

CALCULATION OF REGISTRATION FEE

TITLE OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE	AMOUNT OF REGISTRATION FEE
Common Stock, \$.01 par value	\$ 100,000,000	\$ 2,363 ⁽¹⁾⁽²⁾

(1) Calculated in accordance with Rule 457(o) under the Securities Act of 1933, as amended. This "Calculation of Registration Fee" table shall be deemed to update the "Calculation of Registration Fee" table in the registrant's Registration Statement on Form S-3 (File No. 333-223507) in accordance with Rules 456(b) and 457(r) under the Securities Act of 1933, as amended.

(2) Pursuant to Rule 457(p) under the Securities Act of 1933, as amended, the registrant hereby offsets the total registration fee due under this Registration Statement by the amount of the filing fee associated with the unsold securities from the registrant's Form S-3 Registration Statement (File No. 333-216438) filed with the Securities and Exchange Commission on March 3, 2017, which became effective on May 11, 2017 (the "Prior Registration Statement"). The Prior Registration Statement registered the offer and sale of an indeterminate number of common stock with an aggregate offering price not to exceed \$200,000,000, of which \$91,612,500.00 of such securities (the "Unsold Securities") remained unsold as of the expiration date of the Prior Registration Statement. The associated registration fees are being moved from the Prior Registration Statement to this Registration Statement. Pursuant to Rule 457(p), the associated filing fee of \$10,617.88 relating to such Unsold Securities under the Prior Registration Statement, calculated under Rule 457(o), is hereby used to partially offset the current registration fee of \$12,980.00 due. As a result, a filing fee of \$2,363 is being paid herewith.

PROSPECTUS SUPPLEMENT
(To Prospectus Dated March 7, 2018)



Up to \$100,000,000

Common Stock

We have entered into an Open Market Sale AgreementSM, or sales agreement, with Jefferies LLC, or Jefferies, dated September 25, 2020, relating to shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, under this prospectus supplement, we may offer and sell shares of our common stock, \$0.01 par value per share, having an aggregate offering price of up to \$100,000,000 from time to time through Jefferies, acting as our sales agent.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "IMGN." On September 24, 2020, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$3.50 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through the Nasdaq Global Select Market, the existing trading market for our common stock. Jefferies is not required to sell any specific number or dollar amount of securities, but will act as sales agent and use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between Jefferies and us. There is no arrangement for funds to be received in any escrow, trust, or similar arrangement.

Jefferies will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. In connection with the sale of our common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including liabilities under the Securities Act.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE "RISK FACTORS" ON PAGE [S-7](#) OF THIS PROSPECTUS SUPPLEMENT AND IN THE DOCUMENTS INCORPORATED BY REFERENCE IN THIS PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR COMMON STOCK.

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.

Jefferies

Prospectus supplement dated September 25, 2020.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus relate to the offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement and the accompanying prospectus, together with the information incorporated by reference as described under the heading “Incorporation of Documents by Reference” in this prospectus supplement. These documents contain important information that you should consider when making your investment decision.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the common stock we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein or therein. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference herein or therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties, and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein or in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty, or covenant to you. Moreover, such representations, warranties, or covenants were accurate only as of the date when made. Accordingly, such representations, warranties, and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and Jefferies LLC, or Jefferies, has not, authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus supplement, in the accompanying prospectus, or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We and Jefferies take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not, and Jefferies is not, making an offer to sell, or soliciting an offer to purchase, the securities offered by this prospectus supplement and the accompanying prospectus in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction. The information contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein or therein, and in any free writing prospectus prepared by or on behalf of us that we may authorize for use in connection with this filing is accurate only as of the date of those respective documents. Our business, financial condition, results of operations, and prospects may have changed since those dates. It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any free writing prospectus prepared by or on behalf of us that we may authorize for use in connection with this offering, in their entirety, before making an 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 Documents by Reference” in this prospectus supplement and in the accompanying prospectus.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this

prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless the context otherwise requires, "ImmunoGen," "the Company," "we," "us," "our" and similar names refer to ImmunoGen, Inc. and our subsidiaries. When we refer to "you" or "yours," we mean the investors and potential investors in the shares of common stock offered hereby.

Our trademarks include, without limitation, our name and corporate logo. Other service marks, trademarks, and trade names contained in this prospectus supplement and accompanying prospectus or the documents incorporated by reference herein and therein are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering, and selected information contained elsewhere in this prospectus supplement and the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information you should consider before investing in our common stock. For a more complete understanding of our company and this offering, you should carefully read this entire prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein and therein and any free writing prospectus that we may authorize for use in connection with this offering, including the “Risk Factors” section beginning on page [S-7](#) of this prospectus supplement, our financial statements, and the related notes and other documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Overview

We are a clinical-stage biotechnology company focused on developing the next generation of antibody-drug conjugates, or ADCs, to improve outcomes for cancer patients. By generating targeted therapies with enhanced anti-tumor activity and favorable tolerability profiles, we aim to disrupt the progression of cancer and offer patients more good days. We call this our commitment to “target a better now.”

An ADC with our proprietary technology comprises an antibody that binds to a target found on tumor cells and is conjugated to one of our potent anti-cancer agents as a “payload” to kill the tumor cell once the ADC has bound to its target. ADCs are an expanding approach to the treatment of cancer, with eight approved products and the number of agents in development growing significantly in recent years.

We have established a leadership position in ADCs with a portfolio of differentiated product candidates to address both solid tumors and hematological malignancies.

Our lead program is mirvetuximab soravtansine, a first-in-class investigational ADC targeting folate receptor alpha, or FR α , a cell-surface protein overexpressed in a number of epithelial tumors, including ovarian, endometrial, and non-small-cell lung cancers. In March 2019, we announced that FORWARD I, our Phase 3 clinical trial evaluating mirvetuximab compared to chemotherapy in women with FR α -positive platinum-resistant epithelial ovarian, primary peritoneal, or fallopian tube cancer, which we refer to collectively as PROC, did not meet the primary endpoint in either the entire treatment population or the pre-specified high FR α expression population. Data from FORWARD I did, however, show promising efficacy signals across a range of parameters in the pre-specified subset of patients with high FR α expression. In post hoc exploratory analyses, in the FR α -high population scored by the PS2+ method, mirvetuximab was associated with longer progression free survival, by blinded independent review committee, a higher overall response rate, and longer overall survival.

