

PROSPECTUS SUPPLEMENT
(To Prospectus Dated July 2, 2020)



UP TO \$100,000,000
SHARES OF COMMON STOCK

We have entered into a Controlled Equity OfferingSM Sales Agreement, or sales agreement, with Cantor Fitzgerald & Co., or Cantor Fitzgerald, relating to shares of our common stock, no par value per share, offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, from time to time after August 9, 2022, we may offer and sell shares of our common stock having an aggregate gross sales price of up to \$100.0 million through Cantor Fitzgerald, acting as sales agent, pursuant to this prospectus supplement.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "PGEN." On August 4, 2022, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$2.12 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 an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. Subject to the terms of the sales agreement, Cantor Fitzgerald is not required to sell any specific number or dollar amount of securities but will act as our sales agent and use commercially reasonable efforts consistent with its normal trading and sales practices to sell on our behalf all of the shares of common stock requested to be sold by us, on mutually agreed terms between Cantor Fitzgerald and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Cantor Fitzgerald will be entitled to a commission of 3.0% of the gross sales price per share sold under the sales agreement. See "Plan of Distribution" beginning on page S-11 of this prospectus supplement for additional information regarding Cantor Fitzgerald's compensation. In connection with the sale of our common stock on our behalf, Cantor Fitzgerald will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contributions to Cantor Fitzgerald against certain civil liabilities, including liabilities under the Securities Act.

Investing in our securities involves significant risks. Please read the information contained in or incorporated by reference under the heading "Risk Factors" beginning on page S-5 of this prospectus supplement, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.

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.



The date of this prospectus supplement is August 9, 2022.

TABLE OF CONTENTS

	<u>Page</u>
PROSPECTUS SUPPLEMENT	
About This Prospectus Supplement	S-ii
Prospectus Supplement Summary	S-1
Risk Factors	S-5
Special Note Regarding Forward-Looking Statements	S-7
Use Of Proceeds	S-9
Dilution	S-10
Plan of Distribution	S-11
Legal Matters	S-12
Experts	S-12
Where You Can Find Additional Information	S-12
Incorporation of Certain Information by Reference	S-13

PROSPECTUS

About This Prospectus	1
Where You Can Find More Information	2
Incorporation by Reference	3
The Company	4
Risk Factors	5
Special Note Regarding Forward-Looking Statements	6
Use of Proceeds	8
Description of Capital Stock	9
Description of Debt Securities	13
Description of Warrants	21
Description of Rights	23
Description of Stock Purchase Contracts	24
Description of Units	25
Plan of Distribution	26
Legal Matters	27
Experts	27

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a shelf registration statement on Form S-3 (File No. 333-239366) that we filed with the Securities and Exchange Commission, or SEC, on June 22, 2020 and was declared effective by the SEC on July 2, 2020, pursuant to which we may from time to time offer various securities in one or more offerings.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this 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, including the documents incorporated by reference into 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 refer to 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.

Neither we nor Cantor Fitzgerald have authorized anyone to provide information different from that contained in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering. Neither we nor Cantor Fitzgerald take any responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither the delivery of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering, nor the sale of our common stock means that information contained in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in this offering, is correct after their respective dates. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering in making your investment decision.

This prospectus supplement does not contain all of the information that is important to you. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” in this prospectus supplement. You should assume that the information in this prospectus supplement and the accompanying prospectus, as well as the information we have filed with the SEC and incorporated by reference in this document, is accurate only as of its date or the date which is specified in those documents.

We are not, and Cantor Fitzgerald is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities 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 securities 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.

This prospectus supplement and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference herein are the property of their respective owners.

When we refer to “Precigen,” “we,” “our,” “us,” and the “Company” in this prospectus supplement, we mean Precigen, Inc., unless otherwise specified.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of Precigen and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference in this prospectus supplement, and the information included in any free writing prospectus that we have authorized for use in connection with this offering, including the information referred to under the heading "Risk Factors" in this prospectus supplement beginning on page S-5.

Our Company

We are a dedicated discovery and clinical-stage biopharmaceutical company advancing the next generation of gene and cell therapies with the overall goal of improving outcomes for patients with significant unmet medical needs. We are leveraging our proprietary technology platforms to develop product candidates designed to target urgent and intractable diseases in our core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases. We have developed an extensive pipeline of therapies across multiple indications within these core focus areas.

We believe that our array of technology platforms uniquely positions us among other biotechnology companies to advance precision medicine. Precision medicine is the practice of therapeutic product development that takes into account specific genetic variations within populations impacted by a disease to design targeted therapies to improve outcomes for a disease or patient population. Our proprietary and complementary technology platforms provide a strong foundation to realize the core promise of precision medicine by supporting our efforts to construct powerful gene programs to drive efficacy, deliver these programs through viral, non-viral, and microbe-based approaches to drive lower costs, and control gene expression to drive safety. Our therapeutic platforms, including UltraCAR-T, AdenoVerse immunotherapy, and ActoBiotics, are designed to allow us to precisely control the level and physiological location of gene expression and modify biological molecules to control the function and output of living cells to treat underlying disease conditions.

We are actively advancing our lead clinical programs, including: PRGN-3005 and PRGN-3006, which are built on our UltraCAR-T platform; and PRGN-2009 and PRGN-2012, which are based on our AdenoVerse immunotherapy platform. In addition, we have completed a Phase 1b/2a study of AG019, which is built on our ActoBiotics platform. We also have a robust pipeline of preclinical programs that we are pursuing in order to drive long-term value creation.

We have developed a proprietary electroporation device, UltraPorator, designed to further streamline and ensure the rapid and cost-effective manufacturing of UltraCAR-T therapies. UltraPorator has received U.S. Food and Drug Administration, or FDA, clearance for manufacturing UltraCAR-T cells in clinical trials, and since November 2020, we have been dosing patients with UltraCAR-T cells manufactured with UltraPorator in our PRGN-3005 and PRGN-3006 clinical trials.

We exercise discipline in our portfolio management by systematically evaluating data from our preclinical programs in order to make rapid "go" and "no go" decisions. Through this process, we believe we can more

effectively allocate resources to programs that we believe show the most promise and advance such programs to clinical trials.

Corporate Information

We are a Virginia corporation formed in 1998. Our principal executive offices are located at 20374 Seneca Meadows Parkway, Germantown, MD 20876, and our telephone number is (301) 556-9900. Our website address is www.precigen.com. The inclusion of our website address in this prospectus is, in each case, intended to be an inactive textual reference only and not an active hyperlink to our website. The information contained in, or that can be accessed through, our website is not incorporated by reference herein and is not part of this prospectus. We make available free of charge on our website Form 10-Ks, Form 10-Qs, Form 8-Ks and amendments to those reports as soon as reasonably practicable after filing with or furnishing to the SEC.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$100.0 million.
Common stock to be outstanding after this offering	255,319,832 assuming sales of 47,169,811 shares of our common stock in this offering at an offering price of \$2.12 per share, the last reported sale price of our common stock on The Nasdaq Global Select Market on August 4, 2022. The actual number of shares issued will vary depending on the sales price under this offering.
Plan of distribution	“At the market offering” that may be made from time to time after August 9, 2022 through our sales agent, Cantor Fitzgerald. See “Plan of Distribution” for additional information.
Use of proceeds	We intend to use the net proceeds from this offering to fund the development of clinical and preclinical product candidates and for working capital and other general corporate purposes. See “Use of Proceeds.”
Risk factors	An investment in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-5 of this prospectus supplement, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.
Nasdaq Global Select Market symbol	PGEN

The number of shares of our common stock that will be outstanding after this offering is based on 208,150,021 shares of our common stock outstanding as of June 30, 2022, and excludes:

- 15,492,339 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022 at a weighted-average exercise price of \$10.73 per share and any exercise after that date;
- 714,687 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of June 30, 2022 and any settlement after that date;
- 11,732,440 shares of our common stock issuable upon the conversion of our 3.50% convertible senior notes due 2023 outstanding as of June 30, 2022;
- 121,888 shares of our common stock issuable upon the exercise of outstanding warrants as of June 30, 2022 at a weighted-average exercise price of \$27.95 per share;
- 12,085,537 shares of our common stock available for future issuance under the 2013 Plan as of June 30, 2022; and

· 7,243,025 shares of our common stock available for future issuance under the 2019 Plan as of June 30, 2022.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider and evaluate all of the information contained in this prospectus and in the documents incorporated by reference in this prospectus before you decide to purchase our common stock. In particular, you should carefully consider and evaluate the risks and uncertainties described in “Part I – Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2021, or the 2021 Annual Report, “Part II- Item 1A. Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, and any additional risks and uncertainties included or incorporated by reference herein. Additional risks and uncertainties that we are unaware of or that we believe are not material at this time could also materially adversely affect our business, financial condition or results of operations. Any of these risks and uncertainties could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the trading price or value of our common stock. As a result, you could lose all or part of your investment.

