shareholders may appear in person or by proxy and may be accompanied by an advisor just as a proxy may be accompanied by an advisor. Voting rights may be exercised under the instrument of proxy subject to the proxy, against the delivery of the instrument of proxy, having obtained an admission card to appear on behalf of the shareholder issuing the instrument. The holder of the proxy shall present a written and dated instrument of proxy.

Shareholders may vote by post, i.e. cast their votes in writing before the General Meeting. The postal vote certificate must reach the Company at 10.00 AM the day before the date of the General Meeting. To ensure identification of each

shareholder voting by post, the shareholder must sign the postal vote certificate and state its full name and address in block letters or type as well as its VP-reference number. If the shareholder is a legal person, its Central Business Register (CVR) number or other similar identification must also be clearly specified in the certificate.

§ 11.

The Board of Directors shall appoint a chairman to preside at the General Meeting. The chairman shall decide all matters relating to the transaction of business and voting, including the issue of whether a written poll shall be taken.

Unless otherwise provided by the Companies Act all business transacted at General Meetings shall be resolved upon a simple majority of votes.

Unless the Companies Act otherwise provides, the adoption of any resolution to alter the Company's Articles of Association or wind up the Company shall be subject to the affirmative vote of not less than two thirds of the votes cast as well as of the share capital represented at the General Meeting.

Minutes of the proceedings of the General Meeting shall be entered into a minute book, which shall be signed by the chairman of the meeting.

Board of Directors and Management

§ 12.

The Board of Directors is elected partly by the General Meeting and partly by the employees of the Company and its directly and indirectly owned subsidiaries and branch offices from time to time, regardless of whether their place of residence is within or outside the EU/EEA.

The General Meeting elects between three (3) and nine (9) members of the Board of Directors for a period which expires at the Annual General Meeting in the Company in the first year after the year of their election.

Provided the Company and its directly and indirectly owned subsidiaries and branch offices residing in Denmark, if any, together during the last three (3) years before an ordinary election have employed at least 35 employees on average the employees of the Company and its directly and indirectly owned subsidiaries and branch offices from time to time, regardless of whether their place of residence

is within or outside the EU/EEA, have the right to elect a number of members of the Board of Directors equal to half of the members of the Board of Directors elected by the General Meeting as well as alternate members. If the condition of employment of at least 35 employees on average during the last three (3) years is not met prior to an ordinary election by the employees of members of the Board of Directors and alternate members, the right for the employees to elect members of the Board of Directors and alternate members according to these Articles shall cease for the period thereafter. An ordinary election by the employees of members of the Board of Directors and alternate members shall occur every third year. Re-election can occur. The election is being held as a direct election in accordance with an election regulation approved by the Board of Directors.

If the employees of the Company or the Company's directly and indirectly owned subsidiaries exercise their right to elect company representatives and/or group representatives to the Board of Directors in accordance with the Companies Act, the right for the group employees to elect employee representatives in accordance with these articles shall no longer apply. Employee representatives already elected in accordance with these articles shall resign simultaneously with the commencement of the employee representatives elected in accordance with the Companies Act.

The Board of Directors shall elect one of its members as chairman of the Board.

The specific rules governing the activities of the Board of Directors shall be laid down in rules of procedure drawn up by the Board.

The Board of Directors shall form a quorum when more than half of its members are represented.

The business of the Board of Directors shall be resolved upon by a simple majority of votes.

The Board of Directors shall receive an annual remuneration the size of which shall be stated in the Annual Report.

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§ 13.

The chairman of the Board of Directors shall ensure that the Board of Directors meets whenever required. A member of the Board of Directors or a member of the Management may demand that a meeting of the Board of Directors be convened.

Minutes of the proceedings of the Board of Directors shall be entered into a minute book, which shall be signed by all attending members of the Board of Directors.

The Board of Directors shall appoint 1-5 registered managers in charge of the day-to-day operations of the Company. The Board of Directors may grant powers of procure and determine rules as to who shall be authorized to sign for the Company in relation to banks etc.

§ 14.

The Company has laid down general guidelines for incentive-based remuneration for the Board of Directors and Executive Management of the Company. The guidelines have been adopted by the Company's General Meeting and they are available on the Company's website: www.genmab.com.

Authority to Bind the Company

§ 15.

The Company shall be bound by the joint signatures of a member of the Board of Directors and a member of the Management or by two members of the Board of Directors.

Electronic Communication

§ 16.

The Company shall be entitled to use electronic document exchange and electronic mail, as specified below, when communicating with its shareholders in lieu of sending or providing paper based documents pursuant to these Articles of Association and the Companies Act, except when otherwise required by mandatory

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legislation. The Company may at all times communicate with any of its shareholders using normal letter mail and paper based documents as a supplement or alternative to electronic communication.

Notice to the shareholders of convening of an Annual or Extraordinary General Meeting, including complete proposals to amend the Articles of Association, the agenda, the Annual Report, interim financial reports, company announcements, minutes of the General Meeting and admittance cards as well as any other general information etc. from the Company to its shareholders may thus be sent by the Company to its shareholders via e-mail.

The above documents, except admittance cards to the General Meeting, will be published on the Company's website (www.genmab.com).

The Company's registered shareholders may through the Company's website submit an electronic address to which notices etc. can be sent. It is the responsibility of each shareholder to ensure that the Company is in possession of a proper electronic address. The shareholders can find more information about the procedures for the use of electronic communication as well as system requirements on the Company's website (www.genmab.com).

Company Announcements

§ 17.

Company announcements may be prepared in English only, if decided by the Board of Directors.

Accounting and Auditing

§ 18.

The accounting year of the Company shall be the calendar year.

§ 19.

Annual Reports shall be prepared in English and, if decided by the Board of Directors, in Danish.

§ 20.

The Company's accounts shall be audited by one or more state authorized public accountants elected by the Annual General Meeting.

§ 21.

The Company's accounts shall give a true and fair view of the Company's assets and liabilities, of its financial position, and profit and loss, in accordance with Danish financial reporting rules, international financial reporting standards (IFRS) and possibly US GAAP.

Schedule A

Under the authorization of April 24, 2003 by the General Meeting to issue up to 500,000 warrants to subscribe shares in the Company and authorization of April 1, 2004 to issue 1,250,000 warrants, the Board of Directors has on August 3, 2004 issued warrants to subscribe for up to 730,550 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 730,550 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 1, 2004 by the General Meeting to issue up to 1,250,000 warrants to subscribe shares in the Company, the Board of Directors has on September 22, 2004 issued warrants to subscribe for up to 33,575 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 33,575 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 1, 2004 by the General Meeting to issue up to 1,250,000 warrants to subscribe shares in the Company, the Board of Directors has on December 1, 2004 issued warrants to subscribe for up to 81,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 81,750 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 1, 2004 by the General Meeting to issue up to 1,250,000 warrants to subscribe shares in the Company, the Board of Directors has on April 20, 2005 issued warrants to subscribe for up to 67,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 67,500 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 1, 2004 by the General Meeting to issue up to 1,250,000 warrants to subscribe shares in the Company and authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on June 7, 2005 issued warrants to subscribe for up to 565,000 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 565,000 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 by the General Meeting to issue up to 2,500,000 warrants to subscribe shares in the Company, the Board of Directors has on August 10, 2005 issued warrants to subscribe for up to 307,000 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 307,000 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 by the General Meeting to issue up to 2,500,000 warrants to subscribe shares in the Company, the Board of Directors has on September 21, 2005 issued warrants to subscribe for up to 7,250

of the Company's shares each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 7,250 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 by the General Meeting to issue up to 2,500,000 warrants to subscribe shares in the Company, the Board of Directors has on December 1, 2005 issued warrants to subscribe for up to 23,250 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 23,250 related to the warrants issued. All of these warrants have been exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on March 2, 2006 issued warrants to subscribe for up to 148,375 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 148,375 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on April 25, 2006 issued warrants to subscribe for up to 54,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board has at the same time resolved the necessary cash issue of shares in the amount of DKK 54,500 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on June 21, 2006 issued warrants to subscribe for up to 604,000 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 604,000 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on September 19, 2006 issued warrants to subscribe for up to 146,550 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 146,550 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on December 13, 2006 issued warrants to subscribe for up to 80,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 80,500 related to the warrants issued. All of these warrants have been exercised or have lapsed upon the termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 20, 2005 to issue 2,500,000 warrants, the Board of Directors has on April 19, 2007 issued warrants to subscribe for up to 372,400 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 372,400 related to the warrants issued.