Following consultation with the U.S. Food and Drug Administration, or FDA, we moved forward with two new trials of mirvetuximab: SORAYA, a single-arm clinical trial that, if successful, could lead to accelerated approval of mirvetuximab; and MIRASOL, a randomized Phase 3 clinical trial that, if successful, could lead to full approval of mirvetuximab. We are actively enrolling both studies and expect to report top-line data from SORAYA in the third quarter of 2021 and top-line data from MIRASOL in the first half of 2022. If SORAYA is successful, we expect to submit an application for accelerated approval of mirvetuximab in the applicable patient population to the FDA during the second half of 2021 and to thereafter seek full approval on the basis of a confirmatory Phase 3 trial, MIRASOL.

In May 2020, we presented initial data at the American Society of Clinical Oncology 2020 Virtual Scientific Program from the FORWARD II study evaluating mirvetuximab in combination with Avastin® (bevacizumab) in patients with medium and high FR α -expressing recurrent ovarian cancer for whom a non-platinum based combination regimen is appropriate. We believe the combination of mirvetuximab with bevacizumab in this cohort demonstrated promising anti-tumor activity with a favorable tolerability profile, particularly among patients with high levels of FR α expression, and is encouraging relative to outcomes with available therapies reported in similar patient populations. We continue to evaluate mirvetuximab in combination with other agents and published mature data in September 2020 from the Phase 1b FORWARD II triplet cohort evaluating mirvetuximab in combination with carboplatin and bevacizumab in patients with recurrent, platinum-sensitive ovarian cancer at the European Society for Medical Oncology Virtual Congress while also supporting

the initiation of an investigator sponsored, randomized trial comparing mirvetuximab plus carboplatin versus standard platinum-based therapy in recurrent platinum-sensitive ovarian cancer in the fourth quarter of 2020.

As part of our ongoing development efforts, we have developed a new class of cytotoxic payloads that we refer to as IGNs. Our IGNs are designed to alkylate DNA without cross-linking, which has provided a broad therapeutic index in preclinical models. Specifically, IGN ADCs have retained the anti-tumor potency of crosslinking drugs with less toxicity to normal cells in *in vitro* and animal models. IMGN632 is an investigational ADC comprised of a high affinity antibody designed to target CD123 with site-specific conjugation to our most potent IGN payload. We are advancing IMGN632 in clinical trials for patients with acute myeloid leukemia and blastic plasmacytoid dendritic cell neoplasm in collaboration with Jazz Pharmaceuticals, PLC, or Jazz.

We also continue to advance select preclinical programs, led by IMGC936. IMGC936 is an investigational ADC in co-development with MacroGenics, Inc., or MacroGenics, designed to target ADAM9, an enzyme overexpressed in a range of solid tumors and implicated in tumor progression and metastasis. The Investigational New Drug application, or IND, for IMGC936 was accepted by the FDA in the second quarter of 2020, and we expect to begin enrolling patients in the Phase 1 study in the fourth quarter of 2020.

Additionally, we presented encouraging preclinical data on our next generation anti-folate receptor alpha candidate, IMGN151, at the American Academy of Cancer Research Virtual Annual Meeting II in June 2020. This ADC moved into preclinical development in the second quarter of 2020, and we expect to file the IND for IMGN151 in the second half of 2021.

Collaborating on ADC development with other companies allows us to generate revenue, mitigate expenses, enhance our capabilities, and extend the reach of our proprietary platform. Our most advanced partner program is Roche's marketed product, Kadcyla®. Our ADC technology is also used in candidates in clinical development with a number of partners. We have evolved our partnering approach to pursue relationships where we can gain access to technology and complementary capabilities, such as our technology swap with CytomX Therapeutics, Inc., as well as co-development and co-commercialization opportunities, such as our relationships with Jazz and MacroGenics.

Corporate Information

We were organized as a Massachusetts corporation in March 1981. Our principal offices are located at 830 Winter Street, Waltham, Massachusetts 02451, and our telephone number is (781) 895-0600. We maintain a web site at www.immunogen.com, where certain information about us is available. Please note that the information contained on the website is not a part of this prospectus supplement.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$100,000,000.
Common stock to be outstanding after this offering	203,111,163 shares (as more fully described in the notes following this table), assuming sales of 28,571,428 shares of our common stock in this offering at an assumed offering price of \$3.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on September 24, 2020. The actual number of shares issued in connection with this offering will vary depending on how many shares of our common stock we choose to sell and the prices at which such sales occur.
Manner of offering	Sales of shares of our common stock under this prospectus supplement may be made by any method deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act. Subject to the terms of the sales agreement, Jefferies will make all sales using commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the Nasdaq Global Select Market, on mutually agreeable terms between Jefferies and us. See “Plan of Distribution” beginning on page S-13 of this prospectus supplement.
Use of Proceeds	We intend to use the net proceeds from sales, if any, of shares of our common stock covered by this prospectus supplement to fund our operations, including, but not limited to, clinical trial activities, supply of drug substance and drug product, pre-commercialization and commercialization activities, capital expenditures, and working capital. See “Use of Proceeds” beginning on page S-10 of this prospectus supplement.
Risk Factors	Your investment in shares of our common stock involves substantial risks. You should consider the matters referred to under the heading “Risk Factors” beginning on page S-7 of this prospectus supplement and the other information included in, or incorporated by reference into, this prospectus supplement, before deciding to invest in shares of our common stock.
Nasdaq Global Select Market symbol	“IMGN”

The number of shares of common stock to be outstanding after this offering is based on 174,539,735 shares of common stock outstanding as of June 30, 2020. It does not include:

- 18,768,155 shares of our common stock issuable upon exercise of stock options outstanding as of June 30, 2020 under our stock option plans as of that date, at a weighted average exercise price of \$6.35 per share;
- 414,370 shares of our common stock issuable upon redemption of deferred stock units by non-employee directors outstanding as of June 30, 2020;

- 239,826 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of June 30, 2020;
- 5,681,844 shares of our common stock available as of June 30, 2020 for future grant or issuance pursuant to our stock-based plans for employees, directors and consultants;
- 361,835 shares of our common stock available as of June 30, 2020 for future issuance under our employee stock purchase plan; and
- up to 601,719 shares of our common stock that are issuable upon the conversion of \$2.1 million in aggregate principal amount of our 4.50% Convertible Senior Notes due 2021 outstanding as of June 30, 2020.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before investing in our common stock, you should consider carefully the risks described below and under the section captioned "Risk Factors" in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, together with the other information contained in this prospectus supplement, the accompanying prospectus, and in our filings with the Securities and Exchange Commission, or SEC, that we have incorporated by reference in this prospectus supplement and the accompanying prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We expect to update these Risk Factors from time to time in the periodic and current reports we file with the SEC after the date of this prospectus supplement. These updated Risk Factors will be incorporated by reference in this prospectus supplement. There may be other unknown or unpredictable economic, business, competitive, regulatory, or other factors that could have material adverse effects on our future results. If any of the following risks occur, our business, financial condition, results of operation's and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks related to this offering

You may incur immediate and substantial dilution as a result of this offering.

The assumed offering price per share of our common stock in this offering is substantially higher than the net tangible book value (deficit) per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you may pay a price per share that substantially exceeds our net tangible book value (deficit) per share after this offering. Assuming the sale of \$100,000,000 of our common stock in this offering, based on the assumed offering price of \$3.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on September 24, 2020, and net tangible book value (deficit) per share of our common stock of \$(0.14) as of June 30, 2020, if you purchase shares in this offering, you would suffer immediate and substantial dilution of \$3.14 per share in the as adjusted net tangible book value (deficit) of common stock purchased. See "Dilution" beginning on page S- 11 of this prospectus supplement for a more detailed description of the dilution to new investors in this offering.

In addition, we have a significant number of stock options and deferred stock units outstanding. To the extent that outstanding stock options have been or may be exercised, outstanding deferred stock units are settled, or other securities are issued, investors purchasing our common stock in this offering may 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 these securities could result in further dilution to our shareholders or result in downward pressure on the price of our common stock.

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

We currently intend to use the net proceeds, if any, from this offering to fund our operations, including, but not limited to, clinical trial activities, supply of drug substance and drug product, pre-commercialization and commercialization activities, capital expenditures, and working capital. See "Use of Proceeds" beginning on page S- 10 of this prospectus supplement for further detail. Although we currently intend to use the net proceeds, if any, from this offering in such a manner, we will have broad discretion in the application of such net proceeds. Our failure to apply these funds effectively could result in unfavorable returns and uncertainty about our prospects, each of which could cause the price of our common stock to decline. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or loses value.

You may experience future dilution as a result of future equity offerings.

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional

shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity or equity-based securities. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock.

We have not paid dividends in the past and do not expect to pay dividends in the future on our common stock, and any return on investment may be limited to the value of our common stock.

We have never paid cash dividends and we currently intend to retain any future earnings and do not anticipate paying cash dividends in the foreseeable future. We are not legally or contractually required to pay dividends. The declaration and payment of all future dividends, if any, will be at the sole discretion our board of directors, which retains the right to change our dividend policy at any time, and may be limited by our debt arrangements in place from time to time. The payment of dividends will depend on our earnings, capital requirements, financial condition, prospects, and other factors our board of directors may deem relevant. If we do not pay dividends, our common stock may be less valuable because stockholders must rely on sales of their common stock after price appreciation, which may never occur, to realize any future gains on their investment.

The common stock offered hereby will be sold in "at the market offerings" and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Jefferies at any time throughout the term of the sales agreement. The number of shares that are sold by Jefferies after delivering a placement notice will fluctuate based on the market price of the common shares during the sales period and limits we set with Jefferies. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This prospectus supplement, the accompanying prospectus, and the documents we have filed with the SEC that are incorporated by reference herein and therein contain such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Such statements in connection with any discussion of future operations or financial performance are identified by the use of words such as "may," "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," and other words and terms of similar meaning. Such statements are based on management's expectations and are subject to certain factors, risks, and uncertainties that may cause the actual results, outcome of events, timing, and performance to differ materially from those expressed or implied by such statements. These risks include, but are not limited to, risks and uncertainties regarding our preclinical studies, our ability to conduct clinical trials of our product candidates and the results of such trials, as well as risks and uncertainties relating to litigation, government regulation and third-party reimbursement, economic conditions, markets, products, competition, intellectual property, services and prices, key employees, future capital needs, dependence on our collaborators and their ability to develop ADCs utilizing our technology, and other factors detailed under the "Risk Factors" headings in this prospectus supplement and the accompanying prospectus, and in the discussion of risks and uncertainties under "Risk Factors" contained in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein or therein by reference. The information contained in this document is believed to be current as of the date of this document. We do not intend to update any of the forward-looking statements after the date of this document to conform these statements to actual results or to changes in our expectations, except as required by law.

In light of these assumptions, risks, and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus supplement, the accompanying prospectus, or in any document incorporated by reference herein or therein might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus supplement, the accompanying prospectus, or the date of the document incorporated by reference in this prospectus supplement or accompanying prospectus, as the case may be. 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. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate gross sales proceeds of up to \$100,000,000 from time to time under this prospectus supplement. Because there is no minimum offering amount required pursuant to the sales agreement with Jefferies, the actual total public offering amount, commissions, and proceeds to us, if any, are not determinable at this time. Actual net proceeds will depend on the number of shares we sell and the prices at which such sales occur. There can be no assurance that we will sell any shares under or fully utilize the sales agreement with Jefferies as a source of financing.