This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this prospectus. See “Special Note Regarding Forward-Looking Statements” for information relating to these forward-looking statements.

Risks Related to this Offering

You will experience immediate and substantial dilution in the net tangible book deficit per share of the common stock you purchase in this offering.

The price per share of our common stock being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Assuming that an aggregate of 47,169,811 shares of our common stock are sold at a price of \$2.12 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on August 4, 2022, for aggregate gross proceeds of approximately \$100.00 million, and after deducting commissions and estimated offering expenses payable by us, new investors in this offering will incur immediate dilution of \$1.85 per share. For a more detailed discussion of the foregoing, see the section entitled “Dilution” below.

Investors in this offering may experience future dilution.

In order 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 cannot assure you that we will be able to sell shares of our common stock or other related securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. If the price per share at which we sell additional shares of our common stock or related securities in future transactions is less than the price per share in this offering, investors who purchase our common stock in this offering will suffer dilution in their investment.

In addition, as of June 30, 2022, we had outstanding options to acquire 15,492,339 shares of our common stock at a weighted-average exercise price of \$10.73 per share, outstanding restricted stock units representing 714,687 shares of our common stock, outstanding warrants to purchase 121,888 shares of our common stock, outstanding 3.50% convertible senior notes due 2023 convertible into 11,732,440 shares of our common stock. The issuance of shares of our common stock upon exercise of the stock options or warrants, vesting of the restricted stock units, or conversion of additional convertible notes would result in dilution to the interests of other holders of our common stock and could adversely affect our stock price. In addition, to the extent we need to raise additional capital in the future and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing shareholders may experience dilution and the new securities may have rights senior to those of the common stock offered in this offering.

We have broad discretion in the use of the net proceeds of this offering and our cash reserves and, despite our efforts, we may use the net proceeds and our cash reserves in a manner that does not increase the value of your investment.

We currently intend to use the net proceeds from this offering to fund the development of clinical and preclinical product candidates and for working capital and other general corporate purposes. However, we have not determined the specific allocation of the net proceeds among these potential uses. Our management will have broad discretion over the use and investment of the net proceeds of this offering and our cash resources generally, and, accordingly, investors in this offering will need to rely upon the judgment of our management with respect to the use of proceeds and our cash reserves, with only limited information concerning our specific intentions. These proceeds and our cash resources generally could be applied in ways that do not improve our operating results or increase the value of your investment. Please see the section entitled “Use of Proceeds” on page S-9 of this prospectus supplement for further information.

The shares of common stock 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 placement notices to Cantor Fitzgerald at any time throughout the term of the sales agreement. The number of shares that are sold by Cantor Fitzgerald after delivering a placement notice will fluctuate based on the market price of the common stock during the sales period and limits we set in the placement notice. 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 or the resulting gross proceeds.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and accompanying prospectus may contain forward-looking statements, including with respect to our plans, objectives and expectations for our business, operations and financial performance and condition. All statements, other than statements of historical facts, included in this prospectus supplement and accompanying prospectus, including statements regarding our strategy; future events, including their outcome or timing; future operations; future financial position; future revenue; projected costs; prospects; plans; objectives of management; and expected market growth, are forward-looking statements. The words "aim", "anticipate", "assume", "believe", "continue", "could", "due", "estimate", "expect", "intend", "may", "plan", "positioned", "potential", "predict", "project", "seek", "should", "target", "will", "would" and the negatives of these terms or similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These statements may relate to, among other things:

- the impact of the COVID-19 pandemic on our clinical trials, businesses, operating results, cash flows, and/or financial condition;
- the timeliness of regulatory approvals;
- our strategy and overall approach to our business model, our efforts to realign our business, and our ability to exercise more control and ownership over the development process and commercialization path;
- our ability to successfully enter new markets or develop additional product candidates, including the expected timing and results of investigational studies and preclinical and clinical trials, including any delays or potential delays as a result of the COVID-19 pandemic, whether with our collaborators or independently;
- our ability to consistently manufacture our product candidates on a timely basis or to establish agreements with third-party manufacturers;
- our ability to successfully enter into optimal strategic relationships with our subsidiaries and operating companies that we may form in the future;
- our ability to hold or generate significant operating capital, including through partnering, asset sales, and operating cost reductions;
- actual or anticipated variations in our operating results;
- actual or anticipated fluctuations in competitors' or collaborators' operating results or changes in their respective growth rates;
- our cash position;
- market conditions in our industry;
- the volatility of our stock price;
- the ability, and the ability of our collaborators, to protect our intellectual property and other proprietary rights and technologies;
- our ability, and the ability of our collaborators, to adapt to changes in laws or regulations or policies, including federal, state, and local government responses to the COVID-19 pandemic;
- outcomes of pending and future litigation;
- the rate and degree of market acceptance of any products developed by us, our subsidiaries, collaborations, or joint ventures, or JVs, and competition from existing technologies and products or new technologies and products that may emerge;
- our ability to retain and recruit key personnel;

- expectations related to the use of proceeds from public offerings and other financing efforts;
- estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- the effects, duration, and severity of the ongoing COVID-19 pandemic and the actions we and others have taken or may take in response;
- the timing and the sale of Trans Ova Genetics, L.C.; and
- our use of proceeds from this offering.

These statements are based on management's current expectations, estimates, forecasts and projections about our business and industry, are not guarantees of future performance and involve known and unknown risks, uncertainties, and other factors that are in some cases beyond our control and that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. We discuss many of these risks in greater detail in the section of this prospectus supplement entitled "Risk Factors" and elsewhere in this prospectus supplement and in any other documents incorporated herein (including in the 2021 Annual Report and other filings we make with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act). You should read these factors and the other cautionary statements made in this prospectus supplement and accompanying prospectus as being applicable to all related forward- looking statements wherever they appear herein or therein. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, levels of activity, performance, or achievements may vary materially from any future results, activity, performance, or achievements expressed or implied by these forward-looking statements. We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they were made. We undertake no obligation to publicly update any forward-looking statements after the date of this prospectus, whether as a result of new information, future events or otherwise, except as required by law.

Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus supplement and the accompanying prospectus and in the registration statement of which this prospectus supplement and the accompanying prospectus form a part.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$100,000,000 from time to time. 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. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with Cantor Fitzgerald as a source of financing.

We currently intend to use the net proceeds from this offering to fund the development of clinical and preclinical product candidates and for working capital and other general corporate purposes.

The amounts and timing of our use of the net proceeds from this offering will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering efforts, technological advances and the competitive environment for our products. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the shares of our common stock offered by us hereunder. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

DILUTION

Purchasers of our common stock in this offering will experience immediate dilution to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit) as of June 30, 2022 was approximately \$(27.14) million, or \$(0.13) per share of our common stock. Net tangible book value (deficit) per share of our common stock is determined by dividing total tangible assets less total liabilities, excluding items such as intangible assets and goodwill, by the aggregate number of shares of our common stock outstanding. Dilution per share to new investors represents the difference between the amount per share paid by purchasers for our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately following the completion of this offering.

After giving effect to the sale of our common stock in the aggregate amount of \$100.00 million at an assumed offering price of \$2.12 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on August 4, 2022, and after deducting the underwriting discounts and commissions and the estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2022 would have been approximately \$69.11 million, or approximately \$0.27 per share of our common stock. This represents an immediate increase in net tangible book value of \$0.40 per share of our common stock to our existing stockholders and an immediate dilution in net tangible book value of \$1.85 per share of our common stock to purchasers in this offering.

The following table illustrates this calculation on a per share basis:

Assumed public offering price per share		\$2.12
Net tangible book value (deficit) per share as of June 30, 2022	\$ (0.13)	
Increase in net tangible book value per share attributable to purchasers in this offering	\$ 0.40	
As adjusted net tangible book value per share immediately after this offering		\$0.27
Dilution per share to purchasers in this offering		\$1.85

The above table is based on 208,150,021 shares of our common stock outstanding as of June 30, 2022. Unless specifically stated otherwise, the information in this prospectus supplement is as of June 30, 2022 and excludes:

- 15,492,339 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022 at a weighted- average exercise price of \$10.73 per share and any exercise after that date;
- 714,687 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of June 30, 2022 and any settlement after that date;
- 11,732,440 shares of our common stock issuable upon the conversion of our 3.50% convertible senior notes due 2023 outstanding as of June 30, 2022;
- 121,888 shares of our common stock issuable upon the exercise of outstanding warrants as of June 30, 2022 at a weighted-average exercise price of \$27.95 per share;
- 12,085,537 shares of our common stock available for future issuance under the 2013 Plan as of June 30, 2022; and
- 7,243,025 shares of our common stock available for future issuance under the 2019 Plan as of June 30, 2022.

