UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Ocugen, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

04-3522315 (I.R.S. Employer Identification Number)

11 Great Valley Parkway Malvern, PA 19355 (484) 328-4701

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Shankar Musunuri, Ph.D., MBA Chief Executive Officer and Chairman Ocugen, Inc. 11 Great Valley Parkway Malvern, PA 19355 (484) 328-4701

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Rachael M. Bushey, Esq.
Jennifer L. Porter, Esq.
Goodwin Procter LLP
2929 Arch Street, Suite 1700
Philadelphia, Pennsylvania 19104
(445) 207-7800

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement. If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: \Box If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. \Box Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. Accelerated filer □ Non-accelerated filer □ Smaller reporting Emerging growth company □ Large accelerated filer ⊠ $company \ \boxtimes$

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new

or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 to Registration Statement on Form S-3 (Commission File No. 333-254550), or the Automatic Shelf Registration Statement, of Ocugen, Inc., or the Registrant, is being filed because the Registrant will no longer be a well-known seasoned issuer (as such term is defined in Rule 405 of the Securities Act of 1933, as amended, or the Securities Act) when it files its Annual Report on Form 10-K for the fiscal year ended December 31, 2022. This Post-Effective Amendment No. 1 is filed using EDGAR submission type POSASR and supplements disclosure to the Automatic Shelf Registration Statement required for a registrant other than a well-known seasoned issuer and makes certain other amendments.

The registration statement contains:

- A base prospectus relating to the offer, issuance, and sale by us of our common stock, \$0.01 par value per share, preferred stock, \$0.01 par value per share, debt securities, warrants, and units from time to time in one or more offerings with a total value of up to \$175,000,000; and
- A resale prospectus relating to the resale by the selling stockholders named in such prospectus or such selling stockholders as may be named in one or more prospectus supplements of (i) up to 547,450 shares of our common stock issuable upon the conversion of 54,745 shares of our Series B Convertible Preferred Stock, \$0.01 par value per share, and (ii) up to 801,832 shares of our common stock issuable or issued upon the exercise of certain warrants, in each case, from time to time in one or more offerings.

The base prospectus immediately follows this explanatory note. The specific terms of any securities to be offered pursuant to the base prospectus will be specified in a prospectus supplement to the base prospectus. The resale prospectus immediately follows the base prospectus. The common stock that may be offered and sold by the selling stockholders under the resale prospectus is included in the \$175,000,000 of securities that may be offered, issued, and sold by the Registrant under the base prospectus.



\$175,000,000

Common Stock Preferred Stock Debt Securities Warrants Units

From time to time, we or the selling securityholders may offer and sell up to \$175,000,000 in the aggregate principal amount of the securities identified above in one or more offerings, or any combination of the foregoing, either individually or as units comprised of two or more other securities. This prospectus provides a general description of the securities that we or such selling securityholders may offer and sell.

Each time that we or any selling securityholders offer securities under this prospectus, we or such selling securityholders will provide a supplement to this prospectus that contains the specific terms of the securities offered, including the public offering price and, if applicable, information about the selling security holders. Any prospectus supplement may add to, update, or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement together with additional information described under the heading "Where You Can Find More Information" before you make your investment decision.

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. If any underwriters, dealers, or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission, or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. In addition, the selling securityholders may offer and sell shares of our common stock from time to time, together or separately. 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.

Our common stock is traded on The Nasdaq Capital Market, or Nasdaq, under the symbol "OCGN." On February 27, 2023, the closing sale price of our common stock on Nasdaq was \$0.976 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on Nasdaq or any other securities exchange of the securities covered by the applicable prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. RISKS ASSOCIATED WITH AN INVESTMENT IN OUR SECURITIES WILL BE DESCRIBED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND CERTAIN OF OUR FILINGS WITH THE SECURITIES AND EXCHANGE COMMISSION INCORPORATED BY REFERENCE INTO THIS PROSPECTUS, AS DESCRIBED UNDER "RISK FACTORS" ON PAGE 7.

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

Prospectus dated February 28, 2023

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf registration process, we or the selling securityholders may offer and sell shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination with other securities, in one or more offerings for an aggregate offering amount of up to \$175,000,000.

This prospectus provides you only with a general description of the securities that we or any selling securityholder may offer and sell. Each time that we or the selling securityholders offer and sell securities, we or the selling securityholders 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, including the type and number of securities being offered, the offering price, the names of any underwriters, dealers, brokers, or agents and the applicable sales commission or discount. 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 and any free writing prospectus that we may authorize to be provided to you may also add, update, or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, as applicable. You should read carefully the entire prospectus and any accompanying prospectus supplement or related free writing prospectus, as well as the documents incorporated by reference into this prospectus and/or any prospectus supplement, before making an investment decision. Please also read the additional information described under "Where You Can Find More Information" below.

Neither we nor any selling securityholder has authorized any dealer, agent, or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement or related free writing prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement or related free writing prospectus. This prospectus and the accompanying prospectus supplement and related free writing prospectus, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying prospectus supplement and related free writing prospectus, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should assume that the information appearing in this prospectus and the accompanying prospectus supplement is accurate only as of the date on its respective cover, that the information appearing in any related 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 incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement, or any applicable free writing prospectus may involve estimates, assumptions, and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus, the applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

Unless the context otherwise requires, references in this prospectus to "Ocugen," the "Company," "we," "our" or "us" refer to Ocugen, Inc. and its subsidiaries. See "About Ocugen, Inc.—Company Information."

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form S-3 filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the indenture and other 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. Whenever a reference is made in this prospectus to any of our contracts, agreements, or other documents, the reference may not be complete, and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated herein by reference for a copy of such contract, agreement, or other document.

We are currently subject to the reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, proxy statements, and other information with the SEC. Our SEC filings are available to you on the SEC's website at www.sec.gov and in the "Investors" section of our website at www.ocugen.com. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- Our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 28, 2022;
- Our Quarterly Reports on Form 10-Q for the periods ended March 31, 2022, filed with the SEC on May 6, 2022, June 30, 2022, filed with the SEC on May 6, 2022, June 30, 2022, filed with the SEC on November 8, 2022;
- Our Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports related to such items) filed with the SEC on March 4, 2022, March 11, 2022, March 23, 2022, April 4, 2022, April 12, 2022, April 18, 2022, April 20, 2022, May 6, 2022, May 23, 2022, May 24, 2022, June 7, 2022, June 10, 2022, August 16, 2022, August 17, 2022, August 26, 2022, September 14, 2022, September 28, 2022, November 8, 2022, December 16, 2022, January 9, 2023, January 9, 2023, and February 6, 2023;
- Our <u>Definitive Proxy Statement on Schedule 14A filed with the SEC on April 28, 2022</u>, to the extent incorporated by reference into Part III of the <u>Annual Report on Form 10-K for the fiscal year ended December 31, 2021</u>; and
- The description of our securities contained in our registration statement on Form 8-A filed with the SEC on November 18, 2014 (File No. 001-36751), together with any amendments or reports filed for the purposes of updating this description, including Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 28, 2022.

We also incorporate by reference any future filings (other than any filings or portions of such reports that are not deemed "filed" under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents by writing or telephoning us at the following address or phone number:

Ocugen, Inc. Attention: Corporate Secretary 11 Great Valley Parkway Malvern, Pennsylvania, 19355 (484) 328-4701

ABOUT OCUGEN, INC.

Overview

We are a biotechnology company focused on discovering, developing, and commercializing novel gene and cell therapies and vaccines that improve health and offer hope for patients across the globe.

Our cutting-edge technology pipeline includes:

- Modifier Gene Therapy Platform Based on the use of nuclear hormone receptors, or NHRs, we believe our modifier gene therapy platform has the potential to address many retinal diseases, including retinitis pigmentosa, or RP, Leber congenital amaurosis, or LCA, dry age-related macular degeneration, or AMD, and Stargardt disease, with a single mutation-agnostic therapy.
- Regenerative Medicine Cell Therapy Platform Our Phase 3-ready regenerative medicine cell therapy platform technology, NeoCart (autologous chondrocyte-derived neocartilage), is being developed for the repair of knee cartilage injuries in adults.
- Vaccines COVAXIN is our whole-virion inactivated intramuscular COVID-19 vaccine candidate, which we are developing for the North American market. We are also developing a novel inhaled mucosal vaccine platform, which includes OCU500, a bivalent COVID-19 vaccine; OCU510, a seasonal quadrivalent flu vaccine; and OCU520, a combination quadrivalent seasonal flu and bivalent COVID-19 vaccine.
- Novel Biologic Therapy for Retinal Diseases OCU200 is a novel fusion protein containing parts of human tumstatin and transferrin. OCU200 is designed to treat diabetic macular edema, or DME, diabetic retinopathy, or DR, and wet AMD.

Modifier Gene Therapy Platform

We are developing a modifier gene therapy platform designed to fulfill unmet medical needs related to retinal diseases, including inherited retinal diseases, or IRDs, such as RP, LCA, and Stargardt disease, as well as dry AMD with a single mutation-agnostic therapy. Our modifier gene therapy platform is based on the use of NHRs, which have the potential to restore homeostasis — the basic biological processes in the retina. Unlike single-gene replacement therapies, which only target one genetic mutation, we believe that our modifier gene therapy platform, through its use of NHRs, represents a novel approach that has the potential to address multiple retinal diseases caused by mutations in multiple genes with one product, and potentially address complex diseases that are potentially caused by imbalances in multiple gene networks.

We believe that OCU400 has the potential to be broadly effective in restoring retinal integrity and function across a range of genetically diverse IRDs, including RP and LCA. OCU400 has received Orphan Drug Designation, or ODD, from the United States Food and Drug Administration, or FDA, for nuclear receptor subfamily 2 group E member 3, or *NR2E3*,-related RP and LCA and Orphan Medicinal Product Designation, or OMPD, from the European Commission, based on the recommendation of the European Medicines Agency, for RP and LCA. We previously received ODDs from the FDA for the treatment of certain disease genotypes: *NR2E3*, centrosomal protein 290, or *CEP290*, rhodopsin, or *RHO*, and phosphodiesterase 6B mutation-associated inherited retinal degenerations.

We are conducting a Phase 1/2 clinical trial to assess the safety of unilateral subretinal administration of OCU400 in patients with *NR2E3* and *RHO*-related RP and *CEP290*-related LCA in the United States. We have completed dosing patients with RP in the dose-escalation portion of the clinical trial, which enrolled 10 subjects to receive a low, medium, or high dose of OCU400 in the subretinal space. We are continuing to enroll subjects with RP and LCA in this clinical trial to receive the high dose, which was determined to be the maximum tolerable dose from the dose-escalation portion of the clinical trial. We intend to initiate a Phase 1/2 pediatric clinical trial for OCU400 for the treatment of RP and LCA in the second quarter of 2023 and a Phase 3 clinical trial for OCU400 for the treatment of RP and LCA near the end of 2023, subject to discussions with the FDA.

We are also developing OCU410 and OCU410ST to utilize the nuclear receptor genes RAR-related orphan receptor A for the treatment of dry AMD and Stargardt disease, respectively. We are currently executing Investigational New Drug, or IND-enabling studies and intend to submit IND applications in the second quarter of 2023 to initiate Phase 1/2 clinical trials.

Regenerative Medicine Cell Therapy Platform

NeoCart is a Phase 3-ready, regenerative medicine cell therapy technology that combines breakthroughs in bioengineering and cell processing to enhance the autologous cartilage repair process. NeoCart is a three-dimensional tissue-engineered disc of new cartilage that is manufactured by growing chondrocytes, the cells responsible for maintaining cartilage health. The chondrocytes are derived from the patient on a unique scaffold. In this therapy, healthy cartilage tissue is grown and implanted in the patient. We believe NeoCart has the potential to accelerate healing and reduce pain by reconstructing a patient's previously damaged knee cartilage. It is designed to treat pain at the source, improve function, and potentially prevent a patient's progression to osteoarthritis. The FDA granted a regenerative medicine advanced therapy designation to NeoCart for the repair of full-thickness lesions of knee cartilage injuries in adults. We received concurrence from the FDA on the confirmatory Phase 3 clinical trial design. We are renovating an existing facility into a current Good Manufacturing Practice, or GMP, facility in accordance with the FDA's regulations in support of NeoCart manufacturing for Phase 3 clinical trial material. We intend to initiate the Phase 3 clinical trial in the first half of 2024, subject to discussions with the FDA.

Vaccinos

Intramuscular COVID-19 Vaccine

We have a Co-Development, Supply and Commercialization Agreement, or the Covaxin Agreement, with Bharat Biotech International Limited, or Bharat Biotech, pursuant to which we obtained an exclusive right and license under certain of Bharat Biotech's intellectual property rights, with the right to grant sublicenses, to develop, manufacture, and commercialize COVAXIN for the prevention of COVID-19, caused by SARS-CoV-2, in the United States, its territories, and possessions, Canada, and Mexico, or the Ocugen Covaxin Territory. COVAXIN is a whole-virion inactivated intramuscular COVID-19 vaccine candidate and is formulated with the inactivated SARS-CoV-2 virus, an antigen, and an adjuvant.

In January 2023, we announced top-line results from our Phase 2/3 immuno-bridging and broadening clinical trial in the United States evaluating COVAXIN for adults ages 18 years and older. The clinical trial was designed to evaluate whether the immune response observed in participants in a Phase 3 clinical trial previously conducted by Bharat Biotech in India is similar to a demographically representative, adult population in the United States. The clinical trial met both co-primary immunogenicity endpoints. There were no cases of adverse events or serious adverse events related to the vaccination with COVAXