

MACROGENICS INC
 Form 424B5
 February 13, 2019
TABLE OF CONTENTS

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-214385

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered⁽¹⁾	Proposed Maximum Offering Price per Security	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee⁽²⁾
Common Stock, par value \$0.01 per share	6,325,000	\$ 20.00	\$ 126,500,000	\$ 15,331.80

(1) Includes 825,000 shares of common stock that may be purchased by the underwriters upon exercise of their option in full to purchase additional shares of common stock.

(2) Calculated in accordance with Rule 456(b) and Rule 457(r) under the Securities Act of 1933, as amended.

TABLE OF CONTENTS**PROSPECTUS SUPPLEMENT****(To Prospectus dated November 2, 2016)****5,500,000 Shares****MACROGENICS, INC.****Common Stock**

We are offering 5,500,000 shares of our common stock. Our common stock trades on the Nasdaq Global Select Market under the symbol MGNX. On February 12, 2019, the last reported sale price of our common stock was \$20.99 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page S-6 of this prospectus supplement, the accompanying prospectus and the other documents that are incorporated by reference herein.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	\$ 20.00	\$ 110,000,000
Underwriting discounts and commissions ⁽¹⁾	\$ 1.20	\$ 6,600,000
Proceeds, before expenses, to us	\$ 18.80	\$ 103,400,000

(1) See Underwriting for further information regarding compensation to the underwriters for this offering. The underwriters also have the right to purchase up to an additional 825,000 shares of common stock from us at the public offering price, less the underwriting discounts and commissions, at their option, within 30 days of the date of this prospectus supplement. If the underwriters exercise their option to purchase additional shares in full, the total underwriting discounts and commissions will be \$7,590,000 and the total proceeds, before deducting expenses payable by us, will be \$118,910,000.

The shares of common stock will be ready for delivery on or about February 15, 2019.

Joint Book-Running Managers**SVB Leerink****Evercore ISI****Credit Suisse****Stifel*****Lead Managers*****Nomura****SunTrust Robinson Humphrey****BTIG*****Co-Manager*****H.C. Wainwright & Co.**

The date of this prospectus supplement is February 12, 2019.

TABLE OF CONTENTS

Table of Contents

Prospectus Supplement

<u>About this Prospectus Supplement</u>	<u>S-iii</u>
<u>Special Note Regarding Forward-Looking Statements</u>	<u>S-iv</u>
<u>Prospectus Supplement Summary</u>	<u>S-1</u>
<u>Risk Factors</u>	<u>S-6</u>
<u>Use of Proceeds</u>	<u>S-32</u>
<u>Dilution</u>	<u>S-33</u>
<u>Material United States Federal Tax Considerations for Non-U.S. Holders</u>	<u>S-34</u>
<u>Underwriting</u>	<u>S-38</u>
<u>Legal Matters</u>	<u>S-42</u>
<u>Experts</u>	<u>S-42</u>
<u>Where You Can Find More Information</u>	<u>S-42</u>
<u>Incorporation of Certain Documents by Reference</u>	<u>S-43</u>

Prospectus

<u>About This Prospectus</u>	<u>ii</u>
<u>Where You Can Find More Information</u>	<u>iii</u>
<u>Incorporation By Reference</u>	<u>iii</u>
<u>Special Note Regarding Forward-Looking Statements</u>	<u>iv</u>
<u>Macrogenics, Inc.</u>	<u>1</u>
<u>Risk Factors</u>	<u>2</u>
<u>Consolidated Ratio Of Earnings To Fixed Charges</u>	<u>2</u>
<u>Use Of Proceeds</u>	<u>2</u>
<u>Description Of Debt Securities</u>	<u>3</u>
<u>Description Of Capital Stock</u>	<u>11</u>
<u>Description Of Units</u>	<u>17</u>
<u>Description Of Warrants</u>	<u>18</u>
<u>Forms Of Securities</u>	<u>19</u>
<u>Selling Securityholders</u>	<u>21</u>
<u>Plan Of Distribution</u>	<u>22</u>
<u>Legal Matters</u>	<u>24</u>
<u>Experts</u>	<u>24</u>

S-ii

TABLE OF CONTENTS

About this Prospectus Supplement

This prospectus supplement is part of an automatic shelf registration statement, or Registration Statement, that we filed with the Securities and Exchange Commission, or SEC, as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act, using a shelf registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in the Registration Statement and selling securityholders may, from time to time, offer such securities owned by them. This prospectus supplement, together with the accompanying prospectus and the documents incorporated by reference therein and herein, includes all material information relating to this offering.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of our common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part, the accompanying prospectus, provides more general information about our shelf registration. If the information in this prospectus supplement or the documents incorporated by reference herein is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

Neither this prospectus supplement or the accompanying prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference therein and herein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled *Where You Can Find More Information* and *Incorporation of Certain Documents by Reference* in this prospectus supplement and in the accompanying prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus or in any related free writing prospectus filed by us with the SEC. Neither we nor the underwriters have authorized anyone to provide you with different information. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Our primary executive offices are located at 9704 Medical Center Drive, Rockville, Maryland 20850, and our telephone number is (301) 251-5172. Our website address is www.macrogenics.com. The information contained on, or that can be accessed through, our website is not a part of, and should not be construed as being incorporated by reference into, this prospectus supplement or the accompanying prospectus.

Unless the context otherwise indicates, references in this prospectus supplement to *we*, *our* and *us* refer, collectively, to MacroGenics, Inc., a Delaware corporation, and its consolidated subsidiary.

MacroGenics, the MacroGenics logo and DART® are our trademarks or registered trademarks. The other trademarks, trade names and service marks appearing in this prospectus supplement are the property of their respective owners.

TABLE OF CONTENTS

Special Note Regarding Forward-Looking Statements

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein include forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. Forward-looking statements include statements that may relate to our plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs and other information that is not historical information. Forward-looking statements can often be identified by the use of terminology such as subject to, believe, anticipate, plan, expect, intend, estimate, project, may, will, should, would, could, can, the negatives thereof, variations thereon and similar expressions in discussions of strategy.

All forward-looking statements are based upon our current expectations and various assumptions. We believe there is a reasonable basis for our expectations and beliefs, but they are inherently uncertain. We may not realize our expectations, and our beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements. The following uncertainties and factors, among others, could affect future performance and cause actual results to differ materially from those matters expressed in or implied by our forward-looking statements:

- our plans to develop and commercialize our product candidates;
- the timing and outcomes of our ongoing and planned clinical trials, including when clinical trials will be initiated and completed and when data will be reported or regulatory filings made;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our preliminary financial results;
- our ability to enter into new collaborations or to identify additional products or product candidates with significant commercial potential that are consistent with our commercial objectives;
- the potential benefits and future operation of our existing collaborations;
- our ability to recover the investment in our manufacturing capabilities;
- the rate and degree of market acceptance and clinical utility of our products;
- our commercialization, marketing and manufacturing capabilities and strategy;
- significant competition in our industry;
- costs of litigation and the failure to successfully defend lawsuits and other claims against us;
- economic, political and other risks associated with our international operations;
- our ability to receive research funding and achieve anticipated milestones under our collaborations;
- our ability to protect and enforce patents and other intellectual property;
- costs of compliance and our failure to comply with new and existing governmental regulations including, but not limited to, tax regulations;
- loss or retirement of key members of management;
- failure to successfully execute our growth strategy, including any delays in our planned future growth;
- our failure to maintain effective internal controls; and
- our expected use of proceeds from this offering.

TABLE OF CONTENTS

The factors, risks and uncertainties referred to above and others are more fully described under the heading Risk Factors in this prospectus supplement and under the heading Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, as updated from time to time in our subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Forward-looking statements should be regarded solely as our current plans, estimates and beliefs. You should not place undue reliance on forward-looking statements. The forward-looking statements contained herein represent our judgment as of the date of this prospectus supplement. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by law. You should read this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect.

S-v

TABLE OF CONTENTS

Prospectus Supplement Summary

This summary highlights information contained elsewhere in this prospectus supplement and the accompanying prospectus or incorporated by reference herein or therein. Because it is a summary, it does not contain all the information you should consider before investing in our common stock. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the Risk Factors section beginning on page S-6 of this prospectus supplement, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision.

Company Overview

We are a clinical-stage biopharmaceutical company focused on discovering and developing innovative antibody-based therapeutics designed to modulate the human immune response for the treatment of cancer. We currently have a pipeline of product candidates in human clinical testing, including nine immuno-oncology programs, that have been created primarily using our proprietary antibody-based technology platforms.

We are developing several product candidates targeting B7-H3, a protein in the B7 family of immune regulator proteins, programmed cell death protein 1, or PD-1, as well as tumor-associated antigens, including HER2. B7-H3 is widely expressed by a number of different tumor types and may play a key role in regulating the immune response to various types of cancer. There are no currently approved therapeutic agents directed against B7-H3. PD-1 is important in the regulation of the immune system's response to cancer, and monoclonal antibodies that inhibit PD-1 have been approved by the FDA for the treatment of numerous solid cancers. Beyond PD-1, we are also developing immuno-oncology product candidates that target other immune checkpoints, such as LAG-3 and CTLA-4.

We have created our product candidates based on the following antibody-based technologies:

- *Fc Optimization platform*, which introduces certain mutations into the Fc region of a monoclonal antibody in order to modulate antibody interaction with immune effector cells to enhance the killing of cancer cells;
- *Multi-specific platforms*, which enable us to design antibodies that have the ability to bind to two (in the case of our bispecific DART® product candidates) or more distinct targets; and
- *Antibody drug conjugates (ADC) platforms*, which we have licensed from collaboration partners, and which link monoclonal antibodies that specifically target cancer cells to cytotoxins that are designed to trigger cell death in the cancer cell.

Our Pipeline of Immuno-Oncology Product Candidates

- (a) MGC018 is an antibody-drug conjugate (ADC) based on a duocarmycin payload with cleavable peptide linker that was licensed from Synthon Biopharmaceuticals. MacroGenics retains rights to develop its pipeline assets in combination with MGA012 and to manufacture a portion of global clinical and commercial supply needs of MGA012. Incyte designates this molecule as INCMGA0012 .

S-1

TABLE OF CONTENTS**Recent Developments***Margetuximab*

HER 2-positive Metastatic Breast Cancer. In February 2019, we announced positive results from SOPHIA, our Phase 3 clinical trial of margetuximab in HER2-positive metastatic breast cancer patients. Margetuximab is an investigational immune-enhancing monoclonal antibody derived from our proprietary Fc Optimization technology platform. The SOPHIA clinical trial met the trial's first primary endpoint of prolongation of progression-free survival (PFS) in patients treated with the combination of margetuximab plus chemotherapy compared to trastuzumab plus chemotherapy. Patients in the margetuximab arm experienced a 24% risk reduction in PFS compared to patients in the trastuzumab arm (HR=0.76, p=0.033). Notably, approximately 85% of patients in the study were carriers of the CD16A (Fc R3A) 158F allele, which has been previously associated with diminished clinical response to trastuzumab and other antibodies. In this pre-specified subpopulation, patients in the margetuximab arm experienced a 32% risk reduction in PFS compared to patients in the trastuzumab arm (HR=0.68, p=0.005). Results of the SOPHIA study are being prepared for submission for publication and presentation later this year at a major scientific conference. Follow-up for determination of the impact of therapy on the sequential second primary endpoint of overall survival (OS) is ongoing, as pre-specified in the study protocol and recommended by the trial's independent Data Safety Monitoring Committee. We anticipate submitting a Biologics License Application (BLA) to the U.S. Food and Drug Administration for margetuximab on the basis of the PFS results in the second half of 2019.

The SOPHIA study enrolled 536 patients at approximately 200 trial sites across North America, Europe and Asia. The study evaluated margetuximab in a Phase 3 clinical trial in patients with advanced HER-2+ breast cancer who had received at least two prior lines of anti-HER-2 directed therapy in the metastatic setting, or in the case of having received (neo)adjuvant pertuzumab, at least one prior line of anti-HER-2 directed therapy in the metastatic setting, and who have received at least one and no more than three prior lines of therapy overall in the metastatic setting. Patients were treated with either margetuximab or trastuzumab in combination with one of four chemotherapy agents (capecitabine, eribulin, gemcitabine or vinorelbine). All study patients had previously received trastuzumab and pertuzumab, and approximately 90% had previously received ado-trastuzumab emtansine. The combination of margetuximab and chemotherapy demonstrated acceptable safety and tolerability, comparable overall to that of trastuzumab and chemotherapy.

Gastric Cancer. We are also evaluating margetuximab in a Phase 2 clinical trial in patients with HER2-positive gastric or gastroesophageal junction cancer in combination with an anti-PD-1 monoclonal antibody. The Phase 2 clinical trial seeks to characterize the safety, tolerability, maximum tolerated dose, and antitumor activity of this combination. Enrolled patients had relapsed or refractory advanced HER2+ gastric or gastroesophageal junction cancer with disease progression after or resistance to treatment with trastuzumab plus chemotherapy. The 25 patients in the most recently enrolled expansion cohort had HER2+ gastric carcinoma that was 3+ by immunohistochemistry. Patients in the study were enrolled irrespective of PD-L1 expression status.

As of a January 8, 2019 data cut-off date, objective responses were observed in 18 of 55 HER2-positive (as indicated by a 3+ score on an immunohistochemistry test) response-evaluable gastric cancer patients, including 14 confirmed and 4 unconfirmed. The objective response rate (ORR) for this population was 32.7%, with a disease control rate (or DCR, which includes partial responses and stable disease) of 69.1%. Median PFS was 4.7 months. In the subset of these patients who were also PD-L1 positive, objective responses were observed in 12 of 23 (52.2%) patients, with a DCR of 82.6% and PFS of 4.14 months. As of the data cut-off date, the study was ongoing with 13 gastric cancer patients remaining on therapy. The median OS had not been reached in either of these groups. Acceptable tolerability was observed in the safety population of 95 patients, 92 of whom were treated at the recommended Phase 2 dose of 15 mg/kg for margetuximab and 200mg for the anti-PD-1 monoclonal antibody, both on an every three week schedule of administration. Grade 3 or higher treatment-related adverse events occurred in 17.9% of patients, the most common of

which was infusion-related reaction (3.2%). During the first quarter of 2019, we plan to discuss with the FDA our proposed future development plans for a Phase 2 study of margetuximab in combination with MGA012, an anti-PD-1 monoclonal antibody, which we are planning to initiate in the second half of 2019.

B7-H3 Franchise

Enoblituzumab. Our most advanced product candidate in our B7-H3 franchise, enoblituzumab, is a monoclonal antibody that targets B7-H3 and has been enhanced using our Fc Optimization platform.

S-2

TABLE OF CONTENTS

We conducted a Phase 1 clinical study of the combination of enoblituzumab and an anti-PD-1 monoclonal antibody to evaluate the combination in patients with B7-H3-expressing melanoma, squamous cell carcinoma of the head and neck (SCCHN), non-small cell lung cancer (NSCLC) and urothelial cancer. A total of 133 patients were treated in the study and the data cut-off date was October 12, 2018.

In the SCCHN dose expansion cohort, of the response-evaluable patients who had not previously received anti-PD-1 or anti-PD-L1 therapy, 6 of 18 (33.3%) had confirmed partial responses (PRs). For the subset of patients with B7-H3 tumor expression $\geq 10\%$, 6 of 15 (40.0%) had confirmed PRs. Objective response rates ranging from 13% to 16% have previously been reported in SCCHN patients treated with anti-PD-1 alone.

In the NSCLC dose expansion cohort, of the response-evaluable patients who had not previously received anti-PD-1 or anti-PD-L1 therapy and who were PD-L1 negative (i.e., PD-L1 $<1\%$), 5 of 14 (35.7%) had confirmed PRs. Objective response rates ranging from 8% to 17% have previously been reported in PD-L1 negative NSCLC patients treated with anti-PD-1 alone.

The combination of enoblituzumab and an anti-PD-1 monoclonal antibody demonstrated acceptable tolerability in patients treated to date, with any adverse event \geq Grade 3 occurring in 27.1% of patients. The rate of immune-related adverse events experienced in the trial was comparable to that observed in patients who receive anti-PD-1 as monotherapy.

Based on these results, we intend to commence Phase 2 studies of enoblituzumab in combination with MGA012 in patients with SCCHN and NSCLC beginning in the second half of 2019.

MGD009. MGD009 is a DART molecule that is designed to target both B7-H3 expressed on tumor cells as well as CD3, which is expressed on normal T cells. In preclinical models, MGD009 has re-directed T cells to reduce or eliminate B7-H3 expressing tumors. We are conducting a Phase 1 clinical trial with MGD009 in patients with B7-H3 positive tumors and in a separate study that combines MGD009 and MGA012.

MCG018. Our third B7-H3-directed molecule is MGC018, an ADC that is designed to target solid tumors expressing B7-H3. We initiated a Phase 1 dose escalation study of MGC018 in the fourth quarter of 2018.

PD-1 Franchise

MGA012. MGA012 is an anti-PD-1 monoclonal antibody licensed to Incyte Corporation in 2017, but for which we retain the rights to develop in combination with our pipeline of product candidates. Incyte has announced its intention to pursue development of MGA012 through registration-directed studies in MSI-high endometrial cancer, Merkel cell carcinoma and anal cancer, with initial data anticipated in 2020, in the case of MSI-high endometrial cancer and Merkel cell carcinoma, and 2021, in the case of anal cancer. We are currently studying MGA012 in combination with MGD009 and MGD007, and we intend to commence additional studies of our product candidates in combination with MGA012, including flotetuzumab.

MGD013. MGD013 is a first-in-class bispecific DART molecule that is designed to provide co-blockade of two immune checkpoint molecules expressed on T cells, PD-1 and LAG-3, for the potential treatment of a range of solid tumors and hematological malignancies. We have established the dose and schedule for MGD013 administration and initiated dose expansion in up to nine tumor types in a Phase 1 study. We expect to present data from this ongoing study in 2019.

MGD019. MGD019 is a bispecific DART molecule designed to provide co-blockade of both PD-1 and CTLA-4, two immune checkpoint inhibitors, on T cells. We are currently evaluating MGD019 in a Phase 1 dose escalation study.

Flotetuzumab

Flotetuzumab is a bispecific DART molecule that recognizes both CD123 and CD3 and is being developed for the treatment of acute myeloid leukemia (AML). In December 2018, we presented data from our Phase 1 dose expansion study of flotetuzumab in relapsed/refractory patients with AML. In this study, we enrolled 31 patients at the recommended Phase 2 dose of 500 ng/kg/day by continuous infusion with a lead-in dosing strategy. The goal of the expansion cohort study was to evaluate the safety and preliminary anti-leukemic activity of flotetuzumab, optimize delivery and supportive care, including the management of cytokine release syndrome, and to define the pharmacokinetic and pharmacodynamic activity of flotetuzumab. In the study, flotetuzumab demonstrated anti-leukemic activity in patients with relapsed/refractory AML. In 27 response evaluable patients,

S-3

TABLE OF CONTENTS

the ORR was 26% (7 of 27 patients), with a composite complete response rate (combining both complete responses (CRs) and complete responses with incomplete hematological improvement (CRi)) of 19% (5 of 27 patients). Notably, in primary refractory patients, an extremely challenging population to treat, the ORR was 35% (6 of 17 patients) with a CR/CRi rate of 29% (5 out of 17 patients). The median duration of response for the patients that experienced a CR (three patients), a CRi (two patients) and a morphologic leukemia-free state (one patient) was 3.1 months. The most common treatment-related adverse event was infusion-related reaction/cytokine release syndrome, which occurred in 93% (29 of 31) of patients. Grade 3 or greater infusion-related reaction/cytokine release syndrome was observed in 13% (4 of 31) of patients. We plan to enroll additional patients in this ongoing study and announce data in 2019. We also intend to study flotetuzumab in combination MGA012 in a future clinical trial.

Collaboration and License Agreement with Zai Lab

In November 2018, we entered into an exclusive collaboration and license agreement with Zai Lab Limited (Zai Lab) pursuant to which we licensed to Zai Lab the right to develop and commercialize margetuximab, MGD013 and an undisclosed TRIDENT™ binding molecule that is in preclinical development in mainland China, Hong Kong, Macau and Taiwan, which we refer to collectively as Greater China. Zai Lab will lead clinical development in its territory by leveraging its regulatory and clinical development expertise and broad regional network of investigators. As part of the collaborative clinical development effort, we and Zai Lab intend to initiate a global study using combination regimens containing margetuximab in order to maximize potential clinical benefit in gastric cancer. Under our agreement with Zai Lab, we received an upfront cash payment of \$25 million, less foreign withholding, and are eligible to receive up to \$140 million in potential development and regulatory-based milestone payments. In addition, Zai Lab has agreed to pay us double-digit royalties on annual net sales of the assets, which may be subject to adjustment in specified circumstances.

Preliminary Financial Results

Our cash, cash equivalents and marketable securities were approximately \$233 million as of December 31, 2018. This financial result is preliminary, unaudited and subject to completion and adjustment and may differ from what will be reflected in our audited consolidated financial statements as of and for the year ended December 31, 2018. Also, our cash, cash equivalents and marketable securities as of December 31, 2018 does not include \$25 million, less foreign withholding, received from Zai Lab in early 2019. Our audited consolidated financial statements for fiscal year 2018 will not be available to you prior to investing in this offering.

Company Information

We were incorporated under the laws of the state of Delaware in 2000 under the name MacroGenics, Inc. Our principal executive offices are located at 9704 Medical Center Drive, Rockville, Maryland 20850, and our telephone number is (301) 251-5172. Our website address is www.macrogenics.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus supplement or the accompanying prospectus. We have included our website address in this prospectus supplement solely as an inactive textual reference.

TABLE OF CONTENTS

The Offering

Issuer

MacroGenics, Inc.

Common stock offered by us

5,500,000 shares

Option to purchase additional shares

We have granted the underwriters an option to purchase up to 825,000 additional shares of our common stock. This option is exercisable, in whole or in part, for a period of 30 days from the date of this prospectus supplement.

Common stock to be outstanding after this offering

47,748,075 shares (or 48,573,075 shares if the underwriters exercise their option to purchase additional shares in full)

Use of proceeds

We intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and marketable securities, for general corporate purposes and working capital needs consistent with our business plan which would include, but would not be limited to: (i) potential funding of activities in preparation for the potential regulatory approval and marketing of margetuximab in the U.S.; (ii) potential late-stage development of enoblituzumab for the treatment of B7-H3 positive cancers, potentially including squamous cell carcinoma of the head and neck, non-small cell lung cancer, and others; (iii) potential development of margetuximab in combination with MGA012 for the treatment of gastric cancer; (iv) continued development of our immune checkpoint-based DART product candidates; (v) further investment in the development of our current pipeline programs as they continue to mature; (vi) other research and development programs; and (vii) in-licensing or acquiring other products or technologies. See **Use of Proceeds** on page S-32 of this prospectus supplement.

Risk factors

You should read the **Risk Factors** section beginning on page S-6 of this prospectus supplement for a discussion of factors to carefully consider before deciding to purchase shares of our common stock.

Nasdaq Global Select Market Symbol

MGNX

The number of shares of our common stock to be outstanding after this offering is based on 42,248,075 shares of common stock outstanding as of September 30, 2018 and excludes:

- 5,348,275 shares issuable upon exercise of options outstanding under our employee stock option plans as of September 30, 2018 at a weighted average exercise price of \$21.95 per share, of which 3,365,982 were exercisable at September 30, 2018, and underlying restricted stock units as of September 30, 2018;
- 3,544,620 shares of common stock available for future issuance under our employee stock option plans; and
- 741,757 shares of common stock available for future issuance under our 2016 Employee Stock Purchase Plan, or the 2016 ESPP.

Unless otherwise indicated, all information in this prospectus supplement assumes:

- no exercise of the underwriters' option to purchase additional shares of our common stock; and
- no exercise of outstanding options to purchase shares of common stock or vesting of restricted stock units.

S-5

TABLE OF CONTENTS

Risk Factors

Investing in our common stock involves a high degree of risk. In addition to the other information contained in this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference herein and therein, you should carefully consider the risks discussed below before making a decision about investing in our common stock. The risks and uncertainties discussed below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks actually occur, our business, prospects, operating results and financial condition could suffer materially. In such event, the trading price of our common stock could decline and you might lose all or part of your investment.

Risks Related to Our Business and the Development and Commercialization of Our Product Candidates.

All of our product candidates are in preclinical or clinical development. Clinical drug development is expensive, time consuming and uncertain and we may ultimately not be able to obtain regulatory approvals for the commercialization of some or all of our product candidates.

The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug products are subject to extensive regulation by the U.S. Food and Drug Administration (FDA) and non-U.S. regulatory authorities, which regulations differ from country to country. We are not permitted to market our product candidates in the United States or in other countries until we receive approval of a Biologics License Application (BLA), from the FDA or marketing approval from applicable regulatory authorities outside the United States. Our product candidates are in various stages of development and are subject to the risks of failure inherent in drug development. Based on our recently announced positive top-line results for the first primary endpoint of our SOPHIA study, we intend to submit a BLA for the approval of margetuximab in the second half of 2019. Obtaining approval of a BLA can be a lengthy, expensive and uncertain process, and as a company we have no experience with the preparation of a BLA submission or any other application for marketing approval. In addition, failure to comply with FDA and non-U.S. regulatory requirements may, either before or after product approval, if any, subject our company to administrative or judicially imposed sanctions, including:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on the products, manufacturers, manufacturing facilities or manufacturing process;
- warning letters;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements; and
- refusal to approve pending BLAs or supplements to approved BLAs or analogous marketing approvals outside the United States.

The FDA and foreign regulatory authorities also have substantial discretion in the drug approval process. The number of preclinical studies and clinical trials that will be required for regulatory approval varies depending on the product candidate, the disease or condition that the product candidate is designed to address, and the regulations applicable to any particular drug candidate. Regulatory agencies can delay, limit or deny approval of a product candidate for many reasons, including:

- a product candidate may not be deemed safe or effective;

- the results may not confirm the positive results from earlier preclinical studies or clinical trials;
- regulatory agencies may not find the data from preclinical studies and clinical trials sufficient;

S-6

TABLE OF CONTENTS

- regulatory agencies might not approve or might require changes to our manufacturing processes or facilities; or
- regulatory agencies may change their approval policies or adopt new regulations.

Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to generate revenue from the particular product candidate, which likely would result in significant harm to our financial position and adversely impact our stock price. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. These limitations may limit the size of the market for the product.

If clinical trials for our product candidates are prolonged, delayed or stopped, we may be unable to obtain regulatory approval and commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any product revenue.

We are currently enrolling patients in clinical trials for margetuximab, enoblituzumab, flotetuzumab, MGD009, MGC018, MGA012, MGD013, MGD019 and MGD007 and anticipate initiating or continuing clinical trials for these product candidates as monotherapies or in combination with other product candidates in 2019. In addition, our collaborators are currently enrolling patients in clinical trials for MGA012, which is being developed by Incyte Corporation. The commencement of new clinical trials could be substantially delayed or prevented by several factors, including:

- further discussions with the FDA or other regulatory agencies regarding the scope or design of our clinical trials;
- the limited number of, and competition for, suitable sites to conduct our clinical trials, many of which may already be engaged in other clinical trial programs, including some that may be for the same indication as our product candidates;
- any delay or failure to obtain regulatory approval or agreement to commence a clinical trial in any of the countries where enrollment is planned;
- inability to obtain sufficient funds required for a clinical trial;
- clinical holds on, or other regulatory objections to, a new or ongoing clinical trial;
- delay or failure to manufacture sufficient supplies of the product candidate for our clinical trials;
- delay or failure to reach agreement on acceptable clinical trial agreement terms or clinical trial protocols with prospective sites or clinical research organizations, CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different sites or CROs; and
- delay or failure to obtain institutional review board, or IRB, approval to conduct a clinical trial at a prospective site.

The completion of our clinical trials could also be substantially delayed or prevented by several factors, including:

- slower than expected rates of patient recruitment and enrollment;
- failure of patients to complete the clinical trial;
- unforeseen safety issues, including severe or unexpected drug-related adverse effects experienced by patients, including possible deaths;
- lack of efficacy during clinical trials;
- termination of our clinical trials by one or more clinical trial sites;
- inability or unwillingness of patients or clinical investigators to follow our clinical trial protocols;
- inability to monitor patients adequately during or after treatment by us and/or our CROs; and
- the need to repeat or terminate clinical trials as a result of inconclusive or negative results or unforeseen complications in testing.

TABLE OF CONTENTS

Changes in regulatory requirements and guidance may also occur and we may need to significantly amend clinical trial protocols to reflect these changes with appropriate regulatory authorities. Amendments may require us to renegotiate terms with CROs or resubmit clinical trial protocols to IRBs for re-examination, which may impact the costs, timing or successful completion of a clinical trial. Our clinical trials may be suspended or terminated at any time by the FDA, other regulatory authorities, the IRB overseeing the clinical trial at issue, any of our clinical trial sites with respect to that site, or us, due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols;
- unforeseen safety issues or any determination that a clinical trial presents unacceptable health risks;
- lack of adequate funding to continue the clinical trial due to unforeseen costs or other business decisions; and
- upon a breach or pursuant to the terms of any agreement with, or for any other reason by, current or future collaborators that have responsibility for the clinical development of any of our product candidates.

For example, in December 2018, the FDA imposed a partial clinical hold on our Phase 1 monotherapy study of MGD009, as well as on a combination study of MGD009 and MGA012. Under the partial clinical hold, which was lifted in January 2019, no new patients were permitted to be enrolled in either study, although then-current study participants were permitted to continue to receive drug at their pre-assigned dose. Any failure or significant delay in completing clinical trials for our product candidates would adversely affect our ability to obtain regulatory approval and our commercial prospects and ability to generate product revenue will be diminished.

The results of previous clinical trials may not be predictive of future results, and interim or top line data may be subject to change or qualification based the complete analysis of data. In addition, the results of our current and planned clinical trials may not satisfy the requirements of the FDA or non-U.S. regulatory authorities.

Clinical failure can occur at any stage of clinical development. Clinical trials may produce negative or inconclusive results, and we or any of our current and future collaborators may decide, or regulators may require us, to conduct additional clinical or preclinical testing. Success in early clinical trials does not mean that future larger registration clinical trials will be successful because product candidates in later-stage clinical trials may fail to demonstrate sufficient safety and efficacy to the satisfaction of the FDA and non-U.S. regulatory authorities despite having progressed through initial clinical trials. A number of companies in the pharmaceutical industry, including those with greater resources and experience than us, have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier clinical trials.

We may publicly disclose topline or interim data from time to time, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. For example, we recently announced top line data for the SOPHIA trial of margetuximab for the treatment of certain metastatic breast cancer patients. We make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the topline results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. In addition, the achievement of one primary endpoint for a trial does not guarantee that additional co-primary endpoints or secondary endpoints will be achieved. For example, the achievement by margetuximab of its co-primary endpoint for progression-free survival events in the SOPHIA trial does not indicate whether the co-primary endpoint of overall survival will be achieved

Further, our product candidates may not be approved even if they achieve their primary endpoints in Phase 3 clinical trials or registration trials. For example, we recently announced top line data for the SOPHIA trial in which margetuximab achieved its first primary endpoint. The FDA or other non-U.S. regulatory authorities may disagree

with our trial design for SOPHIA or other trials, and our interpretation of data from preclinical studies and clinical trials. In particular, the FDA may not view our data as being clinically meaningful or statistically persuasive. In addition, any of these regulatory authorities may change requirements for the

S-8

TABLE OF CONTENTS

approval of a product candidate even after reviewing and providing comments or advice on a protocol for a pivotal Phase 3 clinical trial. Any of these regulatory authorities may also approve a product candidate for fewer or more limited indications than we request or may grant approval contingent on the performance of costly post-marketing clinical trials. The FDA or other non-U.S. regulatory authorities may not approve the labeling claims that we believe would be necessary or desirable for the successful commercialization of our product candidates.

We use new technologies in the development of our product candidates and the FDA and other regulatory authorities have not approved products that utilize these technologies.

Our products in development are based on new technologies, such as Fc Optimization, DART molecules and TRIDENT molecules. Given the novelty of our technologies, we intend to work closely with the FDA and other regulatory authorities to perform the requisite scientific analyses and evaluation of our methods to obtain regulatory approval for our product candidates. The validation process takes time and resources, may require independent third-party analyses, and may not be accepted by the FDA and other regulatory authorities. For some of our product candidates that are based on these technology platforms, the regulatory approval path and requirements may not be clear or evolve as more data becomes available for this product candidates, which could add significant delay and expense. Delays or failure to obtain regulatory approval of any of the product candidates that we develop would adversely affect our business.

We may not be successful in our efforts to use and expand our technology platforms to build a pipeline of product candidates. We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

A key element of our strategy is to use and expand our technology platforms to build a pipeline of product candidates and progress these product candidates through clinical development for the treatment of a variety of different types of diseases. Although our research and development efforts to date have resulted in a pipeline of product candidates directed at various cancers, as well as autoimmune disorders and infectious diseases, we may not be able to develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not continue to successfully develop and begin to commercialize product candidates, we will face difficulty in obtaining product revenues in future periods, which could result in significant harm to our financial position and adversely affect our stock price.

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

Even if we obtain FDA approval of any of our product candidates, we may never obtain approval or commercialize our products outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and may require additional preclinical studies or clinical trials or additional administrative review periods, which could result in significant delays, difficulties and costs for us. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory

S-9

TABLE OF CONTENTS

approval in other countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

Our product candidates may have undesirable side effects which may delay or prevent further clinical development or marketing approval, or, if approval is received, require them to be taken off the market, require them to include safety warnings or otherwise limit their sales.

Although all of our product candidates have undergone or will undergo safety testing, not all adverse effects of drugs can be predicted or anticipated. Unforeseen side effects from any of our product candidates could arise either during clinical development or, if approved by regulatory authorities, after the approved product has been marketed. All of our product candidates are still in clinical or preclinical development. Ongoing or future trials of our product candidates may not support the conclusion that one or more of these product candidates have acceptable safety profiles. The results of future clinical or preclinical trials may show that our product candidates cause undesirable or unacceptable side effects, which could interrupt, delay or halt clinical trials, and result in delay of, or failure to obtain, marketing approval from the FDA and other regulatory authorities, or result in marketing approval from the FDA and other regulatory authorities with restrictive label warnings or potential product liability claims.

If any of our product candidates receives marketing approval and we or others later identify undesirable or unacceptable side effects caused by such products:

- regulatory authorities may require us to take our approved product off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- we may be required to change the way the product is administered, impose other risk-management measures, conduct additional clinical trials or change the labeling of the product;
- we may be subject to limitations on how we may promote the product;
- sales of the product may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us, our collaborators or our potential future partners from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of our products.

Even if approved, if any of our product candidates do not achieve broad market acceptance among physicians, patients, the medical community, and third-party payors our revenue generated from their sales will be limited.

The commercial success of our product candidates will depend upon their acceptance among physicians, patients and the medical community. The degree of market acceptance of our product candidates will depend on a number of factors, including:

- limitations or warnings contained in the approved labeling for a product candidate;
- changes in the standard of care for the targeted indications for any of our product candidates;
- limitations in the approved clinical indications for our product candidates;
- demonstrated clinical safety and efficacy compared to other products;
- lack of significant adverse side effects;
- sales, marketing and distribution support;
- availability and extent of reimbursement from managed care plans and other third-party payors;

TABLE OF CONTENTS

- timing of market introduction and perceived effectiveness of competitive products;
- the degree of cost-effectiveness of our product candidates;
- availability of alternative therapies at similar or lower cost, including generic and over-the-counter products;
- the extent to which the product candidate is approved for inclusion on formularies of hospitals and managed care organizations;
- whether the product is designated under physician treatment guidelines as a first-line therapy or as a second- or third-line therapy for particular diseases;
- adverse publicity about our product candidates or favorable publicity about competitive products;
- convenience and ease of administration of our products; and
- potential product liability claims.

If any of our product candidates are approved, but do not achieve an adequate level of acceptance by physicians, patients and the medical community, we may not generate sufficient revenue from these products, and we may not become or remain profitable. In addition, efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

The manufacture of our product candidates is complex, and we may encounter difficulties in production. If we encounter any such difficulties, our ability to supply our product candidates for clinical trials or, if approved, for commercial sale could be delayed or halted entirely.

The process of manufacturing our product candidates is extremely susceptible to product loss due to a variety of factors, including but not limited to contamination, equipment failure or improper installation or operation of equipment, vendor or operator error, contamination and inconsistency in yields, variability in product characteristics, and difficulties in scaling the production process. Even minor deviations from manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Any adverse developments affecting manufacturing operations for our product candidates, if any are approved, may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our products. We may also have to take inventory write-offs and incur other charges and expenses for products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives.

In 2018, we completed the build-out of our commercial-scale cGMP manufacturing facility, which is intended to support future clinical and, if any are approved by the FDA, commercial production of our and our collaborators product candidates. We have limited experience in large-scale or commercial manufacturing, and there can be no assurance that we will be able to effectively manufacture clinical or commercial quantities of our products.

In 2018, we completed the build-out of our commercial-scale current Good Manufacturing Practice, or cGMP, manufacturing facility, which is intended to support future clinical and commercial production of our and our collaborators' product candidates. Although some of our employees have experience in the manufacturing of pharmaceutical products from prior employment at other companies, we as a company do not have experience in large-scale or commercial manufacturing. Designing and building a manufacturing facility is time-consuming, expensive, and we may not realize the benefit of this investment. As a manufacturer of pharmaceutical products, we are required to demonstrate and maintain compliance with cGMPs which include requirements related to production processes, quality control and assurance and recordkeeping. Furthermore, establishing and maintaining manufacturing operations requires a reallocation of other resources, particularly the time and attention of certain of our senior management. Any failure or delay in our manufacturing capabilities could adversely impact the clinical development or commercialization of our or our collaborators' product candidates.

TABLE OF CONTENTS

Our manufacturing facilities are subject to significant government regulations and approvals, which are often costly and could result in adverse consequences to our business if we fail to comply with the regulations or maintain the approvals.

We must comply with the FDA's cGMP requirements, as set out in statute, regulations and guidance. We may encounter difficulties in achieving quality control and quality assurance and may experience shortages in qualified personnel. We are subject to inspections by the FDA and comparable agencies in other jurisdictions to confirm compliance with applicable regulatory requirements. See Other U.S. Post-Marketing Regulatory Requirements above for additional information. Any failure to follow cGMP or other regulatory requirements or delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our product candidates as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our product candidates, including leading to significant delays in the availability of drug product for our clinical trials or the termination or hold on a clinical trial, or the delay or prevention of a filing or approval of marketing applications for our product candidates. Significant noncompliance could also result in the imposition of sanctions, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation. If we are not able to maintain regulatory compliance, we may not be permitted to market our product candidates and/or may be subject to product recalls, seizures, injunctions, or criminal prosecution.

We currently have no marketing, sales or distribution infrastructure. If we are unable to develop sales, marketing and distribution capabilities on our own or through collaborations, we will not be successful in commercializing margetuximab, if approved, or any of our other product candidates.

We currently have no marketing, sales and distribution infrastructure and we have limited sales and marketing experience within our organization. If margetuximab or any of our other product candidates are approved, we intend to establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates in the United States and, potentially, to outsource this function to a third party outside of the United States. Both of these options would be expensive and time consuming, and would require a significant allocation of resources, including the time and attention of our management. In addition, we would need to devote resources to the development and maintenance of policies to ensure compliance with various health care laws related to sales and marketing of pharmaceutical products. These costs may be incurred in advance of any approval of our product candidates. In addition, we may not be able to engage a sales force in the United States that is sufficient in size or has adequate expertise in the medical markets that we intend to target. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of our products.

With respect to certain of our existing and future product candidates, we have entered into collaboration or other licensing arrangements with third party collaborators that have direct sales forces and established distribution systems. To the extent that we enter into additional collaboration agreements, our product revenue may be lower than if we directly marketed or sold any approved products. In addition, any revenue we receive will depend in whole or in part upon the efforts of these third party collaborators, which may not be successful and are generally not within our control. If we are unable to enter into additional arrangements on acceptable terms or at all, we may not be able to successfully commercialize certain approved products. If we are not successful in commercializing approved products, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

We face significant competition and if our competitors develop and market products that are more effective, safer or less expensive than our product candidates, our commercial opportunities will be negatively impacted.

The life sciences industry is highly competitive and subject to rapid and significant technological change. We are currently developing therapeutics that will compete with other drugs and therapies that currently exist or are being developed. Products we may develop in the future are also likely to face competition from other drugs and therapies, some of which we may not currently be aware. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, universities and other research institutions. Many of our competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources than

S-12

TABLE OF CONTENTS

we do. Large pharmaceutical companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing pharmaceutical products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. As a result of all of these factors, our competitors may succeed in obtaining patent protection and/or FDA approval or discovering, developing and commercializing products in our field before we do.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist both of small molecule drug products, as well as biologic therapeutics that work by using next-generation antibody technology platforms to address specific cancer targets. In addition, several companies are developing therapeutics that work by targeting multiple specificities using a single recombinant molecule. See [Competition](#) above for additional information.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third party payors seeking to encourage the use of biosimilar products. Biosimilar products are expected to become available over the coming years. For example, certain HER2 biosimilar products are approved in certain countries and others may be approved prior to margetuximab. Even if our product candidates achieve marketing approval, they may be priced at a significant premium over competitive biosimilar products if any have been approved by then.

Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, the biopharmaceutical industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

Reimbursement decisions by third-party payors may have an adverse effect on pricing and market acceptance. If there is not sufficient reimbursement for our products, it is less likely that our products will be widely used.

Even if our product candidates are approved for sale by the appropriate regulatory authorities, market acceptance and sales of these products will depend on reimbursement policies and may be affected by future healthcare reform measures. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs they will reimburse and establish payment levels and, in some cases, utilization management strategies, such as tiered formularies and prior authorization. We cannot be certain that reimbursement will be available for any products that we develop or that the reimbursement level will be adequate to allow us to operate profitably. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products. Our ability to commercialize our products may depend, in part, on the extent to which reimbursement for the products will be available from government authorities and third-party payors. If reimbursement for our products is not available or is available on a limited basis, or if the reimbursement amount for our products is inadequate, we may not be able to successfully commercialize any of our approved products.

Actual or anticipated changes to the laws and regulations governing the health care system may have a negative impact on cost and access to health insurance coverage and reimbursement of healthcare items and services.

The United States and several foreign jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell any of our future approved products profitably. Among policy makers and payors in the United States and

S-13

TABLE OF CONTENTS

elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives, including the Patient Protection and Affordable Care Act (ACA), which became law in 2010. While it is difficult to assess the impact of the ACA in isolation, either in general or on our business specifically, it is widely thought that the ACA increases downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of, and the price we may charge for, any products we develop that receive regulatory approval. Further, the United State and foreign governments regularly consider reform measures that affect healthcare coverage and costs. Such reforms may include changes to the coverage and reimbursement of healthcare services and products. In particular, there have been recent judicial and Congressional challenges to the ACA, which could have an impact on coverage and reimbursement for healthcare services covered by plans authorized by the ACA, and we expect there will be additional challenges and amendments to the ACA in the future.

In September 2017, members of the United States Congress introduced legislation with the announced intention to repeal major provisions of the ACA. Although it is unclear whether such legislation will ultimately become law, executive or legislative branch attempts to repeal, reform or to repeal and replace the ACA will likely continue. In addition, various other healthcare reform proposals have also emerged at the federal and state level. In addition, recent changes to United States tax laws could negatively impact the ACA. We cannot predict what healthcare initiatives, if any, will be implemented at the federal or state level, however, government and other regulatory oversight and future regulatory and government interference with the healthcare systems could adversely impact our business and results of operations.

We expect to experience pricing pressures in connection with the sale of any products that we develop, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative proposals.

Inadequate funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, upon completion of this offering and in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

If any product liability lawsuits are successfully brought against us or any of our collaborators, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability lawsuits related to the testing of our product candidates in seriously ill patients, and will face an even greater risk if product candidates are approved by regulatory authorities and introduced commercially. Product liability claims may be brought against us or our collaborators by participants enrolled in our clinical trials, patients, health care providers or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities. Regardless of their merit or eventual outcome, liability claims may result in:

- decreased demand for our future approved products;

S-14

TABLE OF CONTENTS

- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- increased regulatory scrutiny;
- significant litigation costs;
- substantial monetary awards to or costly settlement with patients or other claimants;
- product recalls or a change in the indications for which they may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

If any of our product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity. We could also be adversely affected if any of our products or any similar products distributed by other companies prove to be, or are asserted to be, harmful to patients. Because of our dependence upon consumer perceptions, any adverse publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies could have a material adverse impact on our financial condition or results of operations.

We currently hold \$20 million in product liability insurance coverage in the aggregate, with a per incident limit of \$20 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage when we begin the commercialization of our product candidates. Insurance coverage is becoming increasingly expensive. As a result, we may be unable to maintain or obtain sufficient insurance at a reasonable cost to protect us against losses that could have a material adverse effect on our business. A successful product liability claim or series of claims brought against us, particularly if judgments exceed any insurance coverage we may have, could decrease our cash resources and adversely affect our business, financial condition and results of operation.

The contract with the National Institute of Allergy and Infectious Diseases (NIAID) makes us a government contractor. Laws and regulations affecting government contracts may make it more costly and difficult for us to successfully conduct our business.

We must comply with numerous laws and regulations relating to the procurement, formation, administration and performance of government contracts. Failure to comply with these laws could result in significant civil and criminal penalties. Among the most significant government contracting regulations that may affect our business are: the Federal Acquisition Regulation, or FAR, and NIH-NIAID-specific regulations supplemental to the FAR, which comprehensively regulate the procurement, formation, administration and performance of government contracts; business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act, the Procurement Integrity Act, and the False Claims Act; export and import control laws and regulations; and laws, regulations and executive orders restricting the use and dissemination of sensitive information we may receive pursuant to our performance of the government contract. U.S. government agencies routinely audit and investigate government contractors for compliance with applicable laws and standards. If we are audited, such audit could result in disallowance of expected cost reimbursement, or if such audit were to uncover improper or illegal activities, we could be subject to civil and criminal penalties, administrative sanctions, including suspension or debarment from government contracting and significant reputational harm.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

On December 22, 2017, Public Law no. 115-97, or the Tax Act, was signed into law. The Tax Act introduced significant changes to the Internal Revenue Code of 1986, as amended. The Tax Act, among other things, contains

significant changes to corporate taxation, including reduction of the corporate tax rate from a top

S-15

TABLE OF CONTENTS

marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income in respect of losses arising in taxable years beginning after 2017 and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits.

Although we have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future, we continue to examine the impact the Tax Act may have on our business. As a result, the overall impact of the Tax Act is uncertain and our business and financial condition could be adversely affected.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future. We have no products approved for commercial sale, and to date we have not generated any revenue or profit from product sales. We may never achieve or sustain profitability.

We are a clinical-stage biopharmaceutical company. We have incurred significant losses since our inception. As of September 30, 2018, our accumulated deficit was approximately \$445.6 million. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates, prepare for and begin to commercialize any approved products, and add infrastructure and personnel to support our product development efforts and operations as a public company. The net losses and negative cash flows incurred to date, together with expected future losses, have had, and likely will continue to have, an adverse effect on our stockholders' deficit and working capital. The amount of future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue.