To the extent that options are exercised, other equity awards vest, new equity awards are issued under the 2013 Plan or the 2019 Plan or pursuant to inducement awards, convertible notes are converted into common stock, or we issue additional shares of common stock or other securities convertible into or exercisable for common stock in the future, there may be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into a Controlled Equity OfferingSM Sales Agreement, or sales agreement, with Cantor Fitzgerald & Co., or Cantor Fitzgerald, under which from time to time we may issue and sell shares of our common stock through Cantor Fitzgerald acting as agent. Sales of the shares of common stock, if any, may be made on the Nasdaq Global Select Market at market prices and such other sales as agreed upon by us and Cantor Fitzgerald.

Upon delivery of a placement notice and subject to the terms and conditions of the sales agreement, Cantor Fitzgerald may offer and sell shares of our common stock by any method permitted by law deemed to be an “at-the-market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act. We may instruct Cantor Fitzgerald not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Cantor Fitzgerald may suspend or terminate this offering of our common stock upon notice and subject to other conditions.

We will pay Cantor Fitzgerald commissions, in cash, for its services in acting as sales agent in the sale of our common stock. Cantor Fitzgerald will be entitled to a commission equal to 3.0% of the gross sales price per share sold under the sales agreement. Because there is no minimum offering amount required as a condition to this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Cantor Fitzgerald for certain specified expenses, including the reasonable and documented fees and disbursements of its legal counsel in an amount not to exceed \$75,000 and certain other ongoing expenses. We estimate that the total expenses for the offering, excluding commissions payable to Cantor Fitzgerald under the terms of the sales agreement, will be approximately \$750,000.

Settlement for sales of shares of our common stock will occur on the second trading day following the date on which any sales are made (or such earlier day as is industry practice for regular-way trading), or on some other date that is agreed upon by us and Cantor Fitzgerald in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor Fitzgerald may agree upon.

Cantor Fitzgerald will act as our sales agent and use commercially reasonable efforts, consistent with its normal trading and sales practices. In connection with the sale of the common stock on our behalf, Cantor Fitzgerald will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Cantor Fitzgerald will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Cantor Fitzgerald against certain civil liabilities, including liabilities under the Securities Act.

The offering of shares of our common stock pursuant to the sales agreement will terminate upon the earlier of (1) the sale of all shares of our common stock subject to the sales agreement, or (2) termination of the sales agreement as permitted therein. We and Cantor Fitzgerald may each terminate the sales agreement at any time upon ten days' prior notice.

Cantor Fitzgerald and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Cantor Fitzgerald will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

This prospectus in electronic format may be made available on a website maintained by Cantor Fitzgerald and Cantor Fitzgerald may distribute this prospectus electronically.

LEGAL MATTERS

We are being represented by Davis Polk & Wardwell LLP, New York, New York with respect to certain legal matters as to U.S. federal securities and New York State law. Cantor Fitzgerald is being represented by Goodwin Procter LLP with respect to certain legal matters as to U.S. federal securities and New York State law. The validity of the common stock offered in this offering and certain legal matters as to the laws of the Commonwealth of Virginia will be passed upon for us by Hogan Lovells US LLP.

EXPERTS

The financial statements of Precigen, Inc. as of December 31, 2021 and 2020, and for each of the three years in the period ended December 31, 2021, incorporated by reference in this prospectus supplement, and the effectiveness of the Precigen, Inc.'s internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports. Such financial statements are incorporated by reference in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements, and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements, and other information about issuers, such as us, who file electronically with the SEC. The address of that website is www.sec.gov. We make available, free of charge, on our website at www.precigen.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC.

Information on or accessible through our website is not incorporated by reference herein and is not part of this prospectus.

This prospectus supplement and accompanying prospectus are part of a registration statement that we have filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained through the SEC's website, as provided above, or from us, as provided in the section of this prospectus entitled "Incorporation by Reference." Certain documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement or documents incorporated by reference in the registration statement. Statements in this prospectus supplement and accompanying prospectus about these documents are summaries and each statement is subject, and qualified in all respects by reference, to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The SEC file number for each of the documents incorporated by reference in this prospectus is 001-36042. The documents incorporated by reference into this prospectus contain important information that you should read.

This prospectus supplement and accompanying prospectus incorporate by reference the documents set forth below that have previously been filed with the SEC (other than those documents or the portions of those documents not deemed to be filed):

- the 2021 Annual Report, filed with the SEC on March 1, 2022, including the information incorporated therein by reference from our definitive proxy statement for our 2022 Annual Meeting of Shareholders filed on April 29, 2022;
- our quarterly reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on May 9, 2022 and August 8, 2022, respectively;
- our current reports on Form 8-K filed with the SEC on June 14, 2022, July 5, 2022 and July 13, 2022; and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on September 24, 2018, including any amendment or report filed for the purpose of updating such description, including Exhibit 4.5 to the 2021 Annual Report.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including those filed after the date of the initial registration statement of which this prospectus is part and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed “filed” with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876. Our corporate phone number is (301) 556-9900. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at www.precigen.com. The information on or accessible through our website is not incorporated by reference herein and is not a part of this prospectus.



Precigen, Inc.

\$500,000,000

**Common Stock
Preferred Stock
Debt Securities
Warrants
Rights
Stock Purchase Contracts
Units**

We may offer and sell up to \$500,000,000 in the aggregate of the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities we may offer and sell and the general manner in which they may be offered.

Each time we offer securities pursuant to this prospectus, we will provide one or more supplements to this prospectus or free writing prospectuses containing specific information about the offering and the terms of the securities being sold. The prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus, the applicable prospectus supplement, the information incorporated herein and therein by reference, and any free writing prospectus before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers, and agents, or directly to purchasers, or through a combination of these methods. The names of any underwriters, dealers or agents involved in the sale of any of the securities and the terms of the arrangements with them will be set forth in the applicable prospectus supplement or free writing prospectus. See the sections of this prospectus entitled “About this Prospectus” and “Plan of Distribution” for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE SECTION OF THIS PROSPECTUS ENTITLED “[Risk Factors](#)” ON PAGE 5 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on the Nasdaq Global Select Market under the symbol “PGEN.” On June 19, 2020, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$4.99 per share.

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

The date of this prospectus is July 2 , 2020.

Table of Contents

TABLE OF CONTENTS

<u>About This Prospectus</u>	1
<u>Where You Can Find More Information</u>	2
<u>Incorporation by Reference</u>	3
<u>The Company</u>	4
<u>Risk Factors</u>	5
<u>Special Note Regarding Forward-Looking Statements</u>	6
<u>Use of Proceeds</u>	8
<u>Description of Capital Stock</u>	9
<u>Description of Debt Securities</u>	13
<u>Description of Warrants</u>	21
<u>Description of Rights</u>	23
<u>Description of Stock Purchase Contracts</u>	24
<u>Description of Units</u>	25
<u>Plan of Distribution</u>	26
<u>Legal Matters</u>	27
<u>Experts</u>	27

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the U.S. Securities and Exchange Commission, or the SEC, using a “shelf” registration process. By using a shelf registration statement, we may sell securities from time to time and in one or more offerings up to an aggregate dollar amount of \$500,000,000 of securities as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. Before purchasing any securities, you should carefully read this prospectus, the applicable prospectus supplement, and any applicable free writing prospectuses, together with the additional information described in the sections of this prospectus entitled “Where You Can Find More Information” and “Incorporation by Reference.”

We have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We will not make an offer to sell or solicit an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement is accurate only as of the date on its respective cover, that the information appearing in any applicable free writing prospectus is accurate only as of the date of that free writing prospectus, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations, and prospects may have changed since those dates.

This prospectus, the information incorporated herein by reference, and any prospectus supplement or free writing prospectus contain or may contain references to trademarks, service marks, and trade names owned by us or other companies. Solely for convenience, trademarks, service marks, and trade names, including logos, artwork, and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks, service marks, and trade names. We do not intend our use or display of other companies’ trade names, service marks, or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Other trademarks, trade names, and service marks appearing in this prospectus are the property of their respective owners.