We intend to use the net proceeds from sales, if any, of shares of our common stock covered by this prospectus supplement to fund our operations, including, but not limited to, clinical trial activities, supply of drug substance and drug product, pre-commercialization and commercialization activities, capital expenditures, and working capital.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. The amounts and timing of these expenditures will depend on a number of factors, such as whether and when we receive any regulatory approvals for our product candidates, our ability to enter into additional collaboration, licensing, or similar transactions, the timing and progress of our research and development efforts, technological advances, and the competitive environment for our product candidates. As a result, our management will have broad discretion to allocate the net proceeds from this offering. We have no current plans, commitments, or agreements with respect to any acquisitions and may not make any acquisitions. Pending application of the net proceeds as described above, we may invest the net proceeds of the offering in short-term, investment-grade, interest-bearing securities.

DILUTION

If you invest in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value (deficit) per share after giving effect to this offering. We calculate net tangible book value (deficit) per share by dividing the net tangible book value (deficit), which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the amount per share paid by purchasers of shares in this offering and the as adjusted net tangible book value (deficit) per share of our common stock immediately after giving effect to this offering. Our net tangible book value (deficit) as of June 30, 2020 was approximately \$(24.5) million, or \$(0.14) per share.

After giving effect to the sale of our common stock in the aggregate amount of \$100 million at an assumed offering price of \$3.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on September 24, 2020 and after deducting offering commissions and estimated offering expenses payable by us, our net tangible book value (deficit) as of June 30, 2020 would have been \$72.2 million, or \$0.36 per share of common stock. This represents an immediate increase in the net tangible book value (deficit) of \$0.50 per share to our existing stockholders and an immediate dilution in net tangible book value (deficit) of \$3.14 per share to new investors. The following table illustrates this per share dilution:

Assumed offering price per share	\$ 3.50
Net tangible book value (deficit) per share as of June 30, 2020	\$(0.14)
Increase per share attributable to this offering	<u>0.50</u>
As adjusted net tangible book value (deficit) per share as of June 30, 2020 after this offering	0.36
Dilution per share to new investors	<u>\$ 3.14</u>

The table above assumes for illustrative purposes that an aggregate of 28,571,428 shares of our common stock are sold at a price of \$3.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on September 24, 2020, for aggregate gross proceeds of \$100 million. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$3.50 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$100 million during the term of the sales agreement with Jefferies is sold at that price, would increase our as adjusted net tangible book value (deficit) per share after the offering to \$0.37 per share and would increase the dilution in net tangible book value (deficit) per share to new investors in this offering to \$4.13 per share, after deducting offering commissions and estimated offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$3.50 per share shown in the table above, assuming all of our common stock in the amount of \$100 million during the term of the sales agreement with Jefferies is sold at that price, would increase our as adjusted net tangible book value (deficit) per share after the offering to \$0.34 per share and would decrease the dilution in net tangible book value (deficit) per share to new investors in this offering to \$2.16 per share, after deducting offering commissions and estimated offering expenses payable by us. This information is supplied for illustrative purposes only and may differ based on the actual offering price and the actual number of shares offered.

The above discussion is based on 174,539,735 shares of common stock outstanding as of June 30, 2020. It does not include:

- 18,768,155 shares of our common stock issuable upon exercise of stock options outstanding as of June 30, 2020 under our stock option plans as of that date, at a weighted average exercise price of \$6.35 per share;
- 414,370 shares of our common stock issuable upon redemption of deferred stock units by non-employee directors outstanding as of June 30, 2020;
- 239,826 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of June 30, 2020;

- 5,681,884 shares of our common stock available as of June 30, 2020 for future grant or issuance pursuant to our stock-based plans for employees, directors and consultants;
- 361,835 shares of our common stock available as of June 30, 2020 for future issuance under our employee stock purchase plan; and
- up to 601,719 shares of our common stock that are issuable upon the conversion of \$2.1 million in aggregate principal amount of our 4.50% Convertible Senior Notes due 2021 outstanding as of June 30, 2020.

To the extent that options are exercised, deferred stock units are settled, the notes are converted, or other securities are issued, investors purchasing shares in this offering could 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 equity-based securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Jefferies, under which we may offer and sell up to \$100,000,000 of our shares of common stock from time to time through Jefferies acting as agent. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell our shares of common stock under the sales agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the sales agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the second trading day following the date on which the sale was made. Sales of our shares of common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the sales agreement, in an amount not to exceed \$50,000, as well as ongoing disbursements of legal counsel payable in the amount of up to \$15,000 in connection with each diligence bring-down thereafter. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the sales agreement, will be approximately \$285,000. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on the Nasdaq Global Select Market on the day following each day on which our shares of common stock are sold under the sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of our shares of common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain civil liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the sales agreement and (ii) the termination of the sales agreement as permitted therein. We and Jefferies may each terminate the sales agreement at any time upon ten days' prior notice.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is filed as an exhibit to a current report on Form 8-K filed under the Exchange Act, and incorporated by reference in this prospectus supplement.

Jefferies and its affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

A prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute the prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts. Jefferies is being represented in connection with this offering by Latham & Watkins LLP, San Diego, California.

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, 2019](#), and the effectiveness of our internal control over financial reporting as of December 31, 2019, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and file annual, quarterly, and current reports, proxy statements, and other information with the SEC. SEC filings are available at the SEC's web site at <http://www.sec.gov>.

This prospectus supplement and accompanying prospectus are only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omit certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus supplement, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document.