Because of the numerous risks and uncertainties associated with pharmaceutical product development and commercialization, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. For example, our expenses could increase if we are required by the FDA to perform trials in addition to those that we currently expect to perform, or if there are any delays in completing our currently planned clinical trials or in the development of any of our product candidates. Our expenses would also significantly increase to the extent we build out a sales force to support the commercialization of margetuximab, if approved, or any of our other product candidates.

To become and remain profitable, we must succeed in developing and commercializing products with significant market potential. This will require us to be successful in a range of challenging activities for which we are only in the preliminary stages, including developing product candidates, obtaining regulatory approval for them, and manufacturing, marketing and selling those products for which we may obtain regulatory approval. We may never succeed in these activities and may never generate revenue from product sales that is significant enough to achieve profitability. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to become or remain profitable would depress our market value and could impair our ability to raise capital, expand our business, develop other product candidates, or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development programs or operations.

We are advancing our product candidates through clinical development. Developing and commercializing pharmaceutical products, including conducting preclinical studies and clinical trials, is expensive. In order to obtain

such regulatory approval, we will be required to conduct clinical trials for each indication for each of our product candidates. We will continue to require additional funding beyond what was raised in our public offerings and through our collaborations and license agreements to complete the development and commercialization of our product candidates and to continue to advance the development of our other product candidates, and such funding may not be available on acceptable terms or at all. Although it is difficult to predict our funding requirements, based upon our current operating plan, we anticipate that our cash, cash equivalents

S-16

TABLE OF CONTENTS

and marketable securities as of December 31, 2018, combined with the estimated net proceeds from this offering and proceeds from collaboration payments we anticipate receiving, will enable us to fund our operations into 2021, assuming all of our programs and collaborations advance as currently contemplated. Because successful development of our product candidates is uncertain, we are unable to estimate the actual funds we will require to complete research and development and to commercialize our product candidates.

Our future funding requirements will depend on many factors, including but not limited to:

- the number and characteristics of other product candidates and indications that we pursue;
- the scope, progress, timing, cost and results of research, preclinical development, and clinical trials;
- the costs, timing and outcome of seeking and obtaining FDA and non-U.S. regulatory approvals;
- the costs associated with manufacturing our product candidates;
- the costs of establishing sales, marketing, and distribution capabilities;
- our ability to maintain, expand, and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make in connection with the licensing, filing, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to hire additional management, scientific, and medical personnel;
- the effect of competing products that may limit market penetration of our product candidates;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems; and
- the economic and other terms, timing of and success of our existing collaborations, and any collaboration, licensing, or other arrangements into which we may enter in the future, including the timing of receipt of any milestone or royalty payments under these agreements.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through a combination of public or private equity offerings, debt financings, strategic collaborations, and grant funding. If sufficient funds on acceptable terms are not available when needed, or at all, we could be forced to significantly reduce operating expenses and delay, scale back or eliminate one or more of our development programs or our business operations.

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

To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these new securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available at all, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, product candidates, or future revenue streams, or grant licenses on terms that are not favorable to us. We cannot assure you that we will be able to obtain additional funding if and when necessary. If we are unable to obtain adequate financing on a timely basis, we could be required to delay, scale back or eliminate one or more of our development programs or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our ability to use our net operating loss carryforwards and other tax attributes may be limited.

Our ability to utilize our federal net operating losses, or NOLs, and federal tax credits is currently limited, and may be limited further, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended. The limitations apply if an ownership change, as defined by Section 382, occurs. Generally, an ownership change occurs when certain

shareholders increase their aggregate ownership by more than 50 percentage points over their lowest ownership percentage in a testing period, which is typically three years or since the last ownership change. We are already subject to Section 382 limitations due to acquisitions we made in 2002 and 2008. As of December 31, 2017, we had federal and state NOL carryforwards of \$239.7 million and research and

S-17

TABLE OF CONTENTS

development tax credit carryforwards of \$42.8 million available. It is not anticipated that this offering will result in an ownership change, but future offerings or changes in stock ownership may trigger an ownership change and, consequently, another Section 382 limitation. Any limitation may result in expiration of a portion of the net operating loss or tax credit carryforwards before utilization which would reduce our gross deferred income tax assets and corresponding valuation allowance. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards and tax credit carryforwards to reduce United States federal income tax may be subject to limitations, which could potentially result in increased future cash tax liability to us.

Risks Related to Our Dependence on Third Parties

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

We have limited capabilities for drug development and do not yet have any capability for sales, marketing or distribution. We have entered into collaborations with other companies that we believe can provide such capabilities, including our collaboration and license agreements with, for example, Les Laboratoires Servier and Institut de Recherches Servier, or collectively Servier, Green Cross Corporation, or GC Pharma, Incyte Corporation, Zai Lab Limited and F. Hoffman La Roche Ltd and Hoffman-La Roche, Inc, or Roche. These collaborations also have provided us with important funding for our development programs and technology platforms and we expect to receive additional funding under these collaborations in the future. Our existing therapeutic collaborations, and any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
-

collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;

S-18

TABLE OF CONTENTS

- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates. For example, each of our collaboration and license agreements may be terminated for convenience upon the completion of a specified notice period.

If our therapeutic collaborations do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. For example, Servier recently informed us that they did not intend to exercise the option to continue development of MGD007. If we do not receive the funding we expect under these agreements, our development of our technology platforms and product candidates could be delayed and we may need additional resources to develop product candidates and our technology platforms. All of the risks relating to product development, regulatory approval and commercialization described in this report also apply to the activities of our program collaborators.

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

For some of our product candidates, we may in the future determine to collaborate with additional pharmaceutical and biotechnology companies for development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. These factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate.

Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market or continue to develop our technology platforms and our business may be materially and adversely affected.

We may also be restricted under existing collaboration agreements from entering into future agreements on certain terms with potential collaborators. Aside from our agreement with GC Pharma, subject to certain specified exceptions,

each of our existing therapeutic collaborations contains a restriction on our engaging in activities that are the subject of the collaboration with third parties for specified periods of time.

Independent clinical investigators and CROs that we engage to conduct our clinical trials may not devote sufficient time or attention to our clinical trials or be able to repeat their past success.

We expect to continue to depend on independent clinical investigators and CROs to conduct our clinical trials. CROs may also assist us in the collection and analysis of data. There is a limited number of third-party

S-19

TABLE OF CONTENTS

service providers that specialize or have the expertise required to achieve our business objectives. Identifying, qualifying and managing performance of third-party service providers can be difficult, time consuming and cause delays in our development programs. These investigators and CROs will not be our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. If independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of any product candidates that we develop. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. Further, the FDA requires that we comply with standards, commonly referred to as current Good Clinical Practice, or GCP, for conducting, recording and reporting clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial subjects are protected. Failure of clinical investigators or CROs to meet their obligations to us or comply with GCP procedures could adversely affect the clinical development of our product candidates and harm our business.

Failure of third-party contractors to successfully develop and commercialize companion diagnostics for use with our product candidates could harm our ability to commercialize our product candidates.

We plan to develop companion diagnostics for our product candidates where appropriate. At least in some cases, the FDA and similar regulatory authorities outside the United States may request or require the development and regulatory approval of a companion diagnostic as a condition to approving one or more of our product candidates including, for example, margetuximab. We do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions.

In most cases, we will likely outsource the development, production and commercialization of companion diagnostics to third parties. By outsourcing these companion diagnostics to third parties, we become dependent on the efforts of our third party contractors to successfully develop and commercialize these companion diagnostics. Our contractors:

- may not perform their obligations as expected;
- may encounter production difficulties that could constrain the supply of the companion diagnostic;
- may have difficulties gaining acceptance of the use of the companion diagnostic in the clinical community;
- may not commit sufficient resources to the marketing and distribution of such product; and
- may terminate their relationship with us.

If any companion diagnostic for use with one of our product candidates fails to gain market acceptance, our ability to derive revenues from sales of such product candidate could be harmed. If our third party contractors fail to commercialize such companion diagnostic, we may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with such product candidate or do so on commercially reasonable terms, which could adversely affect and delay the development or commercialization of such product candidate.

We expect to contract with third parties for the manufacture of some of our product candidates for clinical testing in the future and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We currently have two cGMP manufacturing facilities located in Rockville, Maryland, one of which was completed in 2018 and is designed to increase our internal capacity to manufacture more drug substance lots, at larger scale and in full compliance with cGMP to support future clinical and commercial production of our and our collaborators' product candidates. We manufacture drug substance at these facilities that we use for research and development purposes and for clinical trials of our and our collaborators' product candidates. We believe we currently have capacity to produce

some but not all of the material required for our and our collaborators

S-20

TABLE OF CONTENTS

clinical trials. Our current facilities will be insufficient to support our needs for our Phase 3 clinical trials for our antibody product candidates and for commercial quantities of such candidates. We do not have experience in manufacturing products at commercial scale.

We have entered into agreements with contract manufacturing organizations to supplement our clinical supply and internal capacity as we advance our product candidate pipeline. We expect to use third parties for the manufacture of certain of our product candidates for clinical testing, as well as for commercial manufacture of some of our product candidates that receive marketing approval and that are not manufactured by one of our third party collaborators. We have entered into two long-term supply agreements with manufacturers for commercial supply, and may in the future enter into one or more additional supply agreements for our product candidates. We may be unable to reach agreement with any of these contract manufacturers, or to identify and reach arrangements on satisfactory terms with other contract manufacturers, to manufacture any of our product candidates. Additionally, the facilities used by any contract manufacturer to manufacture any of our product candidates must be the subject of a satisfactory inspection before the FDA and other regulatory authorities approve a BLA or marketing authorization for the product candidate manufactured at that facility. We will depend on these third-party manufacturing partners for compliance with the FDA's requirements for the manufacture of our finished products. If our manufacturers cannot successfully manufacture material that conforms to our specifications and the FDA and other regulatory authorities' cGMP requirements, our product candidates will not be approved or, if already approved, may be subject to recalls.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured the product candidates ourselves, including:

- the possibility of a breach of the manufacturing agreements by the third parties because of factors beyond our control;
- the possibility of termination or nonrenewal of the agreements by the third parties before we are able to arrange for a qualified replacement third-party manufacturer; and
- the possibility that we may not be able to secure a manufacturer or manufacturing capacity in a timely manner and on satisfactory terms in order to meet our manufacturing needs.

Any of these factors could cause the delay of approval or commercialization of our product candidates, cause us to incur higher costs or prevent us from commercializing our product candidates successfully. Furthermore, if any of our product candidates are approved and contract manufacturers fail to deliver the required commercial quantities of finished product on a timely basis and at commercially reasonable prices, and we are unable to find one or more replacement manufacturers capable of production at a substantially equivalent cost, in substantially equivalent volumes and quality and on a timely basis, we would likely be unable to meet demand for our products and could lose potential revenue. It may take several years to establish an alternative source of supply for our product candidates and to have any such new source approved by the FDA or any other relevant regulatory authorities.

A disruption in our computer networks, including those related to cybersecurity, could adversely affect our financial performance.

We rely on our computer networks and systems, some of which are managed by third parties, to manage and store electronic information (including sensitive data such as confidential business information and personally identifiable data relating to employees, customers and other business partners), and to manage or support a variety of critical business processes and activities. We may face threats to our networks from unauthorized access, security breaches and other system disruptions. Despite our security measures, our infrastructure may be vulnerable to external or internal attacks. Any such security breach may compromise information stored on our networks and may result in significant data losses or theft of sensitive or proprietary information. In addition, a cybersecurity attack could result in other negative consequences, including disruption of our internal operations, increased cyber security protection costs, lost revenue, regulatory actions or litigation. Any disruption could also have a material adverse impact on our

operations. We have not experienced any known attacks on our information technology systems that have resulted in any material system failure, accident or security breach to date.

S-21

TABLE OF CONTENTS

Risks Related to Our Intellectual Property

Our commercial success depends significantly on our ability to operate without infringing the valid patents and other proprietary rights of third parties.

Our success will depend in part on our ability to operate without infringing the proprietary rights of third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our future approved products or impair our competitive position. For example, certain patents held by third parties cover Fc engineering methods and mutations in Fc regions to enhance the binding of Fc regions to Fc receptors on immune cells. Although we believe that these patents are not infringed, and/or are invalid and/or unenforceable, if a court should find that they cover margetuximab or enoblituzumab and we are unable to invalidate such patents, or if licenses for them are not available on commercially reasonable terms, our business could be harmed, perhaps materially.

Patents that we may ultimately be found to infringe could be issued to third parties. Third parties may have or obtain valid and enforceable patents or proprietary rights that could block us from developing product candidates using our technology. Our failure to obtain a license to any technology that we require may materially harm our business, financial condition and results of operations. Moreover, our failure to maintain a license to any technology that we require may also materially harm our business, financial condition, and results of operations. Furthermore, we would be exposed to a threat of litigation.

In the pharmaceutical industry, significant litigation and other proceedings regarding patents, patent applications, trademarks and other intellectual property rights have become commonplace. The types of situations in which we may become a party to such litigation or proceedings include:

- we or our collaborators may initiate litigation or other proceedings against third parties seeking to invalidate the patents held by those third parties or to obtain a judgment that our products or processes do not infringe those third parties' patents;
- if our competitors file patent applications that claim technology also claimed by us or our licensors, we or our licensors may be required to participate in interference or opposition proceedings to determine the priority of invention, which could jeopardize our patent rights and potentially provide a third party with a dominant patent position;
- if third parties initiate litigation claiming that our processes or products infringe their patent or other intellectual property rights, we and our collaborators will need to defend against such proceedings; and
- if a license to necessary technology is terminated, the licensor may initiate litigation claiming that our processes or products infringe or misappropriate their patent or other intellectual property rights and/or that we breached our obligations under the license agreement, and we and our collaborators would need to defend against such proceedings.

These lawsuits would be costly and could affect our results of operations and divert the attention of our management and scientific personnel. There is a risk that a court would decide that we or our collaborators are infringing the third party's patents and would order us or our collaborators to stop the activities covered by the patents. In that event, we or our collaborators may not have a viable alternative to the technology protected by the patent and may need to halt work on the affected product candidate or cease commercialization of an approved product. In addition, there is a risk that a court will order us or our collaborators to pay the other party damages. An adverse outcome in any litigation or other proceeding could subject us to significant liabilities to third parties and require us to cease using the technology that is at issue or to license the technology from third parties. We may not be able to obtain any required licenses on commercially acceptable terms or at all. Any of these outcomes could have a material adverse effect on our business.

The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform or predictable. If we are sued for patent infringement, we would need to demonstrate that our products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and

S-22

TABLE OF CONTENTS

divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may incur substantial monetary damages, encounter significant delays in bringing our product candidates to market and be precluded from manufacturing or selling our product candidates.

The cost of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation and proceedings more effectively than we can because of their substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

If we are unable to obtain and enforce patent protection for our product candidates and related technology, our business could be materially harmed.

Issued patents may be challenged, narrowed, invalidated or circumvented. In addition, court decisions may introduce uncertainty in the enforceability or scope of patents owned by biotechnology companies. The legal systems of certain countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not allow us to protect our inventions with patents to the same extent as the laws of the United States. Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in our patents or patent applications. As a result, we may not be able to obtain or maintain protection for certain inventions. Therefore, the enforceability and scope of our patents in the United States and in foreign countries cannot be predicted with certainty and, as a result, any patents that we own or license may not provide sufficient protection against competitors. We may not be able to obtain or maintain patent protection from our pending patent applications, from those we may file in the future, or from those we may license from third parties. Moreover, even if we are able to obtain patent protection, such patent protection may be of insufficient scope to achieve our business objectives.

Our strategy depends on our ability to identify and seek patent protection for our discoveries. This process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary.