When we refer to “we,” “our,” “us,” and the “Company” in this prospectus, we mean Precigen, Inc., unless otherwise specified. When we refer to “you,” we mean the potential holders of the applicable series of securities.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements, and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements, and other information about issuers, such as us, who file electronically with the SEC. The address of that website is www.sec.gov. We make available, free of charge, on our website at www.precigen.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC.

Information on or accessible through our website is not incorporated by reference herein and does not form a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we have filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained through the SEC's website, as provided above, or from us, as provided in the section of this prospectus entitled "Incorporation by Reference." Certain documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement or documents incorporated by reference in the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is subject, and qualified in all respects by reference, to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters.

INCORPORATION BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC (other than those documents or the portions of those documents not deemed to be filed):

- our annual report on Form 10-K for the year ended December 31, 2019, filed with the SEC on [March 2, 2020](#), or the 2019 Annual Report, including the information incorporated therein by reference from our definitive proxy statement for our 2020 Annual Meeting of Shareholders filed on [April 29, 2020](#);
- our quarterly report on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on [May 11, 2020](#);
- our current reports on Form 8-K filed with the SEC on [January 2, 2020](#), [January 7, 2020](#), [February 4, 2020](#) (as amended on [February 6, 2020](#)), [February 6, 2020](#), [June 4, 2020](#), and [June 19, 2020](#); and
- the description of our Common Stock contained in our Registration Statement on Form 8-A filed with the SEC on [September 24, 2018](#), including any amendment or report filed for the purpose of updating such description, including [Exhibit 4.5](#) to the 2019 Annual Report.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, prior to the termination of this offering, including those filed after the date of the initial registration statement of which this prospectus is part and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed "filed" with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

We will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of such person, a copy of any or all of the documents incorporated by reference in this prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents. Requests may be made in writing or by telephone at:

Precigen, Inc.

20374 Seneca Meadows Parkway

Germantown, Maryland 20876

(301) 556-9900

THE COMPANY

We are a dedicated discovery and clinical-stage biopharmaceutical company advancing the next generation of gene and cell therapies with the overall goal of improving outcomes for patients with significant unmet medical needs. We are leveraging our proprietary technology platforms to develop product candidates designed to target urgent and intractable diseases in our core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases. We have developed an extensive pipeline of therapies across multiple indications within these core focus areas.

We believe that our array of technology platforms uniquely position us among other biotechnology companies to advance precision medicine. Precision medicine is the practice of therapeutic product development that takes into account specific genetic variations within populations impacted by a disease to design targeted therapies to improve outcomes for a disease or patient population. Our proprietary and complementary technology platforms provide a strong foundation to realize the core promise of precision medicine by supporting our efforts to construct powerful gene programs to drive efficacy, deliver these programs through viral, non-viral, and microbe-based approaches to drive lower costs, and control gene expression to drive safety. Our therapeutic platforms, including UltraCAR-T, ActoBiotics, and AdenoVerse Immunotherapy, allow us to precisely control the level and physiological location of gene expression and modify biological molecules to control the function and output of living cells to treat underlying disease conditions.

We are actively advancing our lead programs, including: PRGN-3005 and PRGN-3006, which are built on our UltraCAR-T platform; AG019, which is built on our ActoBiotics platform; and INXN-4001, a non-viral triple-effector plasmid DNA, which is built on our UltraVector platform. In addition, the FDA recently cleared the Investigational New Drug application to initiate a Phase 1/2 trial to study PRGN-2009 in participants with human papillomavirus-positive cancers. We also have a robust pipeline of preclinical programs that we are pursuing in order to drive long-term value creation.

Our healthcare business is operated by our wholly-owned subsidiaries PGEN Therapeutics, Inc., Precigen ActoBio, Inc., and Exemplar Genetics LLC, doing business as Precigen Exemplar, and also includes our majority ownership interest in Triple-Gene LLC, doing business as Precigen Triple-Gene, as well as equity and royalty interests in therapeutics and therapeutic platforms from companies not controlled by us. While our primary focus is in healthcare, we continue to have non-healthcare businesses, including our established bovine genetics company, Trans Ova Genetics, L.C.

We are a Virginia corporation formed in 1998 and our principal executive offices are located at 20374 Seneca Meadows Parkway, Germantown, MD 20876, and our telephone number is (301) 556-9900. Our website address is www.precigen.com. Information on or accessible through our website is not incorporated by reference herein and does not form a part of this prospectus.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves significant risks. You should carefully consider the risk factors incorporated by reference to the 2019 Annual Report, our quarterly report on Form 10-Q filed with the SEC on May 11, 2020, and any subsequent reports we file with the SEC after the date of this prospectus, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in the applicable prospectus supplement and any applicable free writing prospectus before making a decision about investing in our securities. 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 business, financial condition, and results of operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, the applicable prospectus supplement and any free writing prospectus may contain forward-looking statements, including with respect to our plans, objectives, and expectations for our business, operations, and financial performance and condition. Any statements contained herein or therein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “continue,” “could,” “due,” “estimate,” “expect,” “intend,” “may,” “objective,” “plan,” “predict,” “potential,” “positioned,” “seek,” “should,” “target,” “will,” “would,” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or similar language. Forward-looking statements include, but are not limited to, statements about:

- our ability to successfully enter new markets or develop product candidates, including the expected timing and results of investigational studies and preclinical and clinical trials, and our research and development programs;
- the timing or likelihood of regulatory filings for any product candidates we develop and our ability to obtain and maintain regulatory approvals for such product candidates for any indication;
- our intentions and ability to successfully commercialize our product candidates;
- the rate and degree of market acceptance of any products developed by us;
- our ability to successfully execute and achieve benefits from our recent leadership transition plan and organizational restructuring;
- our efforts to hold or generate significant operating capital, including through partnering, potential asset sales of our non-healthcare assets, and operating cost reductions;
- our cash position;
- any delays or potential delays to our clinical trials as a result of the COVID-19 pandemic;
- our estimates regarding expenses, future revenue, capital requirements, and our need for additional financing;
- our strategy and overall approach to our business model, including our efforts to focus our business in the healthcare industry;
- our ability to adapt to changes in laws, regulations, and policies;
- our reliance on and the performance of third parties, including exclusive channel collaborations and joint ventures;
- competition from existing technologies and products or new technologies and products that may emerge;
- our expectations related to the use of proceeds from our public offerings and other financing efforts;
- actual or anticipated variations in our operating results;
- market conditions in our industry;
- our ability to retain, recruit, and train key personnel, or the loss of key personnel as a result of illness or otherwise;
- our ability to successfully enter into optimal strategic relationships with our subsidiaries and operating companies that we may form in the future;
- the result of litigation proceedings or investigations that we currently face or may face in the future;

[Table of Contents](#)

- the effects, duration, and severity of the ongoing COVID-19 pandemic and the actions we and others have taken or may take in response; and
- our intended use of the proceeds from sales of securities by us.

These statements are based on management's current expectations, estimates, forecasts and projections about our business and industry, are not guarantees of future performance and involve known and unknown risks, uncertainties, and other factors that are in some cases beyond our control and that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. We discuss many of these risks in greater detail in the section of this prospectus entitled "Risk Factors" and elsewhere in this prospectus and any related free writing prospectus, and in any other documents incorporated herein or therein (including in our most recent annual report on Form 10-K, subsequent quarterly reports on Form 10-Q, and other filings we make with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act). You should read these factors and the other cautionary statements made in this prospectus, the applicable prospectus supplement, and any free writing prospectus as being applicable to all related forward-looking statements wherever they appear herein or therein. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, levels of activity, performance, or achievements may vary materially from any future results, activity, performance, or achievements expressed or implied by these forward-looking statements. We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they were made. We undertake no obligation to publicly update any forward-looking statements after the date of this prospectus, whether as a result of new information, future events or otherwise, except as required by law.

You should read this prospectus, the applicable prospectus supplement and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by the foregoing cautionary statements.

USE OF PROCEEDS

Unless we specify otherwise in a prospectus supplement, we intend to use the net proceeds from sales of securities by us for general corporate purposes. These purposes may include clinical trials, research and development expenditures, expenditures to build our development and commercialization capabilities, capital expenditures, working capital, repayment or redemption of existing indebtedness, and any other corporate purpose. As of the date of this prospectus, we cannot specify with certainty all of the particular uses of the net proceeds from the sale of securities under this prospectus or the amounts to be used for such purposes. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds described above, we plan to invest any net proceeds from sales of securities by us in a variety of capital preservation investments, including money market funds and U.S. government debt securities. We will not receive proceeds from sales of securities by persons other than us except as may otherwise be stated in an applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes certain information about our capital stock. The summary does not purport to be complete and is subject, and qualified in its entirety by reference, to our amended and restated articles of incorporation, or articles of incorporation, and our amended and restated bylaws, or bylaws, each of which is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part, and the applicable provisions of Virginia law.