We also maintain a website at www.immunogen.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus supplement.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with them, which means that we can disclose important information in this prospectus supplement by referring to those documents. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede the information in this prospectus supplement. We incorporate by reference the following documents (unless otherwise noted, the SEC file number for each of the documents listed below is 000-17999):

- [our Annual Report on Form 10-K for the year ended December 31, 2019 filed on March 11, 2020](#);
- [our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed on May 5, 2020](#);
- [our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 filed on August 5, 2020](#);
- our Current Reports on Form 8-K filed on [January 22, 2020](#) (other than Item 7.01), [January 23, 2020](#) (other than Item 7.01), [January 27, 2020](#), [February 14, 2020](#) (with respect to Item 5.05), [June 18, 2020](#), [July 2, 2020](#), and [July 22, 2020](#);

- [the portions of our definitive proxy statement on Schedule 14A filed on April 28, 2020 that are deemed “filed” with the SEC under the Exchange Act;](#)
- the description of our capital stock contained in our registration statement on Form 8-A filed on September 25, 1989, as amended by Amendment No. 1 thereto, filed on November 15, 1989, under the Exchange Act, including amendments or reports filed for the purpose of updating such description; and
- all of the filings that we make pursuant to the Exchange Act, until all of the securities to which this prospectus supplement relates have been sold or the offering is otherwise terminated, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not considered “filed” under the Exchange Act, which filings will be deemed to be incorporated by reference in this prospectus supplement and to be a part hereof from the date of filing of such documents.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date any offering under this prospectus supplement is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus supplement.

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, upon the request of any such person, a copy of any or all of the information incorporated herein by reference (exclusive of exhibits to such documents unless such exhibits are specifically incorporated by reference herein). Requests, whether written or oral, for such copies should be directed to ImmunoGen, Inc., Attention: Investor Relations, 830 Winter Street, Waltham, Massachusetts 02451, (781) 895-0600.

You should rely only on information contained in, or incorporated by reference into, this prospectus supplement and accompanying prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus supplement or incorporated by reference in this prospectus supplement. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

PROSPECTUS

IMMUNOGEN

**COMMON STOCK
PREFERRED STOCK
DEBT SECURITIES
WARRANTS
UNITS**

This prospectus will allow us to issue, from time to time at prices and on terms to be determined at or prior to the time of the offering, any combination of the securities in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of the debt securities, common stock upon conversion of the preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants. In addition, this prospectus may be used to offer securities for the account of persons other than us. We will provide you with specific terms of any offering in one or more supplements to this prospectus. This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

Our common stock is listed on The Nasdaq Global Select Market under the symbol "IMGN." On March 6, 2018, the last reported sale price of our common stock was \$11.33 per share. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described on page 4 of this prospectus under the caption "Risk Factors." We may include specific risk factors in supplements to this prospectus under the caption "Risk Factors."

Our securities may be sold directly to investors, through agents designated from time to time or to or through underwriters or dealers. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

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

The date of this prospectus is March 7, 2018.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, may be offered in one or more offerings. This prospectus provides you with a general description of the securities that may be offered. Each time a type or series of securities is offered under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. You should carefully read this prospectus, the applicable prospectus supplements, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find More Information” before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

Unless the context otherwise requires, “ImmunoGen,” “the Company,” “we,” “us,” “our” and similar names refer to ImmunoGen, Inc. and our subsidiaries.

Our trademarks include, without limitation, our name and corporate logo. Other service marks, trademarks and trade names contained in this prospectus, any prospectus supplement or the documents incorporated by reference herein and therein are the property of their respective owners.

PROSPECTUS SUMMARY

The following is a summary of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplements. Investing in our securities involves risks. Therefore, carefully consider the risk factors in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

About ImmunoGen, Inc.

We are a clinical-stage biotechnology company focused on developing innovative antibody-drug conjugate, or ADC, therapies that meaningfully improve the lives of people with cancer. An ADC with our proprietary technology comprises an antibody that binds to a target found on tumor cells and is conjugated to one of our potent anti-cancer agents as a “payload” to kill the tumor cell once the ADC has bound to its target. ADCs are an expanding approach to the treatment of cancer, with four approved products and the number of agents in development growing significantly in recent years.

We have established a leadership position in ADCs. Our proprietary portfolio is led by mirvetuximab soravtansine, a first-in-class ADC targeting folate-receptor alpha, or FR α . In late 2016, we initiated a Phase 3 registration trial, FORWARD I, with mirvetuximab soravtansine for use as single-agent therapy to treat patients with platinum-resistant ovarian cancer whose tumors express medium or high levels of FR α and who have received up to three prior treatment regimens. In June 2017, we reported data on 113 ovarian cancer patients treated with mirvetuximab soravtansine from three Phase 1 expansion cohorts. From this pooled analysis, in the subset of 36 patients meeting the key eligibility criteria for FORWARD I, the confirmed overall response rate, or ORR, was 47 percent (95% CI 30, 65) and median progression-free survival, or mPFS, was 6.7 months (95% CI 4.1, 8.3). The safety profile of this pooled population was consistent with data previously reported (ASCO 2016), consisting of low grade, manageable adverse events. The Phase 3 FORWARD I trial is ongoing with sites enrolling in the U.S., Canada and Europe and we expect the trial to enroll fully by mid-2018.

Additionally, we are accruing patients in a companion study, FORWARD II, to evaluate mirvetuximab soravtansine in combination regimens to expand the number of patients with ovarian cancer eligible for treatment with the ADC. FORWARD II consists of cohorts assessing mirvetuximab soravtansine in combination with, in separate doublets, Avastin® (bevacizumab), pegylated liposomal doxorubicin, or PLD, carboplatin, and Keytruda® (pembrolizumab). Based on the encouraging profile of these combinations, we have advanced expansion cohorts for the Avastin and Keytruda combinations in patients with platinum-resistant disease and have recently initiated a triplet combination evaluating mirvetuximab plus carboplatin and Avastin in patients with recurrent platinum-sensitive ovarian cancer. We reported the first clinical data from FORWARD II in June 2017 demonstrating that mirvetuximab soravtansine may complement currently available therapies in a range of treatment settings, including earlier lines of therapy. We expect to report additional data from FORWARD II during 2018.

We have built a productive platform that continues to generate innovative and proprietary ADCs, including IMGN779, our CD33-targeting product candidate for acute myeloid leukemia, or AML. IMGN779 combines a high-affinity, humanized anti-CD33 antibody with one of our novel indolino-benzodiazepine payloads, called IGNs, which alkylate DNA without crosslinking, resulting in potent anti-leukemia activity with relative sparing of normal hematopoietic progenitor cells. We reported clinical data from this trial in December 2017 demonstrating IMGN779 is well tolerated with no dose limiting toxicities and that IMGN779 has dose-dependent biological and anti-leukemia activity. IMGN779 is progressing through dose escalation in a Phase 1 trial in AML. We also are advancing IMGN632, a CD123-targeting ADC that uses an even more potent IGN payload agent with a new engineered linker and novel antibody, which we are developing for hematological malignancies, including AML and blastic plasmacytoid dendritic cell neoplasm (BPDCN). In January 2018, we announced that the first patient had been dosed in the Phase 1 trial of IMGN632.

In August 2017, we announced a strategic collaboration and option agreement with Jazz Pharmaceuticals plc, or Jazz, to develop and co-commercialize ADCs. Jazz has exclusive worldwide rights to opt into development and commercialization of IMG779, IMG632, and a third program to be named later from our early-stage pipeline.

Collaborating on ADC development with other companies allows us to generate revenue, mitigate expenses, enhance our capabilities and extend the reach of our proprietary platform. The most advanced partner program is Roche's marketed product, Kadcyla® (ado-trastuzumab emtansine), the first ADC to demonstrate superiority over standard of care in a randomized pivotal trial, EMILIA, and gain FDA approval. Our ADC platform is used in candidates in clinical development with Amgen, Bayer, Biotest, CytomX, Debiopharm, Lilly, Novartis, and Sanofi. We also have a partnership with Takeda, and expect they will advance their first candidate with our ADC technology deploying our IGN payload into clinical testing for solid tumors in the first half of 2018. We expect that substantially all of our revenue for the foreseeable future will result from payments under our collaborative arrangements.

We were organized as a Massachusetts corporation in March 1981. Our principal offices are located at 830 Winter Street, Waltham, MA 02451, and our telephone number is (781) 895-0600. We maintain a web site at www.immunogen.com, where certain information about us is available. Please note that the information contained on the website is not a part of this document.

RISK FACTORS

Investing in our securities involves risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in us. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K, which is on file with the SEC and is incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company’s future prospects and make informed investment decisions. This prospectus and the documents we have filed with the SEC that are incorporated herein by reference contain such “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995.

Words such as “may,” “anticipate,” “estimate,” “expects,” “projects,” “intends,” “plans,” “believes,” “tracking” and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. Forward-looking statements represent management’s present judgment regarding future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These risks include, but are not limited to, risks and uncertainties regarding our preclinical studies, our ability to conduct clinical trials of our product candidates and the results of such trials, as well as risks and uncertainties relating to litigation, government regulation and third-party reimbursement, economic conditions, markets, products, competition, intellectual property, services and prices, key employees, future capital needs, dependence on our collaborators and their ability to develop ADCs utilizing our technology and other factors. Please also see the discussion of risks and uncertainties under “Risk Factors” contained in this prospectus and in any supplements to this prospectus and in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. 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. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our historical ratios of earnings to fixed charges for the periods indicated. You should read this table in conjunction with the financial statements and notes incorporated by reference in this prospectus.

In thousands	Year Ended	Transition	Year Ended June 30,			
	December 31, 2017	Period Ended December 31, 2016	2016	2015	2014	2014
Ratio of earnings to fixed charges ⁽¹⁾	—	—	—	—	—	—

- (1) Earnings were inadequate to cover fixed charges for the year ended December 31, 2017, the six-month transition period ended December 31, 2016 and the years ended June 30, 2016, 2015, 2014 and 2013 by \$96.0 million, \$78.9 million, \$144.8 million, \$60.7 million, \$71.4 million and \$72.8 million respectively.

USE OF PROCEEDS

Except as provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities by us through this prospectus for general corporate purposes. Except as provided in the applicable prospectus supplement, we will not receive any proceeds in the event that securities are sold by a selling securityholder. Additional information on the use of net proceeds from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

DESCRIPTION OF COMMON STOCK

We are authorized to issue 200,000,000 shares of common stock, par value \$.01 per share. On February 28, 2018, we had 132,846,535 shares of common stock outstanding and approximately 344 shareholders of record.

The following summary of certain provisions of our common stock does not purport to be complete. You should refer to our restated articles of organization and our amended and restated by-laws, both of which are included as exhibits to the registration statement we have filed with the SEC in connection with this offering. The summary below is also qualified by provisions of applicable law.

General

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the shareholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. All shares of common stock outstanding as of the date of this prospectus and, upon issuance and sale, all shares of common stock that we may offer pursuant to this prospectus, will be fully paid and nonassessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.

The Nasdaq Global Select Market

Our common stock is listed for quotation on The Nasdaq Global Select Market under the symbol "IMGN." On March 6, 2018, the last reported sale price of our common stock was \$11.33 per share.

DESCRIPTION OF PREFERRED STOCK

We are authorized to issue 5,000,000 shares of preferred stock, par value \$.01 per share. As of March 6, 2018, no shares of our preferred stock were issued and outstanding. The following summary of certain provisions of our preferred stock does not purport to be complete. You should refer to our restated articles of organization and our amended and restated by-laws, both of which are included as exhibits to the registration statement we have filed with the SEC in connection with this offering. The summary below is also qualified by provisions of applicable law.

General

Our board of directors may, without further action by our shareholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the rights, preferences and limitations of each series, including voting rights, dividend rights and redemption and liquidation preferences. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without shareholder approval, we may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock.