All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 20, 2005 to issue 2,500,000 warrants and of April 25, 2006 to issue 1,200,000 warrants, the Board of Directors has on June 27, 2007 issued warrants to subscribe for up to 826,045 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 826,045 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 25, 2006 to issue 1,200,000 warrants, the Board of Directors has on October 4, 2007 issued warrants to subscribe for up to 188,900 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 188,900 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 25, 2006 to issue 1,200,000 warrants, the Board of Directors has on December 13, 2007 issued warrants to subscribe for up to 132,030 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 132,030 related to the warrants issued. All of these warrants have been exercised or have lapsed upon the termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 25, 2006 to issue 1,200,000 warrants, the Board of Directors has on April 24, 2008 issued warrants to subscribe

for up to 715,600 of the Company's shares, each with a nominal value of DKK 1 to a manager and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 715,600 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 25, 2006 to issue 1,200,000 warrants and of April 19, 2007 to issue 1,000,000 warrants, the Board of Directors has on June 4, 2008 issued warrants to subscribe for up to 231,500 of the Company's shares, each with a nominal value of DKK 1 to a manager and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 231,500 related to the warrants issued. All of these warrants have been exercised; have lapsed upon the termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 19, 2007 to issue 1,000,000 warrants, the Board of Directors has on October 8, 2008 issued warrants to subscribe for up to 505,250 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 505,250 related to the warrants issued. All of these warrants have been exercised; have lapsed upon termination of employees' employment or have lapsed as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 19, 2007 to issue 1,000,000 warrants, the Board of Directors has on December 17, 2008 issued warrants to subscribe for up to 39,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 39,500 related to the warrants issued. All of these warrants have been exercised; have lapsed upon termination of employees' employment or have lapsed

as non-exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 19, 2007 to issue 1,000,000 warrants, the Board of Directors has on April 15, 2009 issued warrants to subscribe for up to 70,450 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 70,450 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 19, 2007 to issue 1,000,000 warrants and of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on June 17, 2009 issued warrants to subscribe for up to 337,000 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 337,000 related to the warrants issued. 327,000 of these warrants had on April 2, 2019 been exercised and 5,000 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on October 8, 2009 issued warrants to subscribe for up to 200,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 200,750 related to the warrants issued. 140,175 of these warrants had on May 15, 2018 been exercised and 55,500 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on December 9, 2009 issued warrants to

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subscribe for up to 12,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 12,500 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on April 21, 2010 issued warrants to subscribe for up to 64,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 64,500 related to the warrants issued. 44,050 of these warrants had on February 26, 2019 been exercised and 16,000 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on June 2, 2010 issued warrants to subscribe for up to 337,500 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 337,500 related to the warrants issued. 246,125 of these warrants had May 15, 2018 been exercised and 6,375 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on October 14, 2010 issued warrants to subscribe for up to 49,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 49,500 related to the warrants issued. 34,750 of these warrants had on February 28, 2017 been exercised and 11,500 had on December 31, 2018 lapsed

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upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on December 9, 2010 issued warrants to subscribe for up to 118,000 of the Company's shares, each with a nominal value of DKK 1 to managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 118,000 related to the warrants issued. 74,500 of these warrants had on February 26, 2019 been exercised and 6,500 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on April 6, 2011 issued warrants to subscribe for up to 54,500 of the Company's shares, each with a nominal value of DKK 1 to a member of the Board of Directors and to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 54,500 related to the warrants issued. 34,000 of these warrants had on June 27, 2017 been exercised and 12,000 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on June 22, 2011 issued warrants to subscribe for up to 347,000 of the Company's shares, each with a nominal value of DKK 1 to members of the Board of Directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 347,000 related to the warrants issued. 249,015 of these warrants had on April 2, 2019 been exercised and 12,250 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on October 14, 2011 issued warrants to subscribe for up to 47,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 47,750 related to the warrants issued. 40,525 of these warrants had on April 2, 2019 been exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, the Board of Directors has on December 8, 2011 issued warrants to subscribe for up to 3,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 3,750 related to the warrants issued. All of these warrants have been exercised. The decisions of the Board of Directors are set out in schedule C to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, as amended by the General Meeting on April 25, 2012, the Board of Directors has on April 25, 2012 issued warrants to subscribe for up to 27,000 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 27,000 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 23, 2008 to issue 1,500,000 warrants, as amended by the General Meeting on April 25, 2012, the Board of Directors has on October 9, 2012 issued warrants to subscribe for up to 31,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 31,500 related to the warrants issued. 20,570 of these warrants had on April 2, 2019 been exercised and 6,500 had on December 31, 2018 lapsed upon termination of employees'

employment. Of the lapsed warrants, 2,000 have been re-issued on January 31, 2013 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 23, 2008 to issue 1,500,000 warrants, as amended by the General Meeting on April 25, 2012, and of April 25, 2012 to issue 250,000 warrants, the Board of Directors has on December 5, 2012 issued warrants to subscribe for up to 325,000 of the Company's shares, each with a nominal value of DKK 1 to members of the board of directors, managers and employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 325,000 related to the warrants issued. 229,975 of these warrants had on April 2, 2019 been exercised and 38,000 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 3,000 have been re-issued on June 12, 2013, 32,500 have been re-issued on October 10, 2013, 500 have been re-issued on December 6, 2013, 1,500 have been re-issued on December 15, 2014 and 500 have been re-issued on June 9, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 23, 2008 to issue 1,500,000 warrants, as amended by the General Meeting on April 25, 2012, and of April 25, 2012 to issue 250,000 warrants, the Board of Directors has on January 31, 2013 issued warrants to subscribe for up to 4,250 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 4,250 related to the warrants issued. 1,625 of these warrants had on August 14, 2018 been exercised and 1,250 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 1,000 have been re-issued on April 17, 2013 and 250 have been re-issued on June 9, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 23, 2008 to issue 1,500,000 warrants, as amended by the General Meeting on April 25, 2012, of April 25, 2012

to issue 250,000 warrants and of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on April 17, 2013 issued warrants to subscribe for up to 28,000 of the Company's shares, each with a nominal value of DKK 1 to a member of the Board of Directors and to an employee of the Company's subsidiary. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 28,000 related to the warrants issued. 26,500 of these warrants had on April 2, 2019 been exercised. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 25, 2012 to issue 250,000 warrants, the Board of Directors has on June 12, 2013 issued warrants to subscribe for up to 3,000 of the Company's shares, each with a nominal value of DKK 1 to an employee of the Company's subsidiary. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 3,000 related to the warrants issued. 2,000 of these warrants had on September 18, 2018 been exercised. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 25, 2012 to issue 250,000 warrants, the Board of Directors has on October 10, 2013 issued warrants to subscribe for up to 32,500 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiary. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 32,500 related to the warrants issued. 23,150 of these warrants had on April 2, 2019 been exercised and 4,125 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 3,000 have been re-issued on December 15, 2014 and 1,125 have been re-issued on December 10, 2015 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 25, 2012 to issue 250,000 warrants and of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on December 6, 2013 issued warrants to subscribe for up to 428,500 of the Company's shares, each with a nominal value of DKK 1 to members of the Board of Directors, managers and employees of the Company and its subsidiaries. The Board of

Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 428,500 related to the warrants issued. 268,448 of these warrants had on April 2, 2019 been exercised and 13,000 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 5,000 have been re-issued on December 15, 2014, 750 have been re-issued on October 7, 2015, 2,250 have been re-issued on December 10, 2015 and 5,000 have been re-issued on June 9, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on February 10, 2014 issued warrants to subscribe for up to 14,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and its subsidiary. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 14,750 related to the warrants issued. 11,662 of these warrants had on September 18, 2018 been exercised. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on April 9, 2014 issued warrants to subscribe for up to 8,000 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 8,000 related to the warrants issued. All of these warrants have been exercised or have lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 1,000 have been re-issued on March 28, 2017 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on June 12, 2014 issued warrants to subscribe for up to 17,000 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK

17,000 related to the warrants issued. 10,475 of these warrants had on April 2, 2019 been exercised and 1,500 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 1,500 have been re-issued on June 8, 2017 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 17, 2013 to issue 600,000 warrants, the Board of Directors has on October 15, 2014 issued warrants to subscribe for up to 57,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 57,750 related to the warrants issued. 36,412 of these warrants had on April 2, 2019 been exercised and 1,188 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 1,000 have been re-issued on June 11, 2015 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 25, 2012 to issue 250,000 warrants, of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on December 15, 2014 issued warrants to subscribe for up to 157,525 of the Company's shares, each with a nominal value of DKK 1 to managers and employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 157,525 related to the warrants issued. 94,104 of these warrants had on April 2, 2019 been exercised and 5,125 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 1,250 have been re-issued on October 7, 2015 and 2,750 have been re-issued on December 10, 2015 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, additionally 625 have been re-issued on April 10, 2018 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on March 26, 2015 issued warrants to subscribe for up to 22,050 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 22,050 related to the warrants issued. 9,726 of these warrants had on April 2, 2019 been exercised and 2,487 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 525 have been re-issued on June 9, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, additionally 262 have been re-issued on March 28, 2017 and 1,700 have been re-issued on April 10, 2018 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on June 11, 2015 issued warrants to subscribe for up to 11,100 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 11,100 related to the warrants issued. 4,075 of these warrants had on May 15, 2018 been exercised and 675 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 675 have been re-issued on December 15, 2017 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on October 7, 2015 issued warrants to subscribe for up to 41,000 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 41,000 related to the warrants issued. 11,000 of these warrants had on February 26, 2019 been exercised and 6,250 had

on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 1,000 have been re-issued on October 6, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, additionally 2,250 have been re-issued on March 28, 2017 and 3,000 have been re-issued on December 15, 2017 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 25, 2012 to issue 250,000 warrants, of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on December 10, 2015 issued warrants to subscribe for up to 101,750 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 101,750 related to the warrants issued. 15,252 of these warrants had on April 2, 2019 been exercised and 5,749 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants, 500 have been re-issued on June 9, 2016 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, additionally 1,500 have been re-issued on March 28, 2017, 1,687 have been re-issued on June 8, 2017, 250 have been re-issued on April 10, 2018, 1,125 have been re-issued on December 10, 2018 and 687 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on March 17, 2016 issued warrants to subscribe for up to 24,350 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 24,350 related to the warrants issued. 3,138 of these warrants had on April 2, 2019 been exercised and 6,725 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Of the lapsed warrants, 2,037 have been re-issued on June 8, 2017, 663 have been re-issued on October 5, 2017, 2,025 have been re-issued on April 10, 2018 and 2,000 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 25, 2012 to issue 250,000 warrants, of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on June 9, 2016 issued warrants to subscribe for up to 16,800 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 16,800 related to the warrants issued. 1,350 of these warrants had on July 3, 2018 been exercised and 1,012 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 1,012 have been re-issued on June 7, 2018 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on October 6, 2016 issued warrants to subscribe for up to 19,450 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 19,450 related to the warrants issued. None of these warrants to subscribe shares have been exercised. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on December 15, 2016 issued warrants to subscribe for up to 89,465 of the Company's shares, each with a nominal value of DKK 1 to managers and employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 89,465 related to the warrants issued. 133 of these warrants had on April 3, 2018 been exercised and 2,672 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles.

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Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 482 have been re-issued on October 5, 2017, 1,236 have been re-issued on April 10, 2018, 535 have been re-issued on December 10, 2018 and 419 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on February 10, 2017 issued warrants to subscribe for up to 1,976 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and one of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 1,976 related to the warrants issued. None of these warrants to subscribe shares have been exercised, but 370 had on December 31, 2018 lapsed upon termination of employees' employment. The decisions of the Board of Directors are set out in schedule D to these Articles of Association and are an integral part of these articles. Of the lapsed warrants, 73 have been re-issued on December 15, 2017 and additionally 297 have been re-issued on September 21, 2018 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on March 28, 2017 issued warrants to subscribe for up to 8,736 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 8,736 related to the warrants issued. None of these warrants to subscribe shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on March 29, 2017 issued warrants to subscribe for up to 8,400 of the Company's shares, each with a nominal value of DKK 1 to a manager of the Company. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 8,400 related to the warrants issued. None of these warrants to subscribe shares have been exercised. The

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decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 17, 2013 to issue 600,000 warrants and of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on June 8, 2017 re-issued warrants (respectively 1,500 and 3,724 warrants under the authorizations) to subscribe for up to 5,224 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 5,224 related to the re-issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of April 9, 2014 to issue 500,000 warrants, the Board of Directors has on October 5, 2017 re-issued 1,145 warrants and issued 17,611 new warrants to subscribe for up to 18,756 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 18,756 related to the issued warrants. None of these warrants to subscribe for shares have been exercised, but 855 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants 778 have been re-issued on September 21, 2018, and 77 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on December 15, 2017 re-issued 3,748 warrants and issued warrants (respectively 64,099 and 71,750 under the authorizations) to subscribe for up to 139,597 of the Company's shares, each with a nominal value of DKK 1 to managers and employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 139,597 related to the issued warrants. None of these warrants to subscribe for shares have been exercised, but 5,960 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants 314 have been re-

issued on April 10, 2018, 3,398 have been re-issued on September 21, 2018, 1,745 have been re-issued on December 10, 2018, and 503 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on April 10, 2018 re-issued 6,150 warrants and issued 8,804 warrants to subscribe for up to 14,954 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 14,954 related to the issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on June 7, 2018 re-issued 1,012 warrants and issued 13,702 warrants to subscribe for up to 14,714 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 14,714 related to the issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on September 21, 2018 re-issued 4,473 warrants and issued 28,753 warrants to subscribe for up to 33,226 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 33,226 related to the issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on December 10, 2018 re-issued 3,405 warrants and issued 210,208 new warrants to subscribe for up to 213,613 of the Company's shares, each with a nominal value of DKK 1 to managers and employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 213,613 related to the issued warrants. None of these warrants to subscribe for shares have been exercised, but 3,176 had on December 31, 2018 lapsed upon termination of employees' employment. Of the lapsed warrants 3,176 have been re-issued on March 1, 2019 as set out in this Schedule A. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorizations of April 9, 2014 to issue 500,000 warrants and of March 28, 2017 to issue 500,000 warrants, the Board of Directors has on March 1, 2019 re-issued 6,862 warrants and issued 13,120 new warrants to subscribe for up to 19,982 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 19,982 related to the issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Under the authorization of March 29, 2019 to issue 500,000 warrants, the Board of Directors has on March 29, 2019 issued 8,035 new warrants to subscribe for up to 8,035 of the Company's shares, each with a nominal value of DKK 1 to employees of the Company and of two of the Company's subsidiaries. The Board of Directors has at the same time resolved the necessary cash issue of shares in the amount of DKK 8,035 related to the issued warrants. None of these warrants to subscribe for shares have been exercised. The decisions of the Board of Directors are set out in schedule E to these Articles of Association and are an integral part of these articles.

Schedule B

[DELETED BY DECISION BY THE GENERAL MEETING ON APRIL 15, 2009]

Schedule C

Under the authorizations by the General Meeting of April 24, 2003, April 1, 2004, April 20, 2005, April 25, 2006, April 19, 2007 and April 23, 2008 the Board of Directors has as of December 8, 2011 granted warrants to subscribe for shares in the Company as follows:

Employees and consultants

The Board of Directors issued on August 3, 2004 615,550 warrants with the right to subscribe 615,550 ordinary shares each with a nominal value of DKK 1 at a price of DKK 86 to employees of the Company and its subsidiaries as well as to the Company's management.

The Board of Directors issued on September 22, 2004 33,575 warrants with the right to subscribe 33,575 ordinary shares each with a nominal value of DKK 1 at a price of DKK 89.50 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 1, 2004 81,750 warrants with the right to subscribe 81,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 97 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 20, 2005 67,500 warrants with the right to subscribe 67,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 116 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 7, 2005 304,000 warrants with the right to subscribe 304,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 114 to employees of the Company and its subsidiaries.

The Board of Directors issued on August 10, 2005 307,000 warrants with the right to subscribe 307,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 101 to employees of the Company and its subsidiaries.

The Board of Directors issued on September 21, 2005 7,250 warrants with the right to subscribe 7,250 ordinary shares each with a nominal value of DKK 1 at a price of DKK 115 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 1, 2005 23,250 warrants with the right to subscribe 23,250 ordinary shares each with a nominal value of DKK 1 at a price of DKK 130 to employees of the Company and its subsidiaries.

The Board of Directors issued on March 2, 2006 148,375 warrants with the right to subscribe 148,375 ordinary shares each with a nominal value of DKK 1 at a price of DKK 184 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 25, 2006 54,500 warrants with the right to subscribe 54,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 210.5 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 21, 2006 314,000 warrants with the right to subscribe 314,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 173 to employees of the Company and its subsidiaries.

The Board of Directors issued on September 19, 2006 146,550 warrants with the right to subscribe 146,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 224 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 13, 2006 80,500 warrants with the right to subscribe 80,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 330 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 19, 2007 322,400 warrants with the right to subscribe 322,400 ordinary shares each with a nominal value of DKK 1 at a price of DKK 364 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 27, 2007 721,045 warrants with the right to subscribe 721,045 ordinary shares each with a nominal value of DKK 1 at a price of DKK 352.50 to employees of the Company and its subsidiaries.

The Board of Directors issued on October 4, 2007 188,900 warrants with the right to subscribe 188,900 ordinary shares each with a nominal value of DKK 1 at a price of DKK 326.50 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 13, 2007 132,030 warrants with the right to subscribe 132,030 ordinary shares each with a nominal value of DKK 1 at a price of DKK 329 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 24, 2008 715,600 warrants with the right to subscribe 715,600 ordinary shares each with a nominal value of DKK 1 at a price of DKK 254 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 4, 2008 231,500 warrants with the right to subscribe 231,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 246 to employees of the Company and its subsidiaries.

The Board of Directors issued on October 8, 2008 421,250 warrants with the right to subscribe 421,250 ordinary shares each with a nominal value of DKK 1 at a price of DKK 272 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on December 17, 2008 39,500 warrants with the right to subscribe 39,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 234.75 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 15, 2009 70,450 warrants with the right to subscribe 70,450 ordinary shares each with a nominal value of DKK 1 at a price of DKK 234 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 17, 2009 277,000 warrants with the right to subscribe 277,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 174 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on October 8, 2009 200,750 warrants with the right to subscribe 200,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 129.75 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 9, 2009 12,500 warrants with the right to subscribe 12,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 77 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 21, 2010 64,500 warrants with the right to subscribe 64,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 68.65 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 2, 2010 270,000 warrants with the right to subscribe 270,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 46.74 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on October 14, 2010 49,500 warrants with the right to subscribe 49,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 67.50 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 9, 2010 118,000 warrants with the right to subscribe 118,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 66.60 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on April 6, 2011 39,500 warrants with the right to subscribe 39,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 55.85 to employees of the Company and its subsidiaries.

The Board of Directors issued on June 22, 2011 247,000 warrants with the right to subscribe 247,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 40.41 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on October 14, 2011 47,750 warrants with the right to subscribe 47,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 31.75 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 8, 2011 3,750 warrants with the right to subscribe 3,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 26.75 to employees of the Company and its subsidiaries.

Members of the Board of Directors

The Board of Directors issued on August 3, 2004 115,000 warrants with the right to subscribe 115,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 86 to members of the Board of Directors of the Company.

The Board of Directors issued on June 7, 2005 261,000 warrants with the right to subscribe 261,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 114 to members of the Board of Directors of the Company.

The Board of Directors issued on June 21, 2006 290,000 warrants with the right to subscribe 290,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 173 to members of the Board of Directors of the Company.

The Board of Directors issued on April 19, 2007 50,000 warrants with the right to subscribe 50,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 364 to members of the Board of Directors of the Company.

The Board of Directors issued on June 27, 2007 105,000 warrants with the right to subscribe 105,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 352.50 to members of the Board of Directors of the Company.

The Board of Directors issued on October 8, 2008 84,000 warrants with the right to subscribe 84,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 272 to members of the Board of Directors of the Company.

The Board of Directors issued on June 17, 2009 60,000 warrants with the right to subscribe 60,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 174 to members of the Board of Directors of the Company.

The Board of Directors issued on June 2, 2010 67,500 warrants with the right to subscribe 67,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 46.74 to members of the Board of Directors of the Company.

The Board of Directors issued on April 6, 2011 15,000 warrants with the right to subscribe 15,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 55.85 to a member of the Board of Directors of the Company.

The Board of Directors issued on June 22, 2011 100,000 warrants with the right to subscribe 100,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 40.41 to members of the Board of Directors of the Company.

All warrants have been issued on the following terms and conditions:

A. General description of warrants.

A warrant means a right — but not an obligation — of the owner (the “Owner”) to subscribe for ordinary shares in the Company at a price fixed in advance (the exercise price).

The Owner of the warrant can for a given period choose to subscribe for shares in the Company by paying the exercise price.

The warrant does not entitle the Owner to vote at the Company’s general meeting or to receive dividends.

When a warrant is exercised, the value may be calculated as the difference between the market value of the shares subscribed and the exercise price. The value cannot become negative without the Owner’s acceptance because a warrant is a right — but not an obligation — to subscribe for shares in the Company. If the market price of the shares at the time of subscription is lower than the exercise price the Owner can abstain from subscribing for shares in the Company.

The Owner of the warrant is obligated to give notice to the Company of changes in the Owner’s contact information.

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B. Conditions for exercise of Warrants.

The Warrants are not granted due to work already performed by the Owners, but are granted in order to motivate the Owners, as described below, during the years following the date of issue of the Warrants.

Thus, the Warrants are issued and granted in order to increase and motivate the Owners’ focus on a positive development of the market price of the shares of the Company and to motivate the Owners to work for a future value increase in the Company and its subsidiaries.

Consequently, the right to exercise the Warrants is earned during the following four years as set out in Clause II below.

(I) Exercise Price.

Warrants are issued to the Owner free of charge.

One Warrant entitles the Owner to subscribe for one ordinary share of a nominal value of DKK 1 at a price per share (the “Exercise Price”) determined by the Board of Directors at the time of issue, but which cannot be lower than the price of the Company’s shares as listed on Nasdaq Copenhagen at close of business on the day of issue by the Board of Directors (the “Date of Issue”).

(II) Exercise Period & Vesting Schedule.

(a) The Warrants will lapse automatically, without prior notice and without compensation on the tenth (10th) anniversary of the Date of Issue (the “Expiry Date”).

From the Date of Issue and until the Expiry Date (“The Exercise Period”), an Owner earns the right to keep and exercise Warrants only in accordance with the following rules:

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- Until one (1) year from the Date of Issue of a particular grant of Warrants, no such Warrants are earned/can be exercised.
- For a period starting one (1) year after the Date of Issue (a “Vesting Date”) of such particular grant of Warrants and ending on the Expiry Date, the Owner has earned and may exercise up to 25% of such Warrants provided that the Owner’s employment/consultancy relationship or board membership (as the case may be) has not expired on or before such Vesting Date due to one of the reasons set out below under heading (c).
- For a period starting two (2) years from the Date of Issue (a “Vesting Date”) of such particular grant of Warrants and ending on the Expiry Date, the Owner has earned and may exercise up to an additional 25 % of such Warrants provided that the Owner’s employment/consultancy relationship or board membership (as the case may be) has not expired on or before such Vesting Date due to one of the reasons set out below under heading (c).
- For a period starting three (3) years from the Date of Issue (a “Vesting Date”) of such particular grant of Warrants and ending on the Expiry Date, the Owner has earned and may exercise up to an additional 25 % of such Warrants provided that the Owner’s employment/consultancy relationship or board membership (as the case may be) has not expired on or before such Vesting Date due to one of the reasons set out below under heading (c).
- For a period starting four (4) years from the Date of Issue (a “Vesting Date”) of such particular grant of Warrants and ending on the Expiry Date, the Owner has earned and may exercise all of such Warrants provided that the Owner’s employment/consultancy relationship or board membership (as the case may be) has not expired on or before such Vesting Date due to one of the reasons set out below under heading (c).

For the sake of clarity it is noted that in no event can Warrants be exercised earlier than one (1) year after the Date of Issue of the Warrants in question.