General

Our authorized capital stock consists of 400,000,000 shares of common stock, no par value per share, and 25,000,000 shares of preferred stock, no par value per share, all of which shares of preferred stock are undesignated. As of May 31, 2020, we had 172,190,152 shares of common stock outstanding and held of record by approximately 288 shareholders. The actual number of shareholders is greater than this number of record holders and includes shareholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include shareholders whose shares may be held in trust by other entities. All outstanding shares of common stock are fully paid and nonassessable. There are no shares of preferred stock outstanding.

Common Stock

Voting rights; Dividends; Liquidation

Holders of our common stock are entitled to:

- cast one vote for each share on all matters submitted to a vote of our shareholders, including the election of directors. Holders of our common stock do not have cumulative voting rights in the election of directors;
- receive dividends if and when dividends are declared by our board of directors out of assets legally available for the payment of dividends, subject to preferential rights of outstanding shares of preferred stock, if any; and
- in the event of our liquidation, dissolution or winding up, whether voluntary or involuntary, after payment of our debts and other liabilities and making provision for the holders of outstanding shares of preferred stock, if any, to share equally and ratably in the remainder of our assets.

Registration Rights

In September 2018, our wholly owned subsidiary Precigen ActoBio, Inc., or ActoBio, issued convertible promissory notes that provide the holders with certain registration rights for shares of our common stock issuable upon conversion thereof. If ActoBio pays any of its obligations under the notes in shares of our common stock, ActoBio is required to cause us to use commercially reasonable efforts to register the resale of such shares by the holders and to maintain the effectiveness of such registration until one year after the noteholder's demand or ActoBio's election to pay.

Other Rights and Preferences

Holders of our common stock have no preemptive, redemption, conversion, or subscription rights and there are no sinking fund provisions applicable to our common stock. The rights, powers, preferences, and privileges of holders of common stock are subject to, and may be impaired by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

[Table of Contents](#)

Preferred Stock

Our board has the authority to designate and issue from time to time one or more series of preferred stock without shareholder approval. Our board may fix and determine the preferences, limitations, and relative rights of each series of preferred stock issued. Because our board has the power to establish the preferences and rights of each series of preferred stock, it may afford the holders of any series of preferred stock preferences and rights, voting or otherwise, senior to the rights of holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of common stock until our board determines the specific rights of the holders of preferred stock. However, the effects might include:

- restricting dividends on our common stock;
- diluting the voting power of our common stock;
- impairing liquidation rights of our common stock; or
- delaying or preventing a change in control of us without further action by our shareholders.

Anti-Takeover Effects of Provisions of our Articles of Incorporation and Bylaws and of Virginia Law

Our articles of incorporation, bylaws, and Virginia law contain provisions that may have the effect of impeding the acquisition of control of us by means of a tender offer, a proxy contest, open market purchases, or otherwise in a transaction not approved by our board of directors. These provisions are designed to reduce, or have the effect of reducing, our vulnerability to coercive takeover practices and inadequate takeover bids. The existence of these provisions could limit the price that investors might otherwise pay in the future for shares of common stock. In addition, these provisions make it more difficult for our shareholders to remove our board of directors or management, should they choose to do so.

Articles of Incorporation and Bylaws

Undesignated preferred stock. Our articles of incorporation authorize our board to establish one or more series of preferred stock and to determine, with respect to any series of preferred stock, the preferences, rights, and other terms of such series. See “Preferred Stock” above for additional information. Under this authority, our board could create and issue a series of preferred stock with rights, preferences or restrictions that have the effect of discriminating against an existing or prospective holder of our capital stock as a result of such holder beneficially owning or commencing a tender offer for a substantial amount of our common stock. One of the effects of authorized but unissued and unreserved shares of preferred stock may be to render it more difficult for, or to discourage an attempt by, a potential acquirer to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management. The issuance of shares of preferred stock may have the effect of delaying, deferring or preventing a change in control of our Company without any action by our shareholders.

Qualification and election of directors. Our bylaws provide that to be eligible to be a nominee for election to our board of directors, a person must submit a written questionnaire regarding his or her background and qualifications and must agree to other representations as set forth in our bylaws. In addition, we have adopted a director resignation policy. Our bylaws provide that, in uncontested director elections (i.e., an election where the number of nominees is not greater than the number of directors to be elected), a nominee for director will be elected to the board of directors if the votes cast for such nominee’s election exceed the votes cast against such nominee’s election. However, directors will be elected by a plurality of the votes cast at any meeting of the shareholders for which (i) the Secretary receives a notice that a shareholder has nominated a person for election to the board of directors in compliance with the advance notice requirements for shareholder nominees for director set forth in the bylaws, and (ii) such nomination has not been withdrawn by such shareholder on or prior to the 10th day preceding the date we first mail the notice of meeting for such meeting to the shareholders (i.e., if there is a contested director election). If directors are to be elected by a plurality of the votes cast, the

[Table of Contents](#)

shareholders may withhold votes, but will not be permitted to vote against a nominee. Our Corporate Governance Guidelines provide that any nominee for director in an uncontested election who receives a greater number of shareholder votes cast against his or her election than votes for his or her election must promptly tender his or her resignation to the board of directors for consideration. The Nominating and Governance Committee will then evaluate the best interests of the Company and will recommend to the board of directors whether to accept or reject the tendered resignation. Following the board of directors' receipt of this recommendation and determination as to whether to accept the resignation, we will disclose the board of directors' decision and an explanation of how the decision was reached.

Board vacancies; removal. Our articles of incorporation provide that any vacancy occurring on our board of directors may be filled by a majority of directors then in office, even if less than a quorum.

Special meetings of shareholders. Our bylaws provide that a special meeting may be called by a vote of shareholders representing in the aggregate not less than 25 percent of the total number of shares of stock entitled to vote on the matter to be brought before the proposed special meeting, and that shareholders may only conduct business at special meetings of shareholders that was specified in the notice of the meeting.

Advance notification of shareholder nominations and proposals. Our bylaws establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board.

Exclusive forum provision. Our bylaws provide that unless we consent in writing to the selection of an alternative forum, the United States District Court for the Eastern District of Virginia, Alexandria Division, or in the event that court lacks subject matter jurisdiction to hear such action, the Circuit Court of the County of Fairfax, Virginia, will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action for breach of duty to the Company or our shareholders by any current or former officer or other employee or agent or director of the Company, (iii) any action against the Company or any current or former officer or other employee or agent or director of the Company arising pursuant to any provision of the Virginia Stock Corporation Act (as it may be amended from time to time) or our articles of incorporation or our bylaws (as either may be amended from time to time), or (iv) any action against the Company or any current or former officer or other employee or agent or director of the Company governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our bylaws. It is possible that a court of law could rule that the choice of forum provision contained in our bylaws is inapplicable or unenforceable if it is challenged in a proceeding or otherwise.

Virginia Anti-takeover Statutes

Affiliated transactions statute. Virginia law contains provisions governing affiliated transactions. In general, these provisions prohibit a Virginia corporation from engaging in affiliated transactions with any holder of more than 10 percent of any class of its outstanding voting shares, or an interested shareholder, for a period of three years following the date that such person became an interested shareholder unless:

- a majority of (but not fewer than two) disinterested directors of the corporation and the holders of two-thirds of the voting shares, other than the shares beneficially owned by the interested shareholder, approve the affiliated transaction; or
- before or on the date the person became an interested shareholder, a majority of disinterested directors approved the transaction that resulted in the shareholder becoming an interested shareholder.

Affiliated transactions subject to this approval requirement include mergers, share exchanges, material dispositions of corporate assets not in the ordinary course of business, any dissolution of the corporation proposed by or on behalf of an interested shareholder or any reclassification, including reverse stock splits,

[Table of Contents](#)

recapitalizations or mergers of the corporation with its subsidiaries, which increases the percentage of voting shares owned beneficially by an interested shareholder by more than five percent.

Virginia law permits a corporation to exempt itself from this statutory provision by placing a statement to that effect in its articles of incorporation. Our articles of incorporation do not specifically address the Virginia statute regarding affiliated transactions; therefore, we are subject to this provision.