If a specific series of preferred stock is offered under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of ImmunoGen; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of ImmunoGen.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that may be offered under this prospectus. While the terms we have summarized below will apply generally to any future debt securities that may be offered pursuant to this prospectus, we will describe the particular terms of any debt securities that may be offered in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any debt securities offered under that prospectus supplement may differ from the terms we describe below, and to the extent the terms set forth in a prospectus supplement differ from the terms described below, the terms set forth in the prospectus supplement shall control.

Under this prospectus, debt securities, which may be senior or subordinated, may be sold from time to time, in one or more offerings. We will issue any such senior debt securities under a senior indenture that we will enter into with a trustee to be named in the senior indenture. We will issue any such subordinated debt securities under a subordinated indenture, which we will enter into with a trustee to be named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, which includes this prospectus. We use the term “indentures” to refer to both the senior indenture and the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture, or the Trust Indenture Act. We use the term “debenture trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities.

General

Each indenture provides that debt securities may be issued from time to time in one or more series and may be denominated and payable in United States dollars or foreign currencies or units based on or relating to United States dollars or foreign currencies, including euros. Neither indenture limits the amount of debt securities that may be issued thereunder, and each indenture provides that the specific terms of any series of debt securities shall be set forth in, or determined pursuant to, an authorizing resolution and/or a supplemental indenture, if any, relating to such series.

We will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title;
- the aggregate principal amount and any limit on the amount that may be issued;
- the currency or units based on or relating to currencies in which debt securities of such series are denominated and the currency or units in which principal or interest or both will or may be payable;
- whether we will issue the series of debt securities in global form, the terms of any global securities and who the depositary will be;
- the maturity date and the date or dates on which principal will be payable;
- the interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place or places where payments will be payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;

- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion on any material or special United States federal income tax considerations applicable to a series of debt securities;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction

The indentures may not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets will be required to assume all of our obligations under the indentures or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of debt securities.

Events of Default Under the Indenture

The following will be events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;
- if we fail to observe or perform any other covenant relating to such series contained in the debt securities of such series or the applicable indentures, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding debt securities of the applicable series; and

- if specified events of bankruptcy, insolvency or reorganization occur as to us.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all debt securities of that series. Before a judgment or decree for payment of the money due has been obtained with respect to debt securities of any series, the holders of a majority in principal amount of the outstanding debt securities of that series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may rescind and annul the acceleration if all events of default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the applicable indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration). We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

These limitations will not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver

The debenture trustee and we may change the applicable indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; and
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series issued pursuant to such indenture.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) that is affected. However, the debenture trustee and we may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or a premium payable upon the redemption of any debt securities;
- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may on behalf of the holders of all debt securities of that series waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all the debt securities of such series waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series or in respect of a covenant or provision, which cannot be modified or amended without the consent of the holder of each outstanding debt security of the series affected; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

Each indenture will provide that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged with respect to a series, we will have to deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange, and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange or in the applicable indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee other than during the occurrence and continuance of an event of default under the applicable indenture, will undertake to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee under such indenture must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we indicate otherwise in the applicable prospectus supplement, on any interest payment date, we will pay the interest on any debt securities to the person in whose name such debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable

prospectus supplement, will we make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Subordination of Subordinated Debt Securities

Our obligations pursuant to any subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of senior indebtedness we may incur. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

Warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately may be offered, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that may be offered. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which the warrants will be issued;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- 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 will be issued in fully registered form or bearer form, 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 United States federal income tax consequences;

- if applicable, 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;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- 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 the warrants, if any;
- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

DESCRIPTION OF UNITS

Units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series may be offered. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the prospectus supplements related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to an amendment to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, as applicable, the form of unit agreement and any supplemental agreements that describe the terms of the series of units being offered before the issuance of the related series of units.

We may evidence each series of units by unit certificates that would issue under a separate agreement that we may enter into with a unit agent. Each unit agent, if one is appointed, will be a bank or trust company that we select. We will indicate the name and address of the unit agent, if one is appointed, in the applicable prospectus supplement relating to a particular series of units.

SELLING SECURITYHOLDERS

Selling securityholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire, securities in various private or other 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 purchasers of our securities, as well as their transferees, pledges, 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 of the selling securityholders and the number of shares of our common stock or other relevant securities beneficially owned by such selling securityholders that are covered by such prospectus supplement.

CERTAIN PROVISIONS OF MASSACHUSETTS LAW AND OF THE COMPANY'S ARTICLES OF ORGANIZATION AND BY-LAWS

Anti-Takeover Provisions under Massachusetts law and our Massachusetts Articles of Organization and By-laws

Provisions of Massachusetts law and our restated articles of organization and amended and restated by-laws contain other provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of our company unless such takeover or change in control is approved by our board of directors.

These provisions, 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. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Massachusetts statutory business combinations provisions. We are subject to Chapter 110F of the Massachusetts General Laws, an anti-takeover law. In general, this statute prohibits a publicly-held Massachusetts corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person becomes an interested stockholder, unless (i) the interested stockholder obtains the approval of the board of directors prior to becoming an interested stockholder, (ii) the interested stockholder acquires 90% of the outstanding voting stock of the corporation (excluding shares held by certain affiliates of the corporation) at the time it becomes an interested stockholder, or (iii) the business combination is approved by both the board of directors and the holders of two-thirds of the outstanding voting stock of the corporation (excluding shares held by the interested stockholder). Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns (or at any time within the prior three years did own) 5% or more of the outstanding voting stock of the corporation. A "business combination" includes a merger, a stock or asset sale, and certain other transactions resulting in a financial benefit to the interested shareholders.

Massachusetts General Laws Chapter 110D, entitled "Regulation of Control Share Acquisitions," in general provides that any shareholder of a company subject to this statute who acquires 20% or more of the outstanding voting stock of a company may not vote such stock unless the shareholders of the company so authorize. Although our amended and restated by-laws currently exclude us from this statute, the board of directors may amend our by-laws to subject us to this statute prospectively.