(b) In case of termination of the employment/consultancy relationship with the Company or one of its subsidiaries the Owner or his/her estate shall be entitled to keep and exercise all Warrants issued to the Owner in instances where

- the Company or one of its subsidiaries terminates the Owner's employment/consultancy relationship without the Owner having given the Company/subsidiary good reason to do so. However, provided that the Owner is comprised by the Danish Act no. 309 of May 5th, 2004 regarding the use of stock options etc. in employment relationships), the Company/subsidiary shall only be deemed to have terminated the Owner's employment with good reason to the extent the termination is made due to the Owner's breach of his/her employment relationship; or
- the Owner terminates the employment/consultancy relationship as a result of a material breach on the part of the Company/subsidiary; or
- the employment/consultancy relationship is terminated as a result of the Owner's death, sickness or injury (other than termination by the employer due to excessive absenteeism or absence without notice), or retirement at an age where the Owner is eligible for Company or governmental pension.

Any exercise may however, only take place within the time periods where the Warrants in question would otherwise become exercisable and with the given percentages), cf. above under heading (a) had the employment/consultancy relationship continued unchanged — that is, the Owner in question cannot be

treated more favourably than the continuing employees/consultants of the Company or its subsidiaries.

(c) In case of termination of the Owner's employment/consultancy relationship with the Company or one of its subsidiaries in all other instances than those described above under heading (b), the Owner's right to exercise the Owner's Warrants shall be limited as described under heading (a) above.

(d) In relation to board members, the vesting shall cease on the termination date of the board membership regardless of the reason therefore unless in case of termination of the board membership as a result of the Owner's death, sickness or injury, retirement at an age where the Owner is eligible for Company or governmental pension or as agreed otherwise with the Board of Directors.

(e) In case of a direct or indirect transfer of shares in the Company which entails that the acquirer achieves any one or more of the following:

- 1) holds at least a third of the voting rights in the Company, unless it is clearly demonstrated that such holding does not constitute a controlling influence over the Company,
- 2) by way of an agreement with other investors controls at least a third of the voting rights in the Company,
- 3) is able to control the Company's financial and operational matters due to the content of the Company's articles of association or as a result of any agreement, or
- 4) is able to appoint or dismiss a majority of the members of the Board of Directors, and the Board of Directors has controlling influence over the Company,

then, the Owner shall immediately be granted the right to exercise all the Owner's Warrants. However, to the extent (i) the Owner has at the time of the transfer of shares received or given notice of termination of the Owner's employment/consultancy relationship with the Company or its subsidiaries, (ii) such

termination notice has become effective prior to the transfer of shares, and (iii) such notice is received or given prior to the transfer of shares due to reasons comprised by heading (c) above, the Owner will only have the right to exercise the number of Warrants following from heading (a) above. Likewise, Owners that are former board members will only be able to exercise such number of Warrants that he or she would otherwise be entitled to cf. heading (d) above. Termination in connection with or due to a transfer of shares as described above shall not be deemed made with a good reason as set out under heading (a) above.

(f) Exercise of Warrants to subscribe shares is dependant upon the availability of the Company's Board of Directors to make the necessary resolutions to increase the share capital of the Company. Any Owner must respect that the Board of Directors may in its discretion decide to defer the processing of any request to fit the working schedule of the Board of Directors as well as to allow that other requests to exercise Warrants are processed at the same time.

(g) Any exercise of Warrants must respect the stock exchange regulation in force from time to time, including the prohibition against insider trading.

(III) Procedure for Exercise.

Warrants must be exercised by the Owner sending a written request to the Board of Directors of the Company for the issue of new shares within the Exercise Periods. The request shall specify the number of shares subscribed for as well as the Owner's account with VP Securities A/S at which the shares shall be registered. The cash subscription amount (i.e. the Exercise Price times the number of shares subscribed for) shall be paid to the Company in full at the same time or no later than within 7 days after the request is made. The Board of Directors may require that requests to exercise are made using special forms.

(IV) Non-transferability.

(a) The Warrants issued are personal and may never be the subject of transfer or assignment. Warrants may not be pledged or otherwise serve as the

basis for settlement of claims by the Owner's creditors. However, transfer can be made to heirs in case of the Owner's death.

(b) Irrespective of heading (a) above, an Owner may transfer his/her Warrants to a company that is wholly-owned (100%) by the Owner. In such case, a principle of transparency will apply causing the receiving company's rights and obligations (including but not limited to the possibility of earning the right to exercise the Warrants) to be identical to those of the Owner. If an Owner transfers his/her Warrants to a company that is wholly-owned by the Owner, the Owner shall without undue delay notify the Company and present appropriate proof of the transfer.

(c) Irrespective of heading (a) above, the Board of Directors can on a case-by-case basis decide that an Owner may transfer his/her Warrants to a third party. The Board of Directors will determine the conditions for such transfer on a case-by-case basis.

(d) If an Owner enters into an agreement with the Company or its subsidiaries to make use of S. 7H of the Danish Tax Assessment Act then the Owner will be prohibited from transferring Warrants to a fully-owned company or — on the basis of the Board of Director's permission — transferring Warrants to a third party, cf. headings (b) to (c) above.

C. General Terms.

(a) Existing shareholders of the Company do not have a right of pre-emption to the shares issued on the basis of the Owner's exercise of Warrants. The shares issued on the basis of Warrants shall be negotiable instruments issued to the bearer and they may be entered in the name of their holders in the Company's Register of Shareholders. No restrictions shall apply to the transferability of the shares except as may otherwise be provided by the laws of the jurisdiction of the Owner's domicile (other than Danish law). No shares shall confer any special rights upon the holder, and no shareholder shall be under an obligation to allow his/her shares to be redeemed.

(b) At the request of the Owner, the Board of Directors of the Company shall issue certificates concerning the Owner's right to Warrants.

D. Adjustment of the Exercise Price and/or the Share Number.

(a) If changes to the capital structure of the Company are implemented causing the value of the non-exercised warrants to be increased or reduced, an adjustment of the Exercise Price and/or the number of shares which may be subscribed for on the basis of the non-exercised warrants (the "Share Number") shall be made. Main examples of such changes in the capital structure of the Company are capital increases and capital decreases not done at market price, payment of dividend, cf. heading (b) below, issuance of bonus shares, change of the denomination of the shares in the Company, purchase and sale of own shares, issuance of warrants and/or convertible instruments, cf. heading (c) below, merger and demerger.

However, no adjustment of the Exercise Price nor the Share Number shall be made as a result of capital increases implemented on the basis of the exercise of the warrants comprised by this Scheme or by Schedule A or Schedule B to the Company's Articles of Association.

(b) If the Company in an accounting year distributes dividend of more than DKK 5 per share at DKK 1, the Exercise Price shall be reduced to such an extent that the value of the warrants is unaffected by the part of the dividend exceeding the said amount.

(c) Irrespective of heading (a) above, if the Company resolves to issue stock options, shares, warrants, convertible instruments or the like to the Company's and/or its subsidiaries' employees, managers, consultants or members of the Board of Directors or buys or sells own shares in this connection, no adjustment of the Exercise Price nor the Share Number shall be made. This applies irrespective of whether the issued share instruments provide the right to acquire shares at a price lower than the market price on the Company's shares at the time

of allotment or whether the purchase/sale of own shares takes place at a price higher or lower than the market price on the Company's shares.

(d) If adjustments pursuant to this Clause D causes the Exercise Price to become lower than par, the warrants may as a starting point not be exercised. However, an Owner may exercise the warrants in accordance with the provisions hereof, if the Owner accepts that the Exercise Price is increased to par without providing the Owner with a right to compensation.

(e) The Company's Board of Directors shall determine whether an implemented change in the capital causes for an adjustment of the Exercise Price and/or the Share Number.

If so determined, the adjustment of the Exercise Price and/or the Share Number shall be made by the Company's Board of Directors as soon as possible after the implementation of the relevant change and to the extent possible according to generally accepted principles therefore and otherwise in such a manner that the market value of the warrants as estimated by the Board of Directors after the relevant change to the extent possible corresponds to the market value of the warrants as estimated by the Board of Directors immediately prior to the change.

(f) The Owner is entitled to demand that the adjustment of the Exercise Price and/or Share Number made pursuant to heading (e) above (but not the decision as to whether an adjustment shall be made or not) is subjected to a valuation by a special expert valuer appointed by the Institute of State Authorised Public Accountants. A demand for a valuation must be made by the Owner to the Company not later than two weeks after the Owner has been notified of the Board of Directors' adjustment. Thereafter, the valuation shall be made as quickly as possible.