Control share acquisitions statute. Virginia law also contains provisions relating to control share acquisitions, which are transactions causing the voting strength of any person acquiring beneficial ownership of shares of a Virginia public corporation to meet or exceed certain threshold percentages (20 percent, 33 ¹/₃ percent or 50 percent) of the total votes entitled to be cast for the election of directors. Shares acquired in a control share acquisition have no voting rights unless:

- the voting rights are granted by a majority vote of all outstanding shares entitled to vote in the election of directors, other than those held by the acquiring person or any officer or employee director of the corporation; or
- the articles of incorporation or bylaws of the corporation provide that these Virginia law provisions do not apply to acquisitions of its shares.

The acquiring person may require that a special meeting of the shareholders be held within 50 days of the corporation's receipt of the acquiring person's request to consider the grant of voting rights to the shares acquired in the control share acquisition. If voting rights are not granted and the corporation's articles of incorporation or bylaws permit, the acquiring person's shares may be repurchased by the corporation, at its option, at a price per share equal to the acquiring person's cost. Virginia law grants dissenters' rights to any shareholder who objects to a control share acquisition that is approved by a vote of disinterested shareholders and that gives the acquiring person control of a majority of the corporation's voting shares.

Our articles of incorporation provide that the statutory provisions governing control share acquisitions do not apply to our Company; therefore, we are not subject to this provision.

Authorized but Unissued Shares

The authorized but unissued shares of common stock and preferred stock are available for future issuance without shareholder approval, subject to any limitations imposed by the Nasdaq Stock Market LLC listing rules. These additional shares may be used for a variety of corporate finance transactions, acquisitions, and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make it more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger, or otherwise.

Listing on the Nasdaq Global Select Market

Our common stock is listed on the Nasdaq Global Select Market under the symbol "PGEN".

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

DESCRIPTION OF DEBT SECURITIES

The following description summarizes certain terms and conditions of the debt securities that we will offer and sell pursuant to this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms and conditions of the series in a prospectus supplement to this prospectus. We will also indicate in the applicable prospectus supplement whether the general terms and conditions described in this prospectus apply to the series of debt securities. The terms and conditions of the debt securities of a series may be different in one or more respects from the terms and conditions described below. If so, those differences will be described in the applicable prospectus supplement. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the indenture, which may be amended or supplemented from time to time, that contains the terms of the debt securities.

The following summary of provisions of the indenture does not purport to be complete and is subject, and qualified in its entirety by reference, to the complete text of the indenture, including, but not limited to, definitions therein of certain terms. This summary may not contain all of the information that you may find useful. The terms and conditions of the debt securities of each series will be set forth in those debt securities and in the indenture and in the applicable prospectus supplement.

The form of indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part. A form of each debt security, reflecting the specific terms and provisions of that series of debt securities, will be filed with the SEC in connection with each offering and will be incorporated by reference in the registration statement of which this prospectus forms a part.

General

We may offer the debt securities from time to time in as many distinct series as we may determine. The indenture does not limit the amount of debt securities that we may issue thereunder. We may, without the consent of the holders of the debt securities of any series, issue additional debt securities ranking equally with, and otherwise similar in all respects to, the debt securities of the series (except for the public offering price and the issue date) so that those additional debt securities will be consolidated and form a single series with the debt securities of the series previously offered and sold.

The debt securities of each series will be issued in fully registered form without interest coupons. We currently anticipate that the debt securities of each series offered and sold pursuant to this prospectus will be issued as global debt securities as described under “Global Debt Securities” and will trade in book-entry form only.

Debt securities denominated in U.S. dollars will be issued in denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof, unless otherwise specified in the applicable prospectus supplement. If the debt securities of a series are denominated in a foreign or composite currency, the applicable prospectus supplement will specify the denomination or denominations in which those debt securities will be issued.

Unless otherwise specified in the applicable prospectus supplement, we will repay the debt securities of each series at 100% of their principal amount, together with any premium and accrued and unpaid interest thereon at maturity, except if those debt securities have been previously redeemed or purchased and cancelled.

Unless otherwise specified in the applicable prospectus supplement, the debt securities of each series will not be listed on any securities exchange.

Provisions of Indenture

A prospectus supplement, the indenture and a supplemental indenture or authorizing resolution of our board of directors (including any related officer’s certificate or Company order), if any, relating to any series of debt

[Table of Contents](#)

securities being offered will include specific terms relating to the offering. These terms will include some or all of the following:

- the form and title of the debt securities;
- the aggregate principal amount of the debt securities and any limit on the aggregate principal amount, provided, however, that such amount may from time to time be increased by a resolution of our board of directors;
- the price or prices at which the debt securities will be sold;
- the person to whom any interest on a debt security of the series will be payable, if other than the person in whose name that debt security is registered;
- the date or dates on which the principal of the debt securities will be payable;
- the rate or rates (fixed or variable, or combination thereof) at which the debt securities will bear interest, if any, or the method of determining such rate or rates;
- the date or dates on which any such interest shall be payable, the date or dates on which payment of any such interest will commence and the record dates, if any, for such payment date or dates, or the method of determining such date or dates, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months, the right, if any, to extend or defer interest payments and the duration of such extension or deferral;
- any optional or mandatory redemption or repayment option, including any sinking fund, amortization or analogous provisions;
- if other than a minimum denomination equal to \$2,000 or an integral multiple of \$1,000 in excess thereof, the denominations in which any debt securities of the series will be issuable;
- any special tax implications of the debt securities, including provisions for original issue discount securities, if offered;
- any provisions granting special rights to holders when a specified event occurs;
- the percentage of the principal amount at which the debt securities will be issued and any payments due if the maturity of the debt securities is accelerated;
- any Events of Default or covenants with respect to the debt securities that differ from, or are in addition to, those set forth in the indenture;
- if other than U.S. dollars, the currency or currencies for which the debt securities will be issued or in which the principal thereof, any premium thereon and any interest thereon will be payable;
- provisions regarding the convertibility or exchangeability of the debt securities;
- provisions pertaining to the issuance of debt securities in the form of global debt securities, as described below;
- provisions relating to the satisfaction and discharge of the indenture;
- the form of and conditions to issuance of debt securities issuable in definitive form, other than as described below;
- if other than the trustee, the identity of any other trustee, the registrar for the debt securities and any paying agent;
- whether the debt securities of the series will be guaranteed by any persons and, if so, the identity of such persons, the terms and conditions upon which such debt securities will be guaranteed and, if applicable, the terms and conditions upon which such guarantees may be subordinated to other indebtedness of the respective guarantors;

Table of Contents

- whether the debt securities of the series will be secured by any collateral and, if so, the terms and conditions upon which such debt securities will be secured and, if applicable, upon which such liens may be subordinated to other liens securing other indebtedness of us or of any guarantor;
- whether the debt securities will be issued in a transaction exempt from registration under the Securities Act and any restriction or condition on the transferability of the debt securities of such series;
- the exchanges, if any, on which the debt securities may be listed;
- the terms of any right to convert or exchange debt securities of such series into any other securities or property of ours or of any other corporation or person, and the additions or changes, if any, to the indenture with respect to the debt securities of such series to permit or facilitate such conversion or exchange; and
- any other terms not prohibited by the provisions of the indenture.

Global Debt Securities

Certain series of the debt securities may be issued as permanent global debt securities to be deposited with a depository with respect to that series. Unless otherwise indicated in the applicable prospectus supplement, the following is a summary of the depository arrangements applicable to debt securities issued in permanent global form and for which The Depository Trust Company, or DTC, acts as depository.

Each global debt security will be deposited with, or on behalf of, DTC, as depository, or its nominee and registered in the name of a nominee of DTC. Except under the limited circumstances described below, global debt securities are not exchangeable for definitive certificated debt securities.

Ownership of beneficial interests in a global debt security is limited to institutions that have accounts with DTC or its nominee, or participants, or persons that may hold interests through participants. In addition, ownership of beneficial interests by participants in a global debt security will be evidenced only by, and the transfer of that ownership interest will be effected only through, records maintained by DTC or its nominee for a global debt security. Ownership of beneficial interests in a global debt security by persons that hold through participants will be evidenced only by, and the transfer of that ownership interest within that participant will be effected only through, records maintained by that participant. DTC has no knowledge of the actual beneficial owners of the debt securities. Beneficial owners will not receive written confirmation from DTC of their purchase, but beneficial owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the participants through which the beneficial owners entered the transaction. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of such securities in definitive form. Such laws may impair the ability to transfer beneficial interests in a global debt security.