The issuance of a patent does not ensure that a court or agency finds or will find the patent valid or enforceable, so even if we obtain patents, they may not be valid or enforceable against third parties. In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our own patented product and practicing our own patented technology. Third parties may also seek to market biosimilar versions of any approved products. Alternatively, third parties may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend and/or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency with jurisdiction may find our patents invalid and/or unenforceable. Even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

The patent position of pharmaceutical or biotechnology companies, including ours, is generally uncertain and involves complex legal and factual considerations. The standards which the United States Patent and Trademark Office, or USPTO, and its foreign counterparts use to grant patents are not always applied predictably or uniformly and can change. There is also no uniform, worldwide policy regarding the subject matter and scope of claims granted or allowable in pharmaceutical or biotechnology patents. The laws of some foreign countries do not protect proprietary information to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary information in these foreign

S-23

TABLE OF CONTENTS

countries. Outside the United States, patent protection must be sought in individual jurisdictions, further adding to the cost and uncertainty of obtaining adequate patent protection outside of the United States. Accordingly, we cannot predict whether additional patents protecting our technology will issue in the United States or in foreign jurisdictions, or whether any patents that do issue will have claims of adequate scope to provide competitive advantage. Moreover, we cannot predict whether third parties will be able to successfully obtain claims or the breadth of such claims. The allowance of broader claims may increase the incidence and cost of patent interference proceedings, opposition proceedings, and/or reexamination proceedings, the risk of infringement litigation, and the vulnerability of the claims to challenge. On the other hand, the allowance of narrower claims does not eliminate the potential for adversarial proceedings, and may fail to provide a competitive advantage. Our issued patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products, or provide us with any competitive advantage.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful.

Even after they have been issued, our patents and any patents which we license may be challenged, narrowed, invalidated or circumvented. If our patents are invalidated or otherwise limited or will expire prior to the commercialization of our product candidates, other companies may be better able to develop products that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition.

The following are examples of litigation and other adversarial proceedings or disputes that we could become a party to involving our patents or patents licensed to us:

- we or our collaborators may initiate litigation or other proceedings against third parties to enforce our patent rights;
- third parties may initiate litigation or other proceedings seeking to invalidate patents owned by or licensed to us or to obtain a declaratory judgment that their product or technology does not infringe our patents or patents licensed to us;
- third parties may initiate opposition, reexamination or inter partes review proceedings challenging the validity or scope of our patent rights, requiring us or our collaborators and/or licensors to participate in such proceedings to defend the validity and scope of our patents;
- there may be a challenge or dispute regarding inventorship or ownership of patents currently identified as being owned by or licensed to us;
- the U.S. Patent and Trademark Office may initiate an interference between patents or patent applications owned by or licensed to us and those of our competitors, requiring us or our collaborators and/or licensors to participate in an interference proceeding to determine the priority of invention, which could jeopardize our patent rights; or
- third parties may seek approval to market biosimilar versions of our future approved products prior to expiration of relevant patents owned by or licensed to us, requiring us to defend our patents, including by filing lawsuits alleging patent infringement.

These lawsuits and proceedings would be costly and could affect our results of operations and divert the attention of our managerial and scientific personnel. There is a risk that a court or administrative body would decide that our patents are invalid or not infringed by a third party's activities, or that the scope of certain issued claims must be further limited. An adverse outcome in a litigation or proceeding involving our own patents could limit our ability to assert our patents against these or other competitors, affect our ability to receive royalties or other licensing consideration from our licensees, and may curtail or preclude our ability to exclude third parties from making, using and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects and financial condition.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to develop a platform that is similar to, or better than, ours in a way that is not covered by the claims of our patents;

S-24

TABLE OF CONTENTS

- others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of our patents;
- we might not have been the first to make the inventions covered by patents or pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- any patents that we obtain may not provide us with any competitive advantages or may ultimately be found invalid or unenforceable; or
- we may not develop additional proprietary technologies that are patentable.

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

We are currently party to various intellectual property license agreements. These license agreements impose, and we expect that future license agreements may impose, various diligence, milestone payment, royalty, insurance and other obligations on us. For example, we have entered into patent and know-how license agreements that grant us the right to use certain technologies related to biological manufacturing to manufacture our clinical product candidates. These licenses typically include an obligation to pay yearly maintenance payments and royalties on sales, and may also include upfront and milestone payments. If we fail to comply with our obligations under the licenses, the licensors may have the right to terminate their respective license agreements, in which event we might not be able to market any product that is covered by the agreements. Termination of the license agreements or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, which could adversely affect our competitive business position and harm our business.

If we are unable to protect the confidentiality of our proprietary information, the value of our technology and products could be adversely affected.

In addition to patent protection, we also rely on other proprietary rights, including protection of trade secrets, and other proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we enter into confidentiality agreements with our employees, consultants, collaborators and others upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. Our agreements with employees and our personnel policies also provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. Thus, despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions. To the extent that an individual who is not obligated to assign rights in intellectual property to us is rightfully an inventor of intellectual property, we may need to obtain an assignment or a license to that intellectual property from that individual, or a third party or from that individual's assignee. Such assignment or license may not be available on commercially reasonable terms or at all.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our proprietary information. The disclosure of our trade secrets would impair our competitive position and may materially harm our business, financial condition and results of operations. Costly and time consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to maintain trade secret protection could adversely affect our competitive business position. In addition, others may independently discover or develop our trade secrets and proprietary information, and the existence of our own trade secrets affords no protection against such independent discovery.

As is common in the biotechnology and pharmaceutical industries, we employ individuals who were previously or concurrently employed at research institutions and/or other biotechnology or pharmaceutical

S-25

TABLE OF CONTENTS

companies, including our competitors or potential competitors. We may be subject to claims that these employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers, or that patents and applications we have filed to protect inventions of these employees, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, 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.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to the USPTO and various foreign patent offices at various points over the lifetime of our patents and/or applications. We have systems in place to remind us to pay these fees, and we rely on our outside counsel to pay these fees when due. Additionally, the USPTO and various foreign patent offices require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, 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. If such an event were to occur, it could have a material adverse effect on our business. In addition, we are responsible for the payment of patent fees for patent rights that we have licensed from other parties. If any licensor of these patents does not itself elect to make these payments, and we fail to do so, we may be liable to the licensor for any costs and consequences of any resulting loss of patent rights.

If we do not obtain protection under the Hatch-Waxman Amendments and similar foreign legislation for extending the term of patents covering each of our product candidates, our business may be materially harmed.

Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced, possibly materially.

Risks Related to Legal Compliance Matters

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research and development involves, and may in the future involve, the use of potentially hazardous materials and chemicals. Our operations may produce hazardous waste products. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by local, state and federal laws and regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident

occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations and fire and building codes, including those governing laboratory procedures, exposure to blood-borne pathogens, use and storage of flammable agents and the handling of biohazardous materials. Although we maintain workers' compensation insurance as prescribed by the States of Maryland and California to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental

S-26

TABLE OF CONTENTS

liability or toxic tort claims that may be asserted against us. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

If we market products in a manner that violates healthcare fraud and abuse laws, or if we violate government price reporting laws, we may be subject to civil or criminal penalties.

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal healthcare laws commonly referred to as fraud and abuse laws have been applied in recent years to restrict certain marketing practices in the pharmaceutical industry. These laws include false claims and anti-kickback statutes.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, or causing to be made, a false statement to get a claim paid. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Although there are several statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. In addition, under the Sunshine Act provisions of the ACA, pharmaceutical manufacturers with one or more products for which payment is available under a federal health care program are subject to federal reporting and disclosure requirements with regard to payments or other transfers of value made to physicians and teaching hospitals. Most states also have statutes or regulations similar to the federal anti-kickback law and federal false claims laws, which may apply to items such as pharmaceutical products and services reimbursed by private insurers. Some state laws also prohibit certain gifts to healthcare providers, require pharmaceutical companies to report payments to healthcare professionals, and/or require companies to adopt compliance programs or codes of conduct. Administrative, civil and criminal sanctions may be imposed under these federal and state laws.

Over the past few years, a number of pharmaceutical and other healthcare companies have been prosecuted under these laws for a variety of promotional and marketing activities, such as: providing free trips, free goods, sham consulting fees and grants and other monetary benefits to prescribers; reporting to pricing services inflated average wholesale prices that were then used by federal programs to set reimbursement rates; engaging in off-label promotion; and submitting inflated best price information to the Medicaid Rebate Program to reduce liability for Medicaid rebates. At such time, if ever, as we market any of our future approved products and these products are paid for by governmental programs, it is possible that some of our business activities could also be subject to challenge under one or more of these fraud and abuse laws.

We are subject to the U.S. Foreign Corrupt Practices Act and other anti-corruption laws. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws that apply in countries where we do business. The FCPA and these other laws generally prohibit us and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We and our commercial partners operate in a number of jurisdictions that pose a risk of potential FCPA violations, and we participate in collaborations and relationships with third parties whose actions could potentially subject us to liability

under the FCPA or other anti-corruption laws. There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws. If we violate provisions of the FCPA or other anti-corruption laws or are subject to an investigation or audit pursuant to these laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures and legal expenses, which could have an adverse impact on our business, financial condition and results of operations.

S-27

TABLE OF CONTENTS

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, to provide accurate information to the FDA or other agencies, to comply with federal and state health care fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a code of conduct, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to 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.

Risks Relating to Employee Matters and Managing Growth

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

We are highly dependent on the research and development, clinical and business development expertise of Scott Koenig, M.D., Ph.D., our President and Chief Executive Officer, as well as the other members of our senior management, scientific and clinical team. Although we have entered into employment agreements with certain of our executive officers, each of them may terminate their employment with us at any time. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. In addition, we will need to expand and effectively manage our managerial, operational, financial, development and other resources in order to successfully pursue our research, development and commercialization efforts for our existing and future product candidates. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We will need to grow our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of the date of this prospectus supplement, we had approximately 360 full-time employees. As our development and commercialization plans and strategies develop, we expect to expand our employee base for managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain, motivate and integrate additional employees. Also, our management may need to divert a disproportionate amount of their attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations which may result in weaknesses in our infrastructure, give rise to operational errors, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital

S-28

TABLE OF CONTENTS

expenditures and may divert financial resources from other projects, such as the development of existing and additional product candidates. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates and compete effectively with others in our industry will depend, in part, on our ability to effectively manage any future growth.

Risks Related to Our Common Stock and This Offering

Our stock price is likely to be volatile and the market price of our common stock after this offering may drop below the price you pay.

You should consider an investment in our common stock as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. You may be unable to sell your shares of common stock at or above the public offering price due to fluctuations in the market price of our common stock arising from changes in our operating performance or prospects. In addition, the stock market has recently experienced significant volatility, particularly with respect to pharmaceutical, biotechnology, and other life sciences company stocks. The volatility of pharmaceutical, biotechnology, and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Some of the factors that may cause the market price of our common stock to fluctuate or decrease below the price paid in this offering include:

- results and timing of our clinical trials and clinical trials of our competitors’ products;
- failure or discontinuation of any of our development programs;
- issues in manufacturing our product candidates or future approved products;
- issues in designing or constructing our commercial manufacturing facilities;
- regulatory developments or enforcement in the United States and foreign countries with respect to our product candidates or our competitors’ products;
- competition from existing products or new products that may emerge;
- developments or disputes concerning patents or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- announcements by us, our collaborators or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- changes in estimates or recommendations by securities analysts, if any cover our common stock;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- public concern over our product candidates or any future approved products;
- threatened or actual litigation;
- future or anticipated sales of our common stock;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- additions or departures of key personnel;
- changes in the structure of health care payment systems in the United States or overseas;
- failure of any of our product candidates, if approved, to achieve commercial success;
- economic and other external factors or other disasters or crises;
- period-to-period fluctuations in our financial condition and results of operations, including the timing of receipt of any milestone or other payments under commercialization or licensing agreements;
- general market conditions and market conditions for biopharmaceutical stocks; and
- overall fluctuations in U.S. equity markets.

TABLE OF CONTENTS

In addition, in the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit and divert the time and attention of our management, which could seriously harm our business.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution of your investment.

The public offering price per share of our common stock is higher than the net tangible book value per share of our common stock prior to this offering. Therefore, if you purchase common stock in this offering, you will pay a price per share of common stock that exceeds our as adjusted net tangible book value per share of common stock after giving effect to this offering. To the extent outstanding options are exercised, you will incur further dilution. Based on the public offering price of \$20.00 per share of common stock, investors purchasing shares in this offering will experience immediate dilution of \$11.92 per share of common stock, representing the difference between our as adjusted net tangible book value per share as of September 30, 2018 after giving effect to this offering, and the public offering price. See the section entitled "Dilution" on page S-33 of this prospectus supplement for a more detailed illustration of the dilution you would incur if you participate in this offering.

Future sales and issuances of our common stock or rights to purchase common stock pursuant to our equity compensation plans could result in additional dilution of the percentage ownership of our stockholders and could cause the price of our common stock to decline.

We will need additional capital in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities, or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities, or other equity securities, or if we issue common stock pursuant to our equity compensation plans, investors may be materially diluted by such subsequent sales or issuances. These sales or issuances may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have broad discretion in the use of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, interest-bearing, investment-grade securities, certificates of deposit or government securities. Our failure to apply these funds effectively could have a material adverse effect on our business, impair or delay our ability to develop our product candidates and cause the price of our common stock to decline. See the section entitled "Use of Proceeds" on page S-32 of this prospectus supplement.

Because we do not expect to declare cash dividends on our common stock in the foreseeable future, stockholders must rely on appreciation of the value of our common stock for any return on their investment.

We have never declared or paid cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not expect to declare or pay any cash dividends in the foreseeable future. As a result, only appreciation of the price of our common stock, if any, will provide a return to investors purchasing shares in this offering.

Provisions of our charter, bylaws, third-party agreements and Delaware law may make an acquisition of us or a change in our management more difficult.

Certain provisions of our restated certificate of incorporation and amended and restated bylaws could discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, since our board of directors is

S-30

TABLE OF CONTENTS

responsible for appointing the members of our management team, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management by making it more difficult for stockholders to replace members of our board of directors. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- establish a classified board of directors, providing that not all members of the board of directors be elected at one time;
- authorize our board of directors to issue without stockholder approval blank check preferred stock that, if issued, could operate as a poison pill to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;
- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;
- limit who may call stockholder meetings; and
- require the approval of the holders of 75% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

Furthermore, in the ordinary course of our business, from time to time we discuss and enter into collaborations, licenses and other transactions with various third parties, including other pharmaceutical companies and biotechnology companies. When we deem it appropriate, our agreements with such third parties may include standstill provisions. These standstill provisions, several of which may be in force from time-to-time, typically prohibit such parties from acquiring our securities for a period of time, which may discourage such parties from acquiring us even if doing so would be beneficial to our stockholders.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders.

TABLE OF CONTENTS

Use of Proceeds

We estimate that the net proceeds to us from this offering will be approximately \$103.0 million (or approximately \$118.5 million if the underwriters exercise their option to purchase additional shares in full), after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We are undertaking this offering in order to increase our liquidity and raise capital to further develop and advance our pipeline of product candidates. We intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and marketable securities, for general corporate purposes and working capital needs consistent with our business plan which would include, but would not be limited to:

- potential funding of activities in preparation for the potential regulatory approval and marketing of margetuximab in the U.S.;
- potential late-stage development of enoblituzumab for the treatment of B7-H3 positive cancers, potentially including squamous cell carcinoma of the head and neck, non-small cell lung cancer, and others;
- potential development of margetuximab in combination with MGA012 for the treatment of gastric cancer;
- continued development of our immune checkpoint-based DART product candidates;
- further investment in the development of our current pipeline programs as they continue to mature;
- other research and development programs; and
- in-licensing or acquiring other products or technologies.

Our expected use of net proceeds to us from this offering represents our current intentions based upon our present plans and business condition. The amount and timing of our actual expenditures will depend upon numerous factors, including the results of our research and development efforts, the timing and success of pre-clinical studies, our ongoing clinical trials or clinical trials we may commence in the future and the timing of regulatory submissions. As a result, our management will have broad discretion over the use of the net proceeds from this offering.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, interest-bearing, investment-grade securities, certificates of deposit or government securities.