(g) Where a valuer is appointed pursuant to heading (f) above, and the valuer's valuation deviates from the adjustments made by the Board of Directors,

the valuer's valuation shall be used as a basis for adjusting the Exercise Price and/or Share Number.

The valuation of the valuer is final and binding on both the Owners and the Company and cannot be brought before the courts or arbitration. The costs of the valuation shall be borne by the Owner or Owners (as the case may be) and the Company each paying half of the costs irrespective of the outcome of the valuation.

E. Merger

If the Company is the surviving or continuing company in a merger ("the absorbing company"), Warrants shall remain unaffected. Where a final resolution is passed to merge or consolidate the Company with or into another company that will be the absorbing company all outstanding non-exercised Warrants shall automatically be considered converted into a right to subscribe for new shares in the absorbing company. The Exercise Price and/or Share Number applicable at the time of the merger shall be adjusted on the basis of the conversion ratio applicable between the Company's shares and the shares of the absorbing company at the time of the merger or consolidation and otherwise in accordance with Clause D above. For the period after the merger, the adjusted Exercise Price and Share number shall be adjusted in accordance with the rules otherwise contained in this Warrant Scheme.

F. Liquidation of the Company

(i) Warrants that have not been exercised shall automatically lapse in the event of the liquidation of the Company. The lapse becomes effective when the general meeting has adopted the final liquidation accounts.

(ii) Prior to the lapse of non-exercised Warrants, the right to exercise all an Owner's Warrants shall be granted to such Owner. However, to the extent (i) an Owner has received or given notice of termination of the Owner's employment/consultancy relationship with the Company or its subsidiaries, (ii) such notice has become effective at the time when the right to exercise Warrants due to the liquidation is granted, and (iii) such notice is received or given due to reasons

comprised by Clause B.II, heading (c) above, the Owner will only be able to exercise the number of Warrants following from Clause B.II, heading (a) above. Likewise, (former) board members will only be able to exercise the number of Warrants that they would otherwise be entitled to under heading II (d) above.

G. Demerger

(i) Where a final resolution is passed to divide the Company so that assets and liabilities as a whole are transferred to several existing or newly set up public or private limited companies against issue of shares and, if relevant, cash to the Company's shareholders, the obligation to issue shares upon the exercise of outstanding Warrants shall, at the Company's discretion, be transferred to one of the new companies or be transferred proportionately among the new companies. In the latter situation, the transfer shall be made in the same proportion as that in which the Company's shareholders receive shares in the new companies to replace shares of the Company. After such a demerger, the right to subscribe for shares on the basis of the Warrants transferred shall remain in existence as a right to subscribe for shares in the company(ies) that has(ve) taken over such an obligation after the demerger.

(ii) In the event of a demerger where the Company remains in existence concurrently with the Company transferring some of its assets and liabilities to one or more existing or newly set up public or private limited companies, the right to Warrants shall be maintained as a right to Warrants in the Company.

(iii) In the event of a demerger as set out in item (i) or (ii) above, the Exercise Price and/or Share Number shall be adjusted according to Clause D above.

(iv) No adjustment of the Exercise Price and/or the Share Number shall be made in the event of a demerger where certain assets and/or liabilities of the Company are divested by the Company into a subsidiary without payment to the shareholders of the Company.

H. Tax Implications.

The Company and its subsidiaries shall have no responsibility for the tax consequences (including social security contributions triggered) for the Owner in

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connection with the allotment, exercise or potential transfer of the Warrants or any transfer of shares acquired on the basis of exercise of Warrants or any tax consequences for the Owner connected with any restructuring of the Company. However, the Company shall be entitled to withhold and pay to tax authorities any applicable taxes or social contributions that the Owner may be the subject of.

I. No extritorial applicability of mandatory laws.

Nothing herein shall be deemed to confer upon employees whose employment relationship is governed by foreign (Non-Danish) law, any benefit under mandatory Danish employment laws and no such laws or regulation is included into this Warrant Scheme by reference.

J. Arbitration.

The interpretation of this Warrant Scheme and Warrants issued pursuant hereto including contents, scope, expiry or breach hereof as well as other disputes shall be governed by Danish law and shall be settled in accordance with the rules of procedure of the Copenhagen Arbitration. Place of arbitration shall be Copenhagen, Denmark.

(as amended by the General Meeting on April 21, 2010 and the Board of Directors on October 15, 2014)

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Schedule D

Under the authorizations by the General Meeting of April 23, 2008, April 25, 2012, April 17, 2013 and April 9, 2014 the Board of Directors has as of February 10, 2017 granted warrants to subscribe for shares in the Company as follows:

Employees and consultants

The Board of Directors issued on April 25, 2012 27,000 warrants with the right to subscribe 27,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 45.24 to employees of the Company and its subsidiaries.

The Board of Directors issued on October 9, 2012 31,500 warrants with the right to subscribe 31,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 79.25 to employees of the Company and its subsidiaries.

The Board of Directors issued on December 5, 2012 235,000 warrants with the right to subscribe 235,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 88.55 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on January 31, 2013 4,250 warrants with the right to subscribe 4,250 ordinary shares each with a nominal value of DKK 1 at a price of DKK 98 to employees of the Company and its subsidiaries.

The Board of Directors issued on April 17, 2013 3,000 warrants with the right to subscribe 3,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 147.50 to an employee of the Company's subsidiary.

The Board of Directors issued on June 12, 2013 3,000 warrants with the right to subscribe 3,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 199 to an employee of the Company's subsidiary.

The Board of Directors issued on October 10, 2013 32,500 warrants with the right to subscribe 32,500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 231.50 to employees of the Company and its subsidiary.

The Board of Directors issued on December 6, 2013 358.500 warrants with the right to subscribe 358.500 ordinary shares each with a nominal value of DKK 1 at a price of DKK 225.90 to managers and employees of the Company and its subsidiaries.

The Board of Directors issued on February 10, 2014 14,750 warrants with the right to subscribe 14,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 210 to employees of the Company and its subsidiary.

The Board of Directors issued on April 9, 2014 8,000 warrants with the right to subscribe 8,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 215.60 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on June 12, 2014 17,000 warrants with the right to subscribe 17,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 225.30 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on October 15, 2014 57,750 warrants with the right to subscribe 57,750 ordinary shares each with a nominal value of DKK 1 at a price of DKK 220.40 to employees of the Company and the Company's subsidiaries.

The Board of Directors issued on December 15, 2014 157,525 warrants with the right to subscribe 157,525 ordinary shares each with a nominal value of DKK 1 at a price of DKK 337.40 to managers and employees of the Company and the Company's subsidiaries.

The Board of Directors issued on March 26, 2015 22,050 warrants with the right to subscribe 22,050 ordinary shares each with a nominal value of DKK 1 at a price of DKK 466.20 to employees of the Company and the Company's subsidiaries.

The Board of Directors issued on June 11, 2015 11,100 warrants with the right to subscribe 11,100 ordinary shares each with a nominal value of DKK 1 at a price of DKK 623.50 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on October 7, 2015 41,000 warrants with the right to subscribe 41,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 636.50 to employees of the Company and the Company's subsidiaries.

The Board of Directors issued on December 10, 2015 101,750 warrants with the right to subscribe 101,750 ordinary shares each with a nominal value of

DKK 1 at a price of DKK 939.50 to employees of the Company and the Company's subsidiaries.

The Board of Directors issued on March 17, 2016 24,350 warrants with the right to subscribe 24,350 ordinary shares each with a nominal value of DKK 1 at a price of DKK 815.50 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on June 9, 2016 16,800 warrants with the right to subscribe 16,800 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,233 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on October 6, 2016 19,450 warrants with the right to subscribe 19,450 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,136 to employees of the Company and one of the Company's subsidiaries.

The Board of Directors issued on December 15, 2016 89,465 warrants with the right to subscribe 89,465 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,145 to managers and employees of the Company and the Company's subsidiaries.

The Board of Directors issued on February 10, 2017 1,976 warrants with the right to subscribe 1,976 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,424 to employees of the Company and one of the Company's subsidiaries.

Members of the Board of Directors

The Board of Directors issued on December 5, 2012 90,000 warrants with the right to subscribe 90,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 88.55 to members of the Board of Directors of the Company.

The Board of Directors issued on April 17, 2013 25,000 warrants with the right to subscribe 25,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 147.50 to a member of the Board of Directors of the Company.