Chapter 110C of the Massachusetts General Laws requires the person commencing a takeover bid to file certain information with the Secretary of the Commonwealth and the target company and provides that a bidder who fails to disclose its intent to gain control over a target corporation prior to acquiring 5% of the target company's stock is precluded from making any takeover bid for a period of one year after crossing the 5% threshold.

Blank check preferred stock. Our restated article of organization allows our board of directors to issue shares of preferred stock without the approval of our shareholders, which is referred to as "blank check" preferred stock. The effects of such issuance, among other things, could include the dilution in the voting power of our common stock if the preferred stock has voting rights and the reduction or restriction in the rights of holders of our common stock to receive a payment in the event of any liquidation, dissolution or winding-up of our company. In some circumstances, the issuance of shares of preferred stock may render more difficult or expensive or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. In addition, the board of directors could also utilize the shares of preferred stock in order to adopt a shareholder rights plan, or "poison pill," which could have the effect of discouraging or delaying a takeover of the company.

Advance notice provisions for shareholder proposals and shareholder nominations of directors. Our amended and restated by-laws provide that, for nominations to the board of directors or for other business

to be properly brought by a shareholder before a meeting of shareholders, the shareholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a shareholder's notice generally must be delivered not less than 45 days nor more than 75 days prior to the anniversary of the mailing date of the proxy statement for the previous year's annual meeting. For special meetings called to elect directors, a shareholder's notice must generally be delivered not less than 60 days (or ten days after public disclosure of the meeting date if later) nor more than 90 days prior to the meeting. Detailed requirements as to the form of the notice and information required in the notice are specified in the amended and amended and restated by-laws. If it is determined that business was not properly brought before a meeting in accordance with our amended and restated by-laws, such business will not be conducted at the meeting. Although our by-laws do not give our board of directors the power to approve or disapprove shareholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, our by-laws may have the effect of precluding the conduct of some business at a meeting if the proper procedures are not followed or may discourage or defer a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Classified board of directors. Section 8.06(b) of the Massachusetts Business Corporation Act provides that unless a company decides otherwise, the terms of directors of a public Massachusetts company shall be staggered by dividing the directors into three groups, as nearly equal in number as possible, with only one group of directors being elected each year. Sections 8.06(d) and (e) of the Massachusetts Business Corporation Act provide that when directors are so classified, (i) shareholders may remove directors only for cause, (ii) the number of directors shall be fixed only by the vote of the board of directors, (iii) vacancies and newly created directorships shall be filled solely by the affirmative vote of a majority of the remaining directors, and (iv) a decrease in the number of directors will not shorten the term of any incumbent director. Our board of directors opted out of this staggered board of directors requirement, and all of our directors currently serve for one-year terms and are elected annually. Under Section 8.06(c)(2) of the Massachusetts Business Corporation Act, our board of directors may opt into the staggered board of directors requirements of Section 8.06(b) and application of Sections 8.06(d) and (e). If the board of directors opts into this structure, these provisions are likely to increase the time required for shareholders to change the composition of the board of directors. For example, in general, at least two annual meetings would be necessary for shareholders to effect a change in a majority of the members of the board of directors. The provision for a classified board could prevent a party who acquires control of a large portion of our outstanding common stock from obtaining control of our board of directors until our second annual shareholders meeting following the date the acquirer obtains the stock interest. The classified board provision could have the effect of discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us and could increase the likelihood that incumbent directors will retain their positions.

Shareholder can only act by unanimous written consent and restrictions on who can call a special meeting of shareholders. Although our restated articles of organization and amended and restated by-laws allow our shareholders to act by written consent, such written consent must be signed by all shareholders entitled to vote on the matter approved. This significantly restricts the ability of our shareholders to act by written consent and essentially provides that our shareholders may only act at a duly called shareholders meeting. In addition, special meetings of the shareholders may be called only by our President, our board of directors and one or more shareholders holding at least 40% of our voting stock.

Limitations on Liability and Indemnification of Officers and Directors

Our restated articles of organization and amended and restated by-laws limit the liability of our officers and directors to the fullest extent permitted by the Massachusetts Business Corporation Act and provides that we will indemnify them to the fullest extent permitted by such law.

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, will pass upon the validity of the issuance of the securities offered by this prospectus.

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 incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at <http://www.sec.gov>. Our common stock is listed on The Nasdaq Global Select Market, and you can read and inspect our filings at the offices of the Financial Industry Regulatory Authority at 1735 K Street, Washington, D.C. 20006.

This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We also maintain a website at www.immunogen.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in “Where to Find More Information.” The documents we are incorporating by reference are:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed on March 7, 2018](#);
- our Current Reports on Form 8-K filed on [January 24, 2018](#), [February 8, 2018](#) and [February 20, 2018](#);
- [the portions of our definitive proxy statement on Schedule 14A filed on April 28, 2017 that are deemed “filed” with the SEC under the Securities Exchange Act of 1934, as amended](#);
- the description of our capital stock contained in our registration statement on Form 8-A filed on September 25, 1989, as amended by Amendment No. 1 thereto, filed on November 15, 1989, under the Securities Exchange Act of 1934, as amended, including amendment or reports filed for the purpose of updating such description; and
- all of the filings that we make pursuant to the Securities Exchange Act of 1934, as amended, (1) after the date of the filing of the original registration statement and prior to the effectiveness of the registration statement and (2) until all of the securities to which this prospectus relates has been sold or the offering is otherwise terminated, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not considered “filed” under the Securities Exchange Act of 1934, as amended, which filings will be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing of such documents.

The SEC file number for each of the documents listed above is 001-17999.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date any offering under this prospectus is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon the request of any such person, a copy of any or all of the information incorporated herein by reference (exclusive of exhibits to such documents unless such exhibits are specifically incorporated by reference herein). Requests, whether written or oral, for such copies should be directed to ImmunoGen, Inc., Attention: Investor Relations, 830 Winter Street, Waltham, MA 02451, 781-895-0600.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

Up to \$100,000,000

immunogen

Common Stock

PROSPECTUS SUPPLEMENT

Jefferies

September 25, 2020