TABLE OF CONTENTS**Dilution**

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the price you pay in this offering and the net tangible book value per share of common stock after this offering.

Our historical net tangible book value as of September 30, 2018 was approximately \$282.6 million, or approximately \$6.69 per share of common stock, based on 42,248,075 shares of common stock then outstanding.

After giving effect to the sale by us of 5,500,000 shares of our common stock in this offering at the public offering price of \$20.00 per share, less the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2018 would have been \$385.6 million, or \$8.08 per share of common stock. This represents an immediate increase in net tangible book value of \$1.39 per share to existing stockholders and an immediate dilution in net tangible book value of \$11.92 per share to investors purchasing shares in this offering. The following table illustrates this dilution on a per share basis.

Public offering price per share	\$ 20.00
Historical net tangible book value per share as of September 30, 2018	\$ 6.69
Increase in net tangible book value per share attributable to investors purchasing shares of our common stock in this offering	\$ 1.39
As adjusted net tangible book value per share after giving effect to this offering	\$ 8.08
Dilution per share to investors purchasing shares of our common stock in this offering	\$ 11.92

If the underwriters exercise their option in full to purchase an additional 825,000 shares of common stock in this offering, the as adjusted net tangible book value per share after this offering would be \$8.26 per share, the increase in the net tangible book value per share to existing stockholders would be \$1.57 per share and the dilution to new investors purchasing shares of our common stock in this offering would be \$11.74 per share.

The above discussion and table are based on 42,248,075 shares of common stock outstanding as of September 30, 2018 and exclude:

- 5,348,275 shares issuable upon exercise of options outstanding under our employee stock option plans as of September 30, 2018 at a weighted average exercise price of \$21.95 per share, of which 3,365,982 were exercisable at September 30, 2018, and underlying restricted stock units as of September 30, 2018;
- 3,544,620 shares of common stock available for future issuance under our employee stock option plans; and
- 741,757 shares of common stock available for future issuance under the 2016 ESPP.

To the extent that outstanding options are exercised or restricted stock units vest, you will experience further dilution. In addition, 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 additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities may result in further dilution to our stockholders.

TABLE OF CONTENTS

Material United States Federal Tax Considerations for Non-U.S. Holders

The following discussion summarizes material United States federal income and estate tax considerations relating to the acquisition, ownership, and disposition of shares of our common stock by a non-U.S. holder (as defined below) that acquires our common stock in this offering and holds it as a capital asset within the meaning of Section 1221 of the Code (defined below). This discussion is based on the tax laws of the United States, including the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated or proposed thereunder, and administrative and judicial interpretations thereof, all as in effect on the date hereof. These tax laws are subject to change, possibly with retroactive effect, and subject to differing interpretations that could affect the tax consequences described herein.

For purposes of this discussion, a non-U.S. holder is a beneficial owner of our common stock that, for United States federal income tax purposes, is:

- a non-resident alien;
- a foreign corporation (or other entity taxable as a corporation);
- an estate the income of which is not subject to United States federal income taxation regardless of its source; or
- a trust that does not have in effect a valid election under the Treasury regulations to be treated as a United States person and either (1) no court within the United States is able to exercise primary supervision over the trust's administration or (2) no United States person has the authority to control all substantial decisions of that trust.

This discussion does not address all aspects of United States federal income and estate taxation that may be applicable to non-U.S. holders in light of their particular circumstances or status (including, for example, financial institutions, banks, investment funds, broker-dealers or traders in securities, insurance companies, persons subject to the alternative minimum tax, partnerships or other pass-through entities, corporations that accumulate earnings to avoid U.S. federal income tax, certain United States expatriates, tax-exempt organizations, pension plans, persons in special situations, such as those that have elected to mark securities to market or that hold shares of our common stock as part of a straddle, hedge or other integrated investment, and foreign governments or agencies).

If a partnership (including any entity or arrangement treated as a partnership for United States federal income tax purposes) holds our common stock, the tax treatment of a person treated as a partner in the partnership for United States federal income tax purposes generally will depend on the status of the partner and the activities of the partnership. Partnerships (and other entities or arrangements so treated for United States federal income tax purposes) and their partners should consult their own tax advisors.

This discussion addresses only non-U.S. holders and does not discuss any tax considerations other than United States federal income tax and certain United States federal estate tax considerations. Prospective investors are urged to consult their own tax advisors regarding the United States federal, state, and local, and foreign tax consequences of the purchase, ownership, and disposition of our common stock, including the effect of any applicable income or estate tax treaty.

Dividends

We do not currently expect to pay dividends. If we make a distribution of cash or property with respect to our common stock, any such distribution generally will constitute a dividend for United States federal income tax purposes. Subject to the discussion below under FATCA Withholding and Information Reporting and Backup Withholding, any such dividends paid to a non-U.S. holder generally will be subject to withholding tax at a 30% rate

or at a lower rate under an applicable income tax treaty between the United States and the non-U.S. holder's country of residence. In order to receive a reduced treaty withholding tax rate and to avoid backup withholding, as described below, a non-U.S. holder must furnish to us or our paying agent a properly executed Internal Revenue Service Form W-8BEN or Form W-8BEN-E (or other applicable form) prior to payment of the dividend, certifying under penalties of perjury that the non-U.S. holder is entitled to a reduction in withholding under an applicable income tax treaty. A non-U.S. holder that holds our common stock through a financial institution or other agent will be required to provide appropriate documentation to the financial institution or

S-34

TABLE OF CONTENTS

other agent, which then will be required to provide certification to us or our paying agent either directly or through other intermediaries. A non-U.S. holder that is eligible for a reduced rate of withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by timely filing a refund claim with the Internal Revenue Service.

A non-U.S. holder is exempt from the withholding tax described above if the dividend is effectively connected with the conduct of a trade or business in the United States of the non-U.S. holder (and, if an applicable income tax treaty so provides, attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States) and the non-U.S. holder furnishes to us or our paying agent an Internal Revenue Service Form W-8ECI (or applicable successor form), certifying under penalties of perjury that the dividend is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States (and, if an applicable income tax treaty so provides, attributable to a permanent establishment or fixed base maintained in the United States). Effectively connected dividends will generally be subject to United States federal income tax at the graduated rates that also apply to U.S. persons. A corporate non-U.S. holder may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate (or at a lower rate under an applicable income tax treaty) with respect to its effectively connected dividends.

To the extent a distribution with respect to our common stock exceeds our current or accumulated earnings and profits, as determined under United States federal income tax principles, the distribution will be treated, first, as a tax-free return of the non-U.S. holder's investment, up to the holder's adjusted tax basis in its shares of our common stock, and, thereafter, as capital gain, which is subject to the tax treatment described below in Gain on Sale, Exchange or Other Taxable Disposition.

Gain On Sale, Exchange or Other Taxable Disposition

Subject to the discussion below under FATCA Withholding and Information Reporting and Backup Withholding, a non-U.S. holder generally will not be subject to United States federal income tax or withholding tax on gain realized upon a sale, exchange or other taxable disposition of shares of our common stock (including a redemption, but only if the redemption would be treated as a sale or exchange rather than a distribution for United States federal income tax purposes) unless:

- the gain is effectively connected with the conduct of a trade or business of the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States), in which case the non-U.S. holder generally will be subject to United States federal income tax on a net income basis with respect to such gain in the same manner as if such holder were a resident of the United States and a corporate non-U.S. holder may also be subject to an additional branch profits tax at a 30% rate (or at a lower rate under an applicable income tax treaty) with respect to effectively connected gains;
- the non-U.S. holder is an individual who is present in the United States for 183 or more days in the taxable year of the disposition and meets certain other conditions, in which case the non-U.S. holder generally will be subject to United States federal income tax at a 30% rate (or at a lower rate under an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S.-source capital losses for the year; or
- we are or have been a United States real property holding corporation or USRPHC at any time within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period for our common stock (the relevant period) and the non-U.S. holder (i) disposes of our common stock during a calendar year when our common stock is no longer regularly traded on an established securities market or (ii) owned (directly, indirectly, and constructively) more than 5% of our common stock at any time during the relevant period, in which case such a non-U.S. holder will be subject to tax on the gain on the disposition of

shares of our common stock generally as if the gain were effectively connected with the conduct of a trade or business in the United States, except that the branch profits tax will not apply.

We believe we currently are not, and we do not anticipate becoming, a USRPHC for United States federal income tax purposes. Generally, a corporation is a USRPHC only if the fair market value of its United States real property interests (as defined in the Code) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business.

S-35

TABLE OF CONTENTS

FATCA Withholding

Under Sections 1471 through 1474 of the Code, Treasury regulations issued under these Sections and intergovernmental agreements entered in connection with these provisions by the Treasury Department with certain countries (together, the Foreign Account Tax Compliance Act or FATCA) a 30% withholding tax is imposed on dividends paid on our common stock to a foreign entity unless the foreign entity:

- is a foreign financial institution (as defined under FATCA) that (i) undertakes specified due diligence, reporting, withholding and certification obligations or (ii) is a resident in a jurisdiction that has entered into an intergovernmental agreement with the United States relating to FATCA and complies with the diligence and reporting requirements of the intergovernmental agreement and local implementing rules;
- is a non-financial foreign entity (as defined under FATCA) and identifies certain of its U.S. investors or that it does not have such U.S. investors, generally on Internal Revenue Service Form W-8BEN-E; or
- otherwise is exempted from withholding under FATCA.

Withholding under FATCA also generally applies to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2018. Withholding agents may, however, rely on, recently proposed U.S. Treasury Regulations that would no longer require FATCA withholding on payments of gross proceeds. A withholding agent such as a broker, and not the Company, will determine whether or not to implement gross proceeds FATCA withholding.

Under certain circumstances, a non-U.S. holder will be eligible for refunds or credits of withholding taxes imposed under FATCA by filing a United States federal income tax return. Prospective investors should consult their tax advisors regarding the effect of FATCA on their ownership and disposition of our common stock.

Information Reporting and Backup Withholding

Except as described below, a non-U.S. holder generally will be exempt from backup withholding and information reporting requirements with respect to dividend payments and the payment of the proceeds from the sale of shares of our common stock effected at a United States office of a broker, as long as the payor or broker does not have actual knowledge or reason to know that the holder is a United States person and the holder has furnished to the payor or broker:

- a valid Internal Revenue Service Form W-8BEN or Form W-8BEN-E on which the non-U.S. holder certifies, under penalties of perjury, that it is a non-United States person; or
- other documentation upon which it may rely to treat the payments as made to a non-United States person in accordance with Treasury regulations,

or the non-U.S. holder otherwise establishes an exemption.

However, we must report annually to the Internal Revenue Service and to non-U.S. holders the amount of dividends paid to them and the tax withheld with respect to such dividends, regardless of whether withholding was required. Copies of the information returns reporting such dividends and withholding may also be made available to the tax authorities in the country in which the respective non-U.S. holder resides under the provisions of an applicable income tax treaty.

Payment of the proceeds from the sale of our common shares effected at a foreign office of a broker generally will not be subject to information reporting or backup withholding. However, a sale of our common stock by a non-U.S. holder that is effected at a foreign office of a broker will be subject to information reporting and backup withholding if:

Edgar Filing: MACROGENICS INC - Form 424B5

- the proceeds are transferred to an account maintained by the non-U.S. holder in the United States;
- the payment of proceeds or the confirmation of the sale is mailed to the non-U.S. holder at a United States address; or
- the sale has some other specified connection with the United States as provided in the Treasury regulations,

S-36

TABLE OF CONTENTS

unless the broker does not have actual knowledge or reason to know that the holder is a United States person and the documentation requirements described above are met or the non-U.S. holder otherwise establishes an exemption.

In addition, a sale of shares of our common stock will be subject to information reporting if it is effected at a foreign office of a broker that is:

- a United States person;
- a controlled foreign corporation for United States federal income tax purposes;
- a foreign person 50% or more of the whose gross income is effectively connected with the conduct of a United States trade or business for a specified three-year period; or
- a foreign partnership, if at any time during its tax year (a) one or more of its partners are U.S. persons, as defined in U.S. Treasury regulations, who in the aggregate hold more than 50% of the income or capital interest in the partnership, or (b) such foreign partnership is engaged in the conduct of a trade or business in the United States,

unless the broker does not have actual knowledge or reason to know that the holder is a United States person and the documentation requirements described above are met or the non-U.S. holder otherwise establishes an exemption.

Backup withholding will apply if the sale is subject to information reporting and the broker has actual knowledge that the holder is a United States person.

Backup withholding is not an additional tax. A non-U.S. holder generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed the non-U.S. holder's income tax liability by filing a refund claim with the Internal Revenue Service.

Federal Estate Taxes

The estates of nonresident alien decedents generally are subject to United States federal estate tax on property with a United States situs. Because we are a United States corporation, our common stock will be United States situs property and therefore will be included in the taxable estate of a nonresident alien decedent at the time of the decedent's death, unless an applicable estate tax treaty between the United States and the decedent's country of residence provides otherwise. An estate tax credit is available to reduce the net tax liability of a nonresident alien's estate, but the estate tax credit for a nonresident alien is generally much smaller than the applicable credit for computing the estate tax of a United States resident. Nonresident aliens should consult their personal tax advisors regarding the United States federal estate tax consequences of owning our common stock.

TABLE OF CONTENTS**Underwriting**

SVB Leerink LLC and Evercore Group L.L.C. are acting as representatives of each of the underwriters named below and as joint bookrunning managers for this offering. Subject to the terms and conditions set forth in the underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
SVB Leerink LLC	1,650,000
Evercore Group L.L.C.	1,375,000
Credit Suisse Securities (USA) LLC	618,750
Stifel, Nicolaus & Company, Incorporated	618,750
Nomura Securities International, Inc.	371,250
SunTrust Robinson Humphrey, Inc.	316,250
BTIG, LLC	288,750
H.C. Wainwright & Co., LLC	261,250
Total	5,500,000

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of the shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting 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 shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' 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 Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the initial public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$0.72 per share. After the initial offering of the shares, the public offering price, concession or any other term of this offering may be changed by the representatives.

The following table shows the initial public offering price, underwriting discounts and commissions and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares of our common stock.

Total

	Per Share	Without Option	With Option
Initial public offering price	\$ 20.00	\$ 110,000,000	\$ 126,500,000
Underwriting discounts and commissions	\$ 1.20	\$ 6,600,000	\$ 7,590,000
Proceeds, before expenses, to us	\$ 18.80	\$ 103,400,000	\$ 118,910,000

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$400,000. We also have agreed to reimburse the underwriters for up to \$15,000 for their FINRA counsel fee. In accordance with FINRA Rule 5110, this reimbursed fee is deemed underwriting compensation for this offering.

S-38

TABLE OF CONTENTS

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to 825,000 additional shares at the initial public offering price, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to the conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and certain of our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into or exchangeable or exercisable for common stock, for 90 days after the date of this prospectus supplement without first obtaining the written consent of SVB Leerink LLC and Evercore Group L.L.C. on behalf of the underwriters. 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 common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right or warrant for the sale of any common stock;
- otherwise dispose of or transfer any common stock;
- request or demand that we file a registration statement related to the common stock; or
- enter into any swap or other agreement or any transaction that transfers, in whole or in part, the economic consequence of ownership of any common stock, whether any such swap, agreement or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

The lock-up provisions apply to common stock and to securities convertible into or exchangeable or exercisable for common stock. They also apply to common stock owned now or acquired later by the person executing the lock-up agreement or for which the person executing the lock-up agreement later acquires the power of disposition.

Nasdaq Global Select Market Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol **MGNX**.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with this offering, the underwriters may purchase and sell our common stock 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 shares than they are required to purchase in this offering. Covered short sales are sales made in an amount not greater than the underwriters' option described above. The underwriters may close out any covered short position by either exercising their option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them under the underwriting agreement described above. Naked short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares 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 common stock in the open market after pricing that could adversely affect investors who purchase in this offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the closing of this offering.

S-39

TABLE OF CONTENTS

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares 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 common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock 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 common stock. 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 this offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Some of the underwriters and certain of their affiliates may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us and our affiliates, for which they may in the future receive customary fees, commissions and expenses.

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.

Selling Restrictions

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, no offer of shares may be made to the public in that Relevant Member State other than:

- 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), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the

representatives; or

C. in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall require 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 in a Relevant Member State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed that it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive. In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the

S-40

TABLE OF CONTENTS

Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

We, the representatives and each of our and the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

This prospectus supplement has been prepared on the basis that any offer of shares in any Relevant Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly, any person making or intending to make an offer in that Relevant Member State of shares which are the subject of the offering contemplated in this prospectus supplement may only do so in circumstances in which no obligation arises for the company or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the underwriters have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the company or the underwriters to publish a prospectus for such offer.

For the purpose of the above provisions, the expression an offer to the public in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in the Relevant Member State by any measure implementing the Prospectus Directive in the Relevant Member State and the expression Prospectus Directive means Directive 2003/71/EC (including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member States) and includes any relevant implementing measure in the Relevant Member State and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

MiFID II Product Governance

Any person offering, selling or recommending the shares (a distributor) should take into consideration the manufacturers target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the shares (by either adopting or refining the manufacturers target market assessment) and determining appropriate distribution channels.

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 (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) or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to Prospective Investors in Canada

The shares 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 shares 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 supplement (including any amendment thereto) contains a

S-41

TABLE OF CONTENTS

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 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.

Legal Matters

The validity of the securities offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Covington & Burling LLP, New York, New York. Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York is counsel for the underwriters in connection with this offering.

Experts

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, and the effectiveness of our internal control over financial reporting as of December 31, 2017 as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated by reference in reliance on Ernst & Young LLP's reports pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates, given on their authority as experts in accounting and auditing.

Where You Can Find More Information

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 we filed with the SEC under the Securities Act and do not contain all of the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement or the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's web site at <http://www.sec.gov>.

TABLE OF CONTENTS

Incorporation of Certain Documents by Reference

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to these documents instead of having to repeat the information in this prospectus supplement. Because we are incorporating by reference future filings with the SEC, this prospectus supplement and the accompanying prospectus are continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus supplement and the accompanying prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement, the accompanying prospectus or in any document previously incorporated by reference have been modified or superseded. Our periodic reports are filed with the SEC under SEC File Number 001-36112.

We hereby incorporate by reference the following documents:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on February 27, 2018;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 from our Definitive Proxy Statement on Schedule 14A for our 2018 Annual Meeting of Stockholders, filed with the SEC on April 6, 2018;
- Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 7, 2018, August 7, 2018 and November 7, 2018;
- Current Reports on Form 8-K filed with the SEC on February 27, 2018 (Item 5.02), April 2, 2018, May 23, 2018, December 7, 2018, January 25, 2019 and February 6, 2019; and
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on October 7, 2013, including any amendments or reports filed for the purpose of updating such description.

In addition, all documents we subsequently file with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, until the offering of the securities offered hereby is terminated or completed, shall be deemed to be incorporated by reference in this prospectus supplement.

Unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus supplement.

We will furnish to you, regardless of whether you are a beneficial owner, at no cost, upon written or oral request, a copy of all of the documents that have been incorporated by reference in this prospectus supplement and the accompanying prospectus, other than the exhibits to such documents unless the exhibits are specifically incorporated by reference but not delivered with this prospectus supplement. Requests should be directed to:

9704 Medical Center Drive
Rockville, MD 20850
Attn: Investor Relations
(301) 251-5172

TABLE OF CONTENTS

PROSPECTUS

MACROGENICS, INC.

Common Stock
Preferred Stock
Units
Warrants
Debt Securities

We may from time to time offer to sell common stock, preferred stock, units, warrants or debt securities. Each time we sell securities pursuant to this prospectus, we will provide a supplement to this prospectus that contains specific information about the offering and the specific terms of the securities offered. The prospectus supplement may also add to, update or change information contained in this prospectus. In addition, we may supplement, update or change any of the information contained in this prospectus by incorporating information by reference in this prospectus.

In addition, selling securityholders to be named in a prospectus supplement may offer our securities from time to time. To the extent that any selling securityholder resells any securities, the selling securityholder may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling securityholder and the terms of the securities being offered.

You should read this prospectus, the supplements to this prospectus and any incorporated documents carefully before you invest in any of our securities. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

We may offer and sell securities to or through one or more underwriters, dealers and agents, or directly to purchasers. The names and compensation of any underwriters or agents involved in the sale of securities will be described in a supplement to this prospectus.

Our common stock is listed on The NASDAQ Global Select Market under the symbol MGNX. If we decide to seek a listing of any securities offered by this prospectus, the applicable prospectus supplement will disclose the exchange or market on which such securities will be listed, if any, or where we have made an application for listing, if any.

Investing in these securities involves certain risks. You should carefully consider the risk factors incorporated in this prospectus by reference and described under the heading Risk Factors beginning on page 2.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 2, 2016

TABLE OF CONTENTS

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	<u>ii</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>iii</u>
<u>INCORPORATION BY REFERENCE</u>	<u>iii</u>
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>iv</u>
<u>MACROGENICS, INC.</u>	<u>1</u>
<u>RISK FACTORS</u>	<u>2</u>
<u>CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES</u>	<u>2</u>
<u>USE OF PROCEEDS</u>	<u>2</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>3</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>11</u>
<u>DESCRIPTION OF UNITS</u>	<u>17</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>18</u>
<u>FORMS OF SECURITIES</u>	<u>19</u>
<u>SELLING SECURITYHOLDERS</u>	<u>21</u>
<u>PLAN OF DISTRIBUTION</u>	<u>22</u>
<u>LEGAL MATTERS</u>	<u>24</u>
<u>EXPERTS</u>	<u>24</u>

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC or the Commission, utilizing a shelf registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus and selling securityholders may, from time to time, offer such securities owned by them. You should carefully read this prospectus and any accompanying prospectus supplement together with the additional information described under the heading **Where You Can Find More Information**.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities pursuant to this prospectus, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading **Where You Can Find More Information** in this prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or such accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to **we**, **our** and **us** refer, collectively, to MacroGenics, Inc., a Delaware corporation, and its consolidated subsidiaries.

TABLE OF CONTENTS

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at <http://www.macrogenics.com>. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus. You may also read and copy any document we file at the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiary and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-36112) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) between the date of this registration statement and the date all of the securities offered by this prospectus are sold or the offering is otherwise terminated:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2015, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our definitive proxy statement for the 2016 Annual Meeting of Stockholders;
- Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2016, June 30, 2016 and September 30, 2016, respectively;
- Current Reports on Form 8-K filed on March 1, 2016, March 10, 2016, May 20, 2016, September 12, 2016 and September 20, 2016, respectively; and
- The description of our common stock contained in our Registration Statement on Form 8-A filed on October 7, 2013, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

9704 Medical Center Drive
Rockville, MD 20850
Attn: Investor Relations
(301) 251-5172

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. Forward-looking statements include statements that may relate to our plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs and other information that is not historical information. Forward-looking statements can often be identified by the use of terminology such as subject to , believe , anticipate , plan , expect , intend , estimate , project , may , will , should , will be , variations thereof, variations thereon and similar expressions, or by discussions of strategy.

All forward-looking statements are based upon our current expectations and various assumptions. We believe there is a reasonable basis for our expectations and beliefs, but they are inherently uncertain. We may not realize our expectations, and our beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements. The following uncertainties and factors, among others, could affect future performance and cause actual results to differ materially from those matters expressed in or implied by forward-looking statements:

- our plans to develop and commercialize our product candidates;
- our ongoing and planned clinical trials;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to enter into new collaborations or to identify additional products or product candidates with significant commercial potential that are consistent with our strategic objectives;
- the rate and degree of market acceptance and clinical utility of our products;
- our commercialization, marketing and manufacturing capabilities and strategy;
- significant competition in our industry;
- costs of litigation and the failure to successfully defend lawsuits and other claims against us;
- economic, political and other risks associated with our international operations;
- our ability to receive research funding and achieve anticipated milestones under our collaborations;
- our ability to protect and enforce patents and other intellectual property;
- costs of compliance and our potential failure to comply with new and existing governmental regulations including, but not limited to, tax regulations;
- loss or retirement of key members of management; and
- failure to successfully execute our growth strategy, including any delays in our planned future growth.

The factors, risks and uncertainties referred to above and others are more fully described under the heading Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, as updated from time to time in our subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Forward-looking statements should be regarded solely as our current plans, estimates and beliefs. You should not place undue reliance on forward-looking statements. The forward-looking statements contained herein represent our judgment as of the date of this report. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by law.

TABLE OF CONTENTS

MACROGENICS, INC.

We are a clinical-stage biopharmaceutical company focused on discovering and developing innovative monoclonal antibody-based therapeutics for the treatment of cancer, as well as autoimmune disorders and infectious diseases. We generate our pipeline of product candidates primarily from our proprietary suite of next-generation antibody-based technology platforms. The combination of our technology platforms and protein engineering expertise has allowed us to generate promising product candidates and enter into several strategic collaborations with global pharmaceutical and biotechnology companies.

Our principal executive offices are located at 9704 Medical Center Drive, Rockville, MD 20850, and our telephone number is (301) 251-5172.

1

TABLE OF CONTENTS

RISK FACTORS

You should consider carefully the information under the headings **Risk Factors** in our Annual Report on Form 10-K for our most recent fiscal year, in any applicable prospectus supplement and any risk factors set forth in our other filings with the SEC, pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including our quarterly reports on Form 10-Q and our current reports on Form 8-K, before making an investment decision. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment. See **Where You Can Find More Information**.

CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES

Our consolidated ratio of earnings to fixed charges for each of the five most recently completed fiscal years and any required interim periods will each be specified in a prospectus supplement or in a document that we file with the SEC and incorporate by reference pertaining to the issuance, if any, by us of debt securities in the future.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include the acquisition of companies or businesses, advancing our pipeline, developing facilities, repayment and refinancing of debt, if any, working capital and capital expenditures. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

TABLE OF CONTENTS

DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. When we refer to the Company, we, our, and us in this section, we mean MacroGenics, Inc. excluding, unless the context otherwise requires or as otherwise expressly stated, our subsidiary.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

None of the indentures will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The senior debt securities will constitute our unsecured and unsubordinated general obligations and will rank pari passu with our other unsecured and unsubordinated obligations. The subordinated debt securities will constitute our unsecured and subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading -Certain Terms of the Subordinated Debt Securities-Subordination. The debt securities will be structurally subordinated to all existing and future indebtedness and other liabilities of our subsidiary unless such subsidiary expressly guarantees such debt securities.

The debt securities will be our unsecured obligations. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities of any series being offered, including the following terms:

- the title and type of the debt securities;
- whether the debt securities will be senior or subordinated debt securities, and, with respect to debt securities issued under the subordinated indenture the terms on which they are subordinated;
- the aggregate principal amount of the debt securities;
- the price or prices at which we will sell the debt securities;
- the maturity date or dates of the debt securities and the right, if any, to extend such date or dates;

- the rate or rates, if any, per year, at which the debt securities will bear interest, or the method of determining such rate or rates;

TABLE OF CONTENTS

- the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;
- the right, if any, to extend the interest payment periods and the duration of that extension;
- the manner of paying principal and interest and the place or places where principal and interest will be payable;
- provisions for a sinking fund, purchase fund or other analogous fund, if any;
- any redemption dates, prices, obligations and restrictions on the debt securities;
- the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable;
- any conversion or exchange features of the debt securities;
- whether and upon what terms the debt securities may be defeased;
- any events of default or covenants in addition to or in lieu of those set forth in the indenture;
- whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions;
- whether the debt securities will be guaranteed as to payment or performance;
- any special tax implications of the debt securities; and
- any other material terms of the debt securities.

When we refer to principal in this section with reference to the debt securities, we are also referring to premium, if any.

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par which are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

TABLE OF CONTENTS

Certain Terms of the Senior Debt Securities

Covenants. Unless we indicate otherwise in a prospectus supplement, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting us, either directly or through any subsidiaries, from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our property or capital stock, or restricting us from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets. Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust (subject to certain exceptions provided for in the senior indenture);
- the successor entity assumes our obligations on the senior debt securities and under the senior indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- certain other conditions are met.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture for any series of senior debt securities:

- failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 30 days (or such other period as may be specified for such series);
- failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period);
- default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series;
- certain events of bankruptcy or insolvency, whether or not voluntary; and
- any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

The default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

TABLE OF CONTENTS

If an event of default specified in the fourth bullet point above occurs and is continuing, the entire principal amount of and accrued interest on each series of senior debt securities then outstanding shall become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities or in respect of a covenant or provision of the senior indenture which cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto.

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

- the holder gives the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default;
- the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense;
- the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security to receive payment of the principal of and interest on such senior debt security in accordance with the terms of such debt security, or to bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge. We can satisfy and discharge our obligations to holders of any series of debt securities if:

- we pay or cause to be paid, as and when due and payable, the principal of and any interest on all senior debt securities of such series outstanding under the senior indenture; or

TABLE OF CONTENTS

all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year) and we deposit in trust a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us. Purchasers of the debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance. Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any series of debt securities issued under the indentures.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the debt securities of any series (called legal defeasance) if certain conditions are met, including the following:

- We deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

- There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due. Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us.

- We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change of current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the debt securities (called covenant defeasance). In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

- We must deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

- We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due.

If we accomplish covenant defeasance, you could still look to us for repayment of the debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

TABLE OF CONTENTS

Modification and Waiver. We and the trustee may amend or supplement the senior indenture or the senior debt securities without the consent of any holder:

- to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;
- to evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture or to otherwise comply with the covenant relating to mergers, consolidations and sales of assets;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the senior indenture under the Trust Indenture Act of 1939, as amended;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default;
- to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement;
- to provide for or add guarantors with respect to the senior debt securities of any series;
- to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture;
- to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms, purposes of issue, authentication and delivery of any series of senior debt securities;
- to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding; or
- to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

- extends the final maturity of any senior debt securities of such series;
- reduces the principal amount of any senior debt securities of such series;
- reduces the rate or extends the time of payment of interest on any senior debt securities of such series;
- reduces the amount payable upon the redemption of any senior debt securities of such series;
- changes the currency of payment of principal of or interest on any senior debt securities of such series;
- reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy;
- waives an uncured default in the payment of principal of or interest on the senior debt securities (except in the case of a rescission of acceleration as described above);
- changes the provisions relating to the waiver of past defaults or changes or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor;

TABLE OF CONTENTS

- modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification; or
- reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or modifies or amends or waives certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Incorporators, Stockholders, Officers, Directors. The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee. The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act of 1939 incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or our subsidiary, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds. All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such principal, premium or interest became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

Governing Law. The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms

of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of or

TABLE OF CONTENTS

interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term *senior indebtedness* of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

- all of the indebtedness of that person for money borrowed;
- all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;
- all of the lease obligations that are capitalized on the books of that person in accordance with generally accepted accounting principles;
- all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and
- all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated debt indenture.

TABLE OF CONTENTS

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is intended as a summary only and therefore is not a complete description of our capital stock. This description is based upon, and is qualified by reference to, our restated certificate of incorporation, our by-laws and applicable provisions of Delaware corporate law. You should read our restated certificate of incorporation and by-laws, which are filed as exhibits to the registration statement of which this prospectus forms a part, for the provisions that are important to you.

Our authorized capital stock consists of 125,000,000 shares of common stock, par value \$0.01 per share, and 5,000,000 shares of preferred stock, par value \$0.01 per share. As of September 30, 2016, 34,813,334 shares of common stock were outstanding and no shares of preferred stock were outstanding.

Common Stock

Voting Rights. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Subject to the supermajority votes for some matters, other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter. Our restated certificate of incorporation and bylaws also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our restated certificate of incorporation described below under *Provisions of Our Restated Certificate of Incorporation and By-laws and Delaware Law That May Have Anti-Takeover Effects-Removal of Directors* and *-Stockholder Action by Written Consent; Special Meetings*.

Dividends. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any outstanding preferred stock.

Liquidation and Dissolution. In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock.

Other Rights. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Transfer Agent and Registrar. Computershare Trust Company, Inc. is the transfer agent and registrar for our common stock.

Listing on The NASDAQ Global Select Market. Our common stock is listed on The NASDAQ Global Select Market under the symbol **MGNX** .

Preferred Stock

We are authorized to issue blank check preferred stock, which may be issued in one or more series upon authorization of our board of directors. Our board of directors is authorized to fix the designation of the series, the number of authorized shares of the series, dividend rights and terms, conversion rights, voting rights, redemption rights and

terms, liquidation preferences and any other rights, powers, preferences and limitations applicable to each series of preferred stock. The authorized shares of our preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. If the approval of our stockholders is not required for the issuance of shares of our preferred stock, our board may determine not to seek stockholder approval. The specific terms of any series of preferred stock offered pursuant to this prospectus will be described in the prospectus supplement relating to that series of preferred stock.

A series of our preferred stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue

TABLE OF CONTENTS

preferred shares based upon its judgment as to the best interests of our stockholders. Our directors, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt through which an acquirer may be able to change the composition of our board of directors, including a tender offer or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of the stock.

The preferred stock has the terms described below unless otherwise provided in the prospectus supplement relating to a particular series of preferred stock. You should read the prospectus supplement relating to the particular series of preferred stock being offered for specific terms, including:

- the designation and stated value per share of the preferred stock and the number of shares offered;
- the amount of liquidation preference per share;
- the price at which the preferred stock will be issued;
- the dividend rate, or method of calculation of dividends, the dates on which dividends will be payable,
- whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will commence to accumulate;
- any redemption or sinking fund provisions;
- if other than the currency of the United States, the currency or currencies including composite currencies in which the preferred stock is denominated and/or in which payments will or may be payable;
- any conversion provisions; and
- any other rights, preferences, privileges, limitations and restrictions on the preferred stock.

The preferred stock will, when issued, be fully paid and non-assessable. Unless otherwise specified in the prospectus supplement, each series of preferred stock will rank equally as to dividends and liquidation rights in all respects with each other series of preferred stock. The rights of holders of shares of each series of preferred stock will be subordinate to those of our general creditors.

Rank. Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up of our affairs, rank:

- senior to our common stock and to all equity securities ranking junior to such preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs;
- on a parity with all equity securities issued by us, the terms of which specifically provide that such equity securities rank on a parity with the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs; and
- junior to all equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs.

The term "equity securities" does not include convertible debt securities.

Dividends. Holders of the preferred stock of each series will be entitled to receive, when, as and if declared by our board of directors, cash dividends at such rates and on such dates described in the prospectus supplement. Different series of preferred stock may be entitled to dividends at different rates or based on different methods of calculation. The dividend rate may be fixed or variable or both. Dividends will be payable to the holders of record as they appear on our stock books on record dates fixed by our board of directors, as specified in the applicable prospectus supplement.

Dividends on any series of preferred stock may be cumulative or noncumulative, as described in the applicable prospectus supplement. If our board of directors does not declare a dividend payable on a dividend payment date on any series of noncumulative preferred stock, then the holders of that noncumulative preferred stock will have no right

to receive a dividend for that dividend payment date, and we will have no obligation to

12

TABLE OF CONTENTS

pay the dividend accrued for that period, whether or not dividends on that series are declared payable on any future dividend payment dates. Dividends on any series of cumulative preferred stock will accrue from the date we initially issue shares of such series or such other date specified in the applicable prospectus supplement.

No dividends may be declared or paid or funds set apart for the payment of any dividends on any parity securities unless full dividends have been paid or set apart for payment on the preferred stock. If full dividends are not paid, the preferred stock will share dividends pro rata with the parity securities.

No dividends may be declared or paid or funds set apart for the payment of dividends on any junior securities unless full dividends for all dividend periods terminating on or prior to the date of the declaration or payment will have been paid or declared and a sum sufficient for the payment set apart for payment on the preferred stock.

Liquidation Preference. Upon any voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before we make any distribution or payment to the holders of any common stock or any other class or series of our capital stock ranking junior to the preferred stock in the distribution of assets upon any liquidation, dissolution or winding up of our affairs, the holders of each series of preferred stock shall be entitled to receive out of assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference per share set forth in the prospectus supplement, plus any accrued and unpaid dividends thereon. Such dividends will not include any accumulation in respect of unpaid noncumulative dividends for prior dividend periods. Unless otherwise specified in the prospectus supplement, after payment of the full amount of their liquidating distributions, the holders of preferred stock will have no right or claim to any of our remaining assets. Upon any such voluntary or involuntary liquidation, dissolution or winding up, if our available assets are insufficient to pay the amount of the liquidating distributions on all outstanding preferred stock and the corresponding amounts payable on all other classes or series of our capital stock ranking on parity with the preferred stock and all other such classes or series of shares of capital stock ranking on parity with the preferred stock in the distribution of assets, then the holders of the preferred stock and all other such classes or series of capital stock will share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be entitled.

Upon any such liquidation, dissolution or winding up and if we have made liquidating distributions in full to all holders of preferred stock, we will distribute our remaining assets among the holders of any other classes or series of capital stock ranking junior to the preferred stock according to their respective rights and preferences and, in each case, according to their respective number of shares. For such purposes, our consolidation or merger with or into any other corporation, trust or entity, or the sale, lease or conveyance of all or substantially all of our property or assets will not be deemed to constitute a liquidation, dissolution or winding up of our affairs.

Redemption. If so provided in the applicable prospectus supplement, the preferred stock will be subject to mandatory redemption or redemption at our option, as a whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such prospectus supplement.

The prospectus supplement relating to a series of preferred stock that is subject to mandatory redemption will specify the number of shares of preferred stock that shall be redeemed by us in each year commencing after a date to be specified, at a redemption price per share to be specified, together with an amount equal to all accrued and unpaid dividends thereon to the date of redemption. Unless the shares have a cumulative dividend, such accrued dividends will not include any accumulation in respect of unpaid dividends for prior dividend periods. We may pay the redemption price in cash or other property, as specified in the applicable prospectus supplement. If the redemption price for preferred stock of any series is payable only from the net proceeds of the issuance of shares of our capital stock, the terms of such preferred stock may provide that, if no such shares of our capital stock shall have been issued or to the extent the net proceeds from any issuance are insufficient to pay in full the aggregate redemption price then due, such preferred stock shall automatically and mandatorily be converted into the applicable shares of our capital

stock pursuant to conversion provisions specified in the applicable prospectus supplement. Notwithstanding the foregoing, we will not redeem any preferred stock of a series unless:

- if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on the preferred stock for all past dividend periods and the then current dividend period; or

TABLE OF CONTENTS

- if such series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends for the then current dividend period.

In addition, we will not acquire any preferred stock of a series unless:

- if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on all outstanding shares of such series of preferred stock for all past dividend periods and the then current dividend period; or
- if that series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends on the preferred stock of such series for the then current dividend period.

However, at any time we may purchase or acquire preferred stock of that series (1) pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding preferred stock of such series or (2) by conversion into or exchange for shares of our capital stock ranking junior to the preferred stock of such series as to dividends and upon liquidation.

If fewer than all of the outstanding shares of preferred stock of any series are to be redeemed, we will determine the number of shares that may be redeemed pro rata from the holders of record of such shares in proportion to the number of such shares held or for which redemption is requested by such holder or by any other equitable manner that we determine. Such determination will reflect adjustments to avoid redemption of fractional shares.

Unless otherwise specified in the prospectus supplement, we will mail notice of redemption at least 30 days but not more than 60 days before the redemption date to each holder of record of preferred stock to be redeemed at the address shown on our stock transfer books. Each notice shall state:

- the redemption date;
- the number of shares and series of preferred stock to be redeemed;
- the redemption price;
- the place or places where certificates for such preferred stock are to be surrendered for payment of the redemption price;
- that dividends on the shares to be redeemed will cease to accrue on such redemption date;
- the date on which the holder's conversion rights, if any, as to such shares shall terminate; and
- the specific number of shares to be redeemed from each such holder if fewer than all the shares of any series are to be redeemed.

If notice of redemption has been given and we have set aside the funds necessary for such redemption in trust for the benefit of the holders of any shares called for redemption, then from and after the redemption date, dividends will cease to accrue on such shares, and all rights of the holders of such shares will terminate, except the right to receive the redemption price.

Voting Rights. Holders of preferred stock will not have any voting rights, except as required by law or as indicated in the applicable prospectus supplement.

Unless otherwise provided for under the terms of any series of preferred stock, no consent or vote of the holders of shares of preferred stock or any series thereof shall be required for any amendment to our restated certificate of incorporation that would increase the number of authorized shares of preferred stock or the number of authorized shares of any series thereof or decrease the number of authorized shares of preferred stock or the number of authorized shares of any series thereof (but not below the number of authorized shares of preferred stock or such series, as the case may be, then outstanding).

Conversion Rights. The terms and conditions, if any, upon which any series of preferred stock is convertible into our common stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include the number of shares of common stock into which the shares of preferred stock are convertible, the

TABLE OF CONTENTS

conversion price, rate or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at our option or at the option of the holders of the preferred stock, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption.

Transfer Agent and Registrar. The transfer agent and registrar for the preferred stock will be set forth in the applicable prospectus supplement.

Provisions of Our Restated Certificate of Incorporation and By-laws and Delaware Law That May Have Anti-Takeover Effects

Delaware law contains, and our restated certificate of incorporation and our bylaws contain, provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

Removal of Directors. A director may be removed only for cause and only by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Stockholder Action by Written Consent; Special Meetings. Our restated certificate of incorporation provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Our restated certificate of incorporation and bylaws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors.

Advance Notice Requirements for Stockholder Proposals. Our bylaws have established an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Delaware Business Combination Statute. We are subject to Section 203 of the Delaware General Corporation Law. Subject to specified exceptions, Section 203 of the Delaware General Corporation Law restricts some types of transactions and business combinations between a corporation and a 15% stockholder. A 15% stockholder is generally considered by Section 203 to be a person owning 15% or more of the corporation's outstanding voting stock. Section 203 refers to a 15% stockholder as an interested stockholder. Section 203 restricts these transactions for a period of three years from the date the stockholder acquires 15% or more of our outstanding voting stock. With some exceptions, unless the transaction is approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation, Section 203 prohibits significant business transactions such as:

- a merger with, disposition of significant assets to or receipt of disproportionate financial benefits by the interested stockholder, and
- any other transaction that would increase the interested stockholder's proportionate ownership of any class or series of our capital stock.

The shares held by the interested stockholder are not counted as outstanding when calculating the two-thirds of the outstanding voting stock needed for approval.

The prohibition against these transactions does not apply if:

- prior to the time that any stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction in which such stockholder acquired 15% or more of our outstanding voting stock, or

TABLE OF CONTENTS

- the interested stockholder owns at least 85% of our outstanding voting stock as a result of a transaction in which such stockholder acquired 15% or more of our outstanding voting stock. Shares held by persons who are both directors and officers or by some types of employee stock plans are not counted as outstanding when making this calculation.

Amendment of Restated Certificate of Incorporation and Bylaws. The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's restated certificate of incorporation or bylaws, unless a corporation's restated certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our bylaws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our restated certificate of incorporation described above under *Removal of Directors* and *Stockholder Action by Written Consent; Special Meetings*.

TABLE OF CONTENTS

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities that may be offered under this prospectus, in any combination. The following, together with the additional information we may include in the applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms summarized below will apply generally to any units we may offer, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately at any time, or at any time before a specified date.

Any applicable prospectus supplement will describe:

- any material provisions relating to the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any material provisions of the governing unit agreement that differ from those described above.

TABLE OF CONTENTS**DESCRIPTION OF WARRANTS**

We may issue warrants to purchase common stock, preferred stock or debt securities. We may offer warrants separately or together with one or more additional warrants, common stock, preferred stock or debt securities, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the accompanying prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the preferred stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, preferred stock or common stock will be separately transferable;
- the number of shares of common stock or preferred stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

TABLE OF CONTENTS

FORMS OF SECURITIES

Each debt security, unit and warrant will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Unless the applicable prospectus supplement provides otherwise, certificated securities in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depository or its nominee as the owner of the debt securities, units or warrants represented by these global securities. The depository maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Global Securities

We may issue the debt securities, units and warrants in the form of one or more fully registered global securities that will be deposited with a depository or its nominee identified in the applicable prospectus supplement and registered in the name of that depository or nominee. In those cases, one or more global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a global security may not be transferred except as a whole by and among the depository for the global security, the nominees of the depository or any successors of the depository or those nominees.

If not described below, any specific terms of the depository arrangement with respect to any securities to be represented by a global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depository arrangements.

Ownership of beneficial interests in a global security will be limited to persons, called participants, that have accounts with the depository or persons that may hold interests through participants. Upon the issuance of a global security, the depository will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depository, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in global securities.

So long as the depository, or its nominee, is the registered owner of a global security, that depository or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the global security for all purposes under the applicable indenture or warrant agreement. Except as described below, owners of beneficial interests in a global security will not be entitled to have the securities represented by the global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture or warrant agreement. Accordingly, each person owning a beneficial interest in a global security must rely on the procedures of the depository for that global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture or warrant agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a global security desires to give or take any action that a holder is entitled to give or take under

the applicable indenture or warrant agreement, the depositary for the global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities, and any payments to holders with respect to warrants or units, represented by a global security registered in the name of a depositary or its

TABLE OF CONTENTS

nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the global security. None of us, or any trustee, warrant agent, unit agent or other agent of ours, or any agent of any trustee, warrant agent or unit agent will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a global security, upon receipt of any payment to holders of principal, premium, interest or other distribution of underlying securities or other property on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in street name, and will be the responsibility of those participants.

If the depositary for any of the securities represented by a global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the global security that had been held by the depositary. Any securities issued in definitive form in exchange for a global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the global security that had been held by the depositary.

TABLE OF CONTENTS

SELLING SECURITYHOLDERS

Selling securityholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, our securities in various private transactions. Such selling securityholders may be parties to registration rights agreements with us, or we otherwise may have agreed or will agree to register their securities for resale. The initial purchasers of our securities, as well as their transferees, pledgees, donees or successors, all of whom we refer to as selling securityholders, may from time to time offer and sell the securities pursuant to this prospectus and any applicable prospectus supplement.

The applicable prospectus supplement will set forth the name of each selling securityholder and the number of and type of securities beneficially owned by such selling securityholder that are covered by such prospectus supplement. The applicable prospectus supplement also will disclose whether any of the selling securityholders have held any position or office with, have been employed by or otherwise have had a material relationship with us during the three years prior to the date of the prospectus supplement.

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We, or any selling securityholders, may sell securities:

- through underwriters;
- through dealers;
- through agents;
- directly to purchasers; or
- through a combination of any of these methods of sale.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act, and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price and the proceeds we will receive from the sale of the securities;
- any discounts and commissions to be allowed or re-allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or re-allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

TABLE OF CONTENTS

Remarketing firms, agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than three scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the third business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle more than three scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any

FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

TABLE OF CONTENTS

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, the validity of the securities in respect of which this prospectus is being delivered will be passed upon by Covington & Burling LLP.

EXPERTS

Ernst & Young, LLP, independent registered accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015, and the effectiveness of our internal control over financial reporting as of December 31, 2015 as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated by reference in reliance on Ernst & Young LLP's reports pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates, given on their authority as experts in accounting and auditing.

TABLE OF CONTENTS

5,500,000 Shares

MACROGENICS, INC.

Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

**SVB Leerink
Evercore ISI
Credit Suisse
Stifel**

Lead Managers

**Nomura
SunTrust Robinson Humphrey
BTIG**

Co-Manager

H.C. Wainwright & Co.

February 12, 2019