Payments on debt securities represented by a global debt security registered in the name of or held by DTC or its nominee will be made to DTC or its nominee, as the case may be, as the registered owner and holder of the global debt security representing the debt securities. We expect that upon receipt of any payments with respect to a global debt security, DTC will immediately credit accounts of participants on its book-entry registration and transfer system with payments in amounts proportionate to their respective beneficial interests in the principal amount of that global debt security as shown in the records of DTC. Payments by participants to owners of beneficial interests in a global debt security held through those participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the sole responsibility of those participants, subject to any statutory or regulatory requirements that may be in effect from time to time.

Neither we, any trustee nor any of our respective agents will be responsible for any aspect of the records of DTC, any nominee or any participant relating to, or payments made on account of, beneficial interests in a

Table of Contents

permanent global debt security or for maintaining, supervising or reviewing any of the records of DTC, any nominee or any participant relating to such beneficial interests.

A global debt security is exchangeable for definitive debt securities registered in the name of, and a transfer of a global debt security may be registered to, any person other than DTC or its nominee, only if:

- DTC notifies us that it is unwilling or unable to continue as depository for that global debt security or at any time DTC ceases to be registered under the Exchange Act, and a successor depository is not appointed by us within 90 days after our receipt of such notice;
- there shall have occurred and be continuing an event of default under the debt securities and the registrar shall have received a request from the depository to issue certificated securities;
- we determine in our sole discretion that the global debt security will be exchangeable for definitive debt securities in registered form; or
- as may be provided in any applicable prospectus supplement.

Any global debt security that is exchangeable pursuant to the preceding sentence will be exchangeable in whole for definitive debt securities in registered form, of like tenor and of an equal aggregate principal amount as the global debt security. The definitive debt securities will be registered by the registrar in the name or names instructed by DTC. We expect that these instructions may be based on directions received by DTC from its participants with respect to ownership of beneficial interests in the global debt security.

Except as provided above, owners of the beneficial interests in a global debt security will not be entitled to receive physical delivery of debt securities in definitive form and will not be considered the holders of debt securities for any purpose under the indenture. No global debt security will be exchangeable except for another global debt security of like denomination and tenor to be registered in the name of DTC or its nominee. Accordingly, each person owning a beneficial interest in a global debt security must rely on the procedures of DTC and, if that person is not a participant, on the procedures of the participant through which that person owns its interest, to exercise any rights of a holder under the global debt security or the indenture.

We understand that, under existing industry practices, in the event that we request any action of holders, or an owner of a beneficial interest in a global debt security desires to give or take any action that a holder is entitled to give or take under the debt securities or the indenture, DTC would authorize the participants holding the relevant beneficial interest to give or take that action, and those participants would authorize beneficial owners owning through those participants to give or take that action or would otherwise act upon the instructions of beneficial owners owning through them.

DTC is a limited purpose trust company organized under the laws of the State of New York, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities of its participants and to facilitate the clearance and settlement of securities transactions among its participants in those securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC’s participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation, or DTCC. DTCC is the holding company for DTC, National Securities Clearance Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as banks, brokers, dealers, trust companies and clearing corporations that clear through or maintain a custodial relationship with a participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC. More information about DTC can be found at www.dtcc.com; the information contained on that website is not incorporated in this prospectus or in any prospectus supplement.

[Table of Contents](#)

Certain Covenants

The indenture sets forth limited covenants that will apply to each series of debt securities issued under the indenture, unless otherwise specified in the applicable prospectus supplement. Under the indenture, we will agree to:

- pay the principal of, and interest and any premium on, the debt securities when due;
- maintain a place of payment;
- deliver an officer's certificate to the trustee within 120 days after the end of each fiscal year regarding our review of compliance with our obligations under the indenture;
- maintain our corporate existence; and
- deposit sufficient funds with any paying agent on or before the due date for any payment of principal, interest or premium.

Consolidation, Merger or Asset Sale

The indenture generally will allow us to consolidate with or merge into any other person, association or entity. The indenture will also allow us to convey, transfer or lease our property and assets as, or substantially as, an entirety to a person, association or entity.

However, we will only consolidate with or merge into any other person, association or entity or convey, transfer or lease our properties and assets as, or substantially as, an entirety according to the terms and conditions of the indenture, including the following requirements:

- (i) we are the surviving person or (ii) the remaining or acquiring person, association or entity is a corporation or partnership organized under the laws of the United States, any state or the District of Columbia and expressly assumes all of our responsibilities and liabilities under the indenture, including the punctual payment of all amounts due on the debt securities and performance of the covenants in the indenture;
- immediately after giving effect to the transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, as defined below, exists; and
- delivery to the trustee of an officer's certificate and an opinion of counsel, each stating that all related conditions have been satisfied.

The remaining or acquiring person, association or entity will be substituted for us in the indenture with the same effect as if it had been an original party to the indenture. Thereafter, the successor may exercise our rights and powers under the indenture, in our name or in its own name. If we sell or transfer our assets substantially as an entirety, we will be released from all our liabilities and obligations under the indenture and the debt securities. If we lease our assets substantially as an entirety, we will not be released from our obligations under the indenture and the debt securities.

Events of Default

Unless otherwise specified in the applicable prospectus supplement, each of the following events will be an Event of Default under the indenture with respect to any series of debt securities issued under the indenture:

- failure to pay any interest on any debt security of the series when due, continued for 30 days;
- failure to pay principal of (or premium, if any, on) any debt security of the series when due;
- failure to deposit a sinking fund payment when and as due by the terms of a debt security of the series;

Table of Contents

- failure to perform or comply with any covenant in the indenture or related supplemental indenture, continued for 90 days after written notice as provided in the indenture;
- certain events in bankruptcy, insolvency or reorganization affecting us; and
- any other Event of Default set forth in the indenture or supplemental indenture relating to the debt securities of that series.

An Event of Default for a particular series of debt securities does not necessarily constitute an Event of Default for any other series of debt securities issued under the indenture. The trustee may withhold notice to the holders of a series of debt securities of any default, except payment defaults of principal or interest or any premium on those debt securities, if it considers such withholding to be in the interest of the holders.

If an Event of Default occurs and is continuing, then the trustee or the holders of 25% in aggregate principal amount of the outstanding debt securities of that series may declare the entire principal amount of the debt securities of that series to be due and payable immediately; provided, however, that the holders of a majority of the aggregate principal amount of the debt securities of that series may, under certain circumstances, rescind and annul the declaration.

Subject to provisions in the indenture relating to its duties in case an Event of Default shall have occurred and be continuing, the trustee will not be under an obligation to exercise any of its rights or powers under the indenture at the request, order or direction of any holders of debt securities then outstanding under the indenture, unless the holders shall have offered to the trustee reasonable indemnity. If such reasonable indemnity is provided, the holders of a majority in aggregate 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 trustee or exercising any power conferred on the trustee, for any series of debt securities.

Defeasance

Debt securities of a series may be defeased at any time in accordance with their terms and as set forth in the indenture and described briefly below, unless the securities resolutions or supplemental indenture establishing the terms of the series provides otherwise. Any defeasance may terminate all of our obligations (with limited exceptions) with respect to a series of debt securities and the indenture, or legal defeasance, or it may terminate only our obligations under any restrictive covenants which may be applicable to a particular series, or covenant defeasance.

We may exercise our legal defeasance option even though we have also exercised our covenant defeasance option. If we exercise the legal defeasance option with respect to a series of debt securities, that series may not be accelerated because of an Event of Default. If we exercise the covenant defeasance option, that series of debt securities may not be accelerated by reference to any restrictive covenants which may be applicable to that particular series.

To exercise either defeasance option as to a series of debt securities, we must:

- irrevocably deposit in trust with the trustee or another trustee money or U.S. government obligations in an amount to pay and discharge the principal of and any premium and interest on the debt securities on the stated maturities or redemption dates therefor and any mandatory sinking fund payments;
- deliver a certificate from an independent public accountant or financial advisor expressing its opinion that the payments of principal and interest when due on the deposited U.S. government obligations, without reinvestment, plus any deposited money without investment, will provide cash at the times and in the amounts necessary to pay the principal of and premium and interest when due on all debt securities of the series to maturity or redemption, as the case may be, and any mandatory sinking fund payments; and

[Table of Contents](#)

- comply with certain other conditions, including that there be no Event of Default at the time of deposit or Event of Default due to bankruptcy on or prior to the 90th day after the deposit date. In particular, we must obtain an opinion of tax counsel that the defeasance will not result in recognition of any gain or loss to holders for federal income tax purposes as a result of the deposit.

Discharge

We may discharge all our obligations under the indenture with respect to the notes of any series, other than our obligation to register the transfer of and to exchange notes of that series, when either:

- all outstanding notes of that series (except (i) mutilated, destroyed, lost or stolen notes that have been replaced or paid and notes for whose payment money has been deposited in trust and thereafter repaid to us and (ii) notes for whose payment money has theretofore been deposited in trust or segregated and held in trust by us and thereafter repaid to us or discharged from such trust) have been delivered to the trustee cancelled or for cancellation; or
- all such notes not so delivered for cancellation have either become due and payable or will become due and payable at their stated maturity within one year or are to be called for redemption within one year, and we have deposited with the trustee in trust an amount of cash sufficient to pay the entire indebtedness of such notes, including interest to the stated maturity or applicable redemption date; and
- we have paid all other sums due under the indenture and delivered an officer's certificate and opinion of counsel to the trustee stating that all related conditions have been satisfied.

Modification of the Indenture

Under the indenture, generally we and the trustee may modify our rights and obligations and the rights of the holders with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of each series affected by the modification.

No modification of the principal or interest payment terms, no modification reducing the percentage required for any waiver or modifications and no modification impairing the right to institute suit for the enforcement of any payment on debt securities of any series when due, is effective against any holder without its consent.

In addition, we and the trustee may amend the indenture without the consent of any holder of the debt securities to make certain changes, such as:

- curing ambiguities or correcting defects or inconsistencies;
- otherwise adding or changing provisions with respect to matters or questions arising under the indenture relating to a particular series of debt securities that does not adversely affect the rights of any holder in any material respect;
- evidencing the succession of another person to us, and the assumption by that successor of our obligations under the indenture and the debt securities of any series;
- providing for the acceptance of appointment by a successor trustee;
- qualifying the indenture under the Trust Indenture Act, or TIA;
- complying with the rules and regulations of any securities exchange or automated quotation system on which debt securities of any series may be listed or traded or any applicable depository;
- adding, changing or eliminating provisions relating to a particular series of debt securities to be issued, provided that any such addition, change or elimination (1) shall neither (i) apply to any debt security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the holders of any such debt security with respect to such provision or (2) shall become effective only when there is not such debt security outstanding;

[Table of Contents](#)

- to establish the form or terms of any debt securities of any series under the indenture; or
- to provide for the issuance of additional debt securities of any series.

No Individual Liability of Officers, Directors, Employees or Stockholders

No director, officer, employee or stockholder, as such, of ours or any of our affiliates will have any personal liability in respect of our obligations under the indenture or the debt securities by reason of his, her or its status as such.

Governing Law

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

Regarding the Trustee

The indenture provides that there may be more than one trustee thereunder, each with respect to one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust or trusts separate and apart from the trust or trusts administered by any other trustee under the indenture. Unless otherwise indicated in any applicable prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only with respect to the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed with respect to one or more series of debt securities. All payments of principal of, and premium, if any, and interest on, and all registration, transfer, exchange, authentication and delivery (including authentication and delivery on original issuance of the debt securities) of, the debt securities of a series will be effected by the trustee with respect to that series at an office designated by the trustee.

We may maintain corporate trust relationships in the ordinary course of business with the trustee. The trustee shall have and be subject to all the duties and responsibilities specified with respect to the indenture trustee under the TIA. Subject to the provisions of the TIA, the trustee is under no obligation to exercise any of the powers vested in it by the indenture at the request of any holder of debt securities, unless offered satisfactory indemnity by the holder against the costs, expense and liabilities which might be incurred thereby.

Under the TIA, the indenture is deemed to contain limitations on the right of the trustee, should it become a creditor of our company, to obtain payment of claims in some cases or to realize on certain property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions with us. If it acquires any conflicting interest under the TIA relating to any of its duties with respect to the debt securities, however, it must eliminate the conflict or resign as trustee.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock or preferred stock or of debt securities. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. Each series of warrants may be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. The following description summarizes certain provisions of the warrants and warrant agreements and is subject, and qualified in its entirety by reference, to the complete text of the warrant agreement and warrant certificate applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;
- the designation, stated value and terms (including, without limitation, liquidation, dividend, conversion, and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock;
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;
- the date, if any, on and after which the warrants and the related debt securities, preferred stock or common stock will be separately transferable;
- the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- certain United States federal income tax consequences applicable to the warrants; and
- any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled:

- to vote, consent or receive dividends;
- to receive notice as shareholders with respect to any meeting of shareholders for the election of our directors or any other matter; or
- to exercise any rights as shareholders of the Company.

Each warrant will entitle its holder to purchase the principal amount of debt securities or the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any

[Table of Contents](#)

other office indicated in the applicable prospectus supplement. Until any warrants to purchase debt securities are exercised, the holder of the warrants will not have any rights of holders of the debt securities that can be purchased upon exercise, including any rights to receive payments of principal, premium or interest on the underlying debt securities or to enforce covenants in the applicable indenture. Until any warrants to purchase common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up on the common stock or preferred stock, if any.

The description in the applicable prospectus supplement of any warrants that we may offer will not necessarily be complete and will be subject, and qualified in its entirety by reference, to the complete text any applicable warrant agreement and certificate, which will be filed with the SEC.

DESCRIPTION OF RIGHTS

We may issue rights to purchase debt securities, preferred stock, common stock or other securities. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the shareholder receiving the rights in such offering. The applicable prospectus supplement may add, update or change the terms and conditions of the rights as described in this prospectus. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete rights agreements and rights certificates that contain the terms of the rights.

The applicable prospectus supplement will describe the specific terms of any offering of rights for which this prospectus is being delivered, including the following:

- the price, if any, per right;
- the exercise price payable for debt securities, preferred stock, common stock, or other securities upon the exercise of the rights;
- the number of rights issued or to be issued to each shareholder;
- the number and terms of debt securities, preferred stock, common stock, or other securities which may be purchased per right;
- the extent to which the rights are transferable;
- any other terms of the rights, including the terms, procedures and limitations relating to the exchange and exercise of the rights;
- the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;
- the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities; and
- if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the applicable securities purchased upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than shareholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements with one or more underwriters or other purchasers, pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering, as described in the applicable prospectus supplement.

The description in the applicable prospectus supplement of any rights that we may offer will not necessarily be complete and will be subject, and qualified in its entirety by reference, to the applicable rights agreement and rights certificate, which will be filed with the SEC.

DESCRIPTION OF STOCK PURCHASE CONTRACTS

We may issue stock purchase contracts, including contracts obligating holders to purchase from or sell to us, and obligating us to sell to or purchase from the holders, a specified number of shares of common stock, preferred stock or other securities at a future date or dates, which we refer to in this prospectus as stock purchase contracts. The price per share of the securities and the number of shares of the securities may be fixed at the time the stock purchase contracts are issued or may be determined by reference to a specific formula set forth in the stock purchase contracts, and may be subject to adjustment under anti-dilution formulas.

The applicable prospectus supplement will describe the material terms of the stock purchase contracts. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete stock purchase contract agreements and stock purchase contracts that contain the terms of the stock purchase contracts. Certain United States federal income tax considerations applicable to the stock purchase contracts will also be discussed in the applicable prospectus supplement.

The description in the applicable prospectus supplement of any stock purchase contracts that we may offer will not necessarily be complete and will be subject, and qualified in its entirety by reference, to the applicable stock purchase contract, and, if applicable, collateral or depositary arrangements relating to the stock purchase contract, which will be filed with the SEC.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of any unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes certain features of the units that we may offer under this prospectus. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete unit agreements that contain the terms of the units. If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain United States federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent securities.

The description in the applicable prospectus supplement of any units that we may offer will not necessarily be complete and will be subject, and qualified in its entirety by reference, to the applicable unit agreement, which will be filed with the SEC.

PLAN OF DISTRIBUTION

We may sell the offered securities from time to time:

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

We will identify the specific plan of distribution, including any underwriters, dealers, agents or direct purchasers and their compensation in the applicable prospectus supplement.

LEGAL MATTERS

Certain legal matters relating to the issuance and sale of the securities offered hereby will be passed upon for us by our counsel, Hogan Lovells US LLP, Baltimore, Maryland. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The financial statements incorporated in this prospectus by reference from the 2019 Annual Report for the year ended December 31, 2019, and the effectiveness of the Company's internal control over financial reporting, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

The financial statements as of December 31, 2018 and for each of the two years in the period ended December 31, 2018 incorporated in this prospectus by reference to the 2019 Annual Report have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

**UP TO \$100,000,000
SHARES OF COMMON STOCK**



PROSPECTUS SUPPLEMENT



August 9, 2022