The Board of Directors issued on December 6, 2013 70,000 warrants with the right to subscribe 70,000 ordinary shares each with a nominal value of DKK 1 at a price of DKK 225.90 to members of the Board of Directors of the Company.

All warrants are issued on terms identical with the terms in Schedule C except that the Expiry Date set out in “(II) Exercise Period & Vesting Schedule” is the seventh (7th) anniversary instead of the tenth (10th) anniversary.

Schedule E

Under the authorizations by the General Meeting of April 17, 2013, April 9, 2014, March 28, 2017 and March 29, 2019, the Board of Directors has as of March 29, 2019 granted warrants to subscribe for shares in the Company as follows:

Employees, including managers

The Board of Directors issued on March 28, 2017 warrants with the right to subscribe 8,736 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,402 to employees of the Company and its subsidiaries.

The Board of Directors issued on March 29, 2017 warrants with the right to subscribe 8,400 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,427 to a manager of the Company.

The Board of Directors issued on June 8, 2017 warrants with the right to subscribe 5,224 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,408 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on October 5, 2017 warrants with the right to subscribe 18,756 ordinary shares each with a nominal value of DKK 1 at a price of DKK 1,432 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on December 15, 2017 warrants with the right to subscribe 139,597 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,032 to managers and employees of the Company and two of its subsidiaries.

The Board of Directors issued on April 10, 2018 warrants with the right to subscribe 14,954 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,210 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on June 7, 2018 warrants with the right to subscribe 14,714 ordinary shares each with a nominal value of DKK 1 at the price of DKK 962 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on September 21, 2018 warrants with the right to subscribe 33,226 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,050 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on December 10, 2018 warrants with the right to subscribe 213,613 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,025 to managers and employees of the Company and two of its subsidiaries.

The Board of Directors issued on March 1, 2019 warrants with the right to subscribe 19,982 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,161 to employees of the Company and two of its subsidiaries.

The Board of Directors issued on March 29, 2019 warrants with the right to subscribe 8,035 ordinary shares each with a nominal value of DKK 1 at the price of DKK 1,155 to employees of the Company and two of its subsidiaries.

All warrants have been issued on the following terms and conditions:

A. General description of warrants.

A warrant means a right — but not an obligation — of the owner (the “Owner”) to subscribe for ordinary shares in the Company at a price fixed in advance (the exercise price).

The Owner of the warrant can for a given period choose to subscribe for shares in the Company by paying the exercise price.

The warrant does not entitle the Owner to vote at the Company’s general meeting or to receive dividends.

When a warrant is exercised, the value may be calculated as the difference between the market value of the shares subscribed and the exercise price. The value cannot become negative without the Owner’s acceptance because a warrant is a right — but not an obligation — to subscribe for shares in the Company. If the market price of the shares at the time of subscription is lower than the exercise price the Owner can abstain from subscribing for shares in the Company.

The Owner of the warrant is obligated to give notice to the Company of changes in the Owner’s contact information.

B. Conditions for exercise of Warrants.

The Warrants are not granted due to work already performed by the Owners, but are granted in order to motivate the Owners, as described below, during the years following the date of issue of the Warrants.

Thus, the Warrants are issued and granted in order to increase and motivate the Owners' focus on a positive development of the market price of the shares of the Company and to motivate the Owners to work for a future value increase in the Company and its subsidiaries.

(I) Exercise Price.

Warrants are issued to the Owner free of charge.

One Warrant entitles the Owner to subscribe for one ordinary share of a nominal value of DKK 1 at a price per share (the "Exercise Price") determined by the Board of Directors at the time of issue, but which cannot be lower than the price of the Company's shares as listed on Nasdaq Copenhagen at close of business on the day of issue by the Board of Directors (the "Date of Issue").

(II) Exercise Period & Vesting Schedule.

(a) The Warrants will lapse automatically, without prior notice and without compensation on the seventh (7th) anniversary of the Date of Issue (the "Expiry Date").

From the Date of Issue and until the Expiry Date ("The Exercise Period"), an Owner earns the right to keep and exercise Warrants only in accordance with the following rules:

- Until three (3) years from the Date of Issue of a particular grant of Warrants, no such Warrants are earned/can be exercised.
- For a period starting three (3) years after the Date of Issue (a "Vesting Date") of such particular grant of Warrants and ending on

the Expiry Date, the Owner has earned and may exercise all of such Warrants provided that the Owner's employment relationship has not expired on or before such Vesting Date due to one of the reasons set out below under heading (c).

For the sake of clarity it is noted that in no event can Warrants be exercised earlier than three (3) years after the Date of Issue of the Warrants in question, unless as set out in Clause B.II, heading (d) in this Schedule E.

(b) In case of termination of the employment relationship with the Company or one of its subsidiaries the Owner or his/her estate shall be entitled to keep and exercise all Warrants issued to the Owner in instances where

- the Company or one of its subsidiaries terminates the Owner's employment relationship without the Owner having given the Company/subsidiary good reason to do so. However, provided that the Owner is comprised by the Danish Act no. 309 of May 5th, 2004 (regarding the use of stock options etc. in employment relationships), the Company/subsidiary shall only be deemed to have terminated the Owner's employment with good reason to the extent the termination is made due to the Owner's breach of his/her employment relationship; or
- the Owner terminates the employment relationship as a result of a material breach on the part of the Company/subsidiary; or
- the employment relationship is terminated as a result of the Owner's death, sickness or injury (other than termination by the employer due to excessive absenteeism or absence without notice), or retirement at an age where the Owner is eligible for Company or governmental pension.

Any exercise may however, only take place within the time periods where the Warrants in question would otherwise become exercisable had the employment

relationship continued unchanged — that is, the Owner in question cannot be treated more favourably than the continuing employees of the Company or its subsidiaries.

(c) In case of termination of the Owner's employment relationship with the Company or one of its subsidiaries in all other instances than those described above under heading (b), the Owner's right to exercise the Owner's Warrants shall be limited as described under heading (a) above.

(d) In case of a direct or indirect transfer of shares in the Company which entails that the acquirer achieves any one or more of the following:

- 1) holds at least a third of the voting rights in the Company, unless it is clearly demonstrated that such holding does not constitute a controlling influence over the Company,
- 2) by way of an agreement with other investors controls at least a third of the voting rights in the Company,
- 3) is able to control the Company's financial and operational matters due to the content of the Company's articles of association or as a result of any agreement, or
- 4) is able to appoint or dismiss a majority of the members of the Board of Directors, and the Board of Directors has controlling influence over the Company,

then, the Owner shall immediately be granted the right to exercise all the Owner's Warrants. However, to the extent (i) the Owner has at the time of the transfer of shares received or given notice of termination of the Owner's employment relationship with the Company or its subsidiaries, (ii) such termination notice has become effective prior to the transfer of shares, and (iii) such notice is received or given prior to the transfer of shares due to reasons comprised by heading (c) above, the Owner will only have the right to exercise the number of Warrants following from heading (a) above. Termination of the Owner's employment in connection with or as a consequence of a transfer of shares as

described above shall not be considered to be a good reason as described in heading (a) above.

(e) Exercise of Warrants to subscribe shares is dependent upon the availability of the Company's Board of Directors to make the necessary arrangements in preparation for the increase of the share capital of the Company. Any Owner must respect that the Board of Directors may in its discretion decide to schedule defined periods where requests to exercise Warrants may be submitted to fit the working schedule of the Board of Directors as well as to allow that other requests to exercise Warrants are processed at the same time.

(f) Any exercise of Warrants must respect the stock exchange regulation in force from time to time, including the prohibition against insider trading.

(III) Procedure for Exercise.

Warrants must be exercised by the Owner sending a written request to the Board of Directors of the Company for the issue of new shares within the Exercise Periods. The request shall specify the number of shares subscribed for as well as the Owner's account with VP Securities A/S at which the shares shall be registered. The cash subscription amount (i.e. the Exercise Price times the number of shares subscribed for) shall be paid to the Company in full at the same time or no later than the day before the subscription of the shares. The Board of Directors may require that requests to exercise are made using special forms or using specific digital solutions.

(IV) Non-transferability.

(a) The Warrants issued are personal and may never be the subject of transfer or assignment. Warrants may not be pledged or otherwise serve as the basis for settlement of claims by the Owner's creditors. However, transfer can be made to heirs in case of the Owner's death.

(b) Irrespective of heading (a) above, an Owner may transfer his/her Warrants to a company that is wholly-owned (100%) by the Owner. In such case, a principle of transparency will apply causing the receiving company's rights and obligations (including but not limited to the possibility of earning the right to exercise the Warrants) to be identical to those of the Owner. If an Owner transfers his/her Warrants to a company that is wholly-owned by the Owner, the Owner shall without undue delay notify the Company and present appropriate proof of the transfer.

(c) Irrespective of heading (a) above, the Board of Directors can on a case-by-case basis decide that an Owner may transfer his/her Warrants to a third party. The Board of Directors will determine the conditions for such transfer on a case-by-case basis.

(d) If an Owner enters into an agreement with the Company or its subsidiaries to make use of S. 7P of the Danish Tax Assessment Act then the Owner will be prohibited from transferring Warrants to a fully-owned company or — on the basis of the Board of Director's permission — transferring Warrants to a third party, cf. headings (b) to (c) above.

C. General Terms.

(a) Existing shareholders of the Company do not have a right of pre-emption to the shares issued on the basis of the Owner's exercise of Warrants. The shares issued on the basis of Warrants shall be negotiable instruments issued in the name of the holder. No restrictions shall apply to the transferability of the shares except as may otherwise be provided by the laws of the jurisdiction of the Owner's domicile (other than Danish law). No shares shall confer any special rights upon the holder, and no shareholder shall be under an obligation to allow his/her shares to be redeemed.

(b) At the request of the Owner, the Board of Directors of the Company shall issue certificates concerning the Owner's right to Warrants.

D. Adjustment of the Exercise Price and/or the Share Number.

(a) If changes to the capital structure of the Company are implemented causing the value of the non-exercised warrants to be increased or reduced, an adjustment of the Exercise Price and/or the number of shares which may be subscribed for on the basis of the non-exercised warrants (the “Share Number”) shall be made. Main examples of such changes in the capital structure of the Company are capital increases and capital decreases not done at market price, payment of dividend, cf. heading (b) below, issuance of bonus shares, change of the denomination of the shares in the Company, purchase and sale of own shares, issuance of warrants and/or convertible instruments, cf. heading (c) below, merger and demerger.

However, no adjustment of the Exercise Price nor the Share Number shall be made as a result of capital increases implemented on the basis of the exercise of the warrants comprised by this Warrant Scheme or by Schedule C or Schedule D to the Company’s Articles of Association.

(b) If the Company in an accounting year distributes dividend of more than DKK 5 per share at DKK 1, the Exercise Price shall be reduced to such an extent that the value of the warrants is unaffected by the part of the dividend exceeding the said amount.

(c) Irrespective of heading (a) above, if the Company resolves to issue stock options, shares, warrants, convertible instruments or the like to the Company’s and/or its subsidiaries’ employees, including the Company’s managers, or buys or sells own shares in this connection, no adjustment of the Exercise Price nor the Share Number shall be made. This applies irrespective of whether the issued share instruments provide the right to acquire shares at a price lower than the market price on the Company’s shares at the time of allotment or whether the purchase/sale of own shares takes place at a price higher or lower than the market price on the Company’s shares.

(d) If adjustments pursuant to this Clause D causes the Exercise Price to become lower than par, the warrants may as a starting point not be exercised.

However, an Owner may exercise the warrants in accordance with the provisions hereof, if the Owner accepts that the Exercise Price is increased to par without providing the Owner with a right to compensation.

(e) The Company's Board of Directors shall determine whether an implemented change in the capital causes for an adjustment of the Exercise Price and/or the Share Number.

If so determined, the adjustment of the Exercise Price and/or the Share Number shall be made by the Company's Board of Directors as soon as possible after the implementation of the relevant change and to the extent possible according to generally accepted principles therefore and otherwise in such a manner that the value of the warrants as estimated by the Board of Directors after the relevant change to the extent possible corresponds to the value of the warrants as estimated by the Board of Directors immediately prior to the change.

(f) The Owner is entitled to demand that the adjustment of the Exercise Price and/or Share Number made pursuant to heading (e) above (but not the decision as to whether an adjustment shall be made or not) is subjected to a valuation by a special expert valuer appointed by the Institute of State Authorised Public Accountants. A demand for a valuation must be made by the Owner to the Company not later than two weeks after the Owner has been notified of the Board of Directors' adjustment. Thereafter, the valuation shall be made as quickly as possible.

(g) Where a valuer is appointed pursuant to heading (f) above, and the valuer's valuation deviates from the adjustments made by the Board of Directors, the valuer's valuation shall be used as a basis for adjusting the Exercise Price and/or Share Number.

The valuation of the valuer is final and binding on both the Owners and the Company and cannot be brought before the courts or arbitration. The costs of the valuation shall be borne by the Owner or Owners (as the case may be) and the Company each paying half of the costs irrespective of the outcome of the valuation.

E. Merger

If the Company is the surviving or continuing company in a merger (“the absorbing company”), Warrants shall remain unaffected. Where a final resolution is passed to merge or consolidate the Company with or into another company that will be the absorbing company all outstanding non-exercised Warrants shall automatically be considered converted into a right to subscribe for new shares in the absorbing company. The Exercise Price and/or Share Number applicable at the time of the merger shall be adjusted on the basis of the conversion ratio applicable between the Company’s shares and the shares of the absorbing company at the time of the merger or consolidation and otherwise in accordance with Clause D above. For the period after the merger, the adjusted Exercise Price and Share number shall be adjusted in accordance with the rules otherwise contained in this Warrant Scheme.

F. Liquidation of the Company

(i) Warrants that have not been exercised shall automatically lapse in the event of the liquidation of the Company. The lapse becomes effective when the general meeting has adopted the final liquidation accounts.

(ii) Prior to the lapse of non-exercised Warrants, the right to exercise all an Owner’s Warrants shall be granted to such Owner. However, to the extent (i) an Owner has received or given notice of termination of the Owner’s employment relationship with the Company or its subsidiaries, (ii) such notice has become effective at the time when the right to exercise Warrants due to the liquidation is granted, and (iii) such notice is received or given due to reasons comprised by Clause B.II, heading (c) above, the Owner will only be able to exercise the number of Warrants following from Clause B.II, heading (a) above.

G. Demerger

(i) Where a final resolution is passed to demerge the Company so that assets and liabilities as a whole are transferred to several existing or newly set up

public or private limited companies against issue of shares and, if relevant, cash to the Company's shareholders, non-exercised Warrants shall, at the Company's discretion, be transferred to one of the new companies or be transferred proportionately among the new companies. In the latter situation, the transfer shall be made in the same proportion as that in which the Company's shareholders receive shares in the new companies to replace shares of the Company. After such a demerger, the right to subscribe for shares on the basis of the Warrants transferred shall remain in existence as a right to subscribe for shares in the company(ies) that has(ve) taken over such an obligation after the demerger.

(ii) In the event of a demerger where the Company remains in existence concurrently with the Company transferring some of its assets and liabilities to one or more existing or newly set up public or private limited companies, the right to Warrants shall be maintained as a right to Warrants in the Company.

(iii) In the event of a demerger as set out in item (i) or (ii) above, the Exercise Price and/or Share Number shall be adjusted according to Clause D above.

(iv) No adjustment of the Exercise Price and/or the Share Number shall be made in the event of a demerger where certain assets and/or liabilities of the Company are divested by the Company into a subsidiary without payment to the shareholders of the Company.

H. Tax Implications.

The Company and its subsidiaries shall have no responsibility for the tax consequences (including social security contributions triggered) for the Owner in connection with the allotment, exercise or potential transfer of the Warrants or any transfer of shares acquired on the basis of exercise of Warrants or any tax consequences for the Owner connected with any restructuring of the Company. However, the Company shall be entitled to withhold and pay to tax authorities any applicable taxes or social contributions that the Owner may be the subject of.

I. No extritorial applicability of mandatory laws.

Nothing herein shall be deemed to confer upon employees whose employment relationship is governed by foreign (Non-Danish) law, any benefit

under mandatory Danish employment laws and no such laws or regulation is included into this Warrant Scheme by reference.

J. Arbitration.

The interpretation of this Warrant Scheme and Warrants issued pursuant hereto including contents, scope, expiry or breach hereof as well as other disputes shall be governed by Danish law and shall be settled in accordance with the rules of procedure of the Copenhagen Arbitration. Place of arbitration shall be Copenhagen, Denmark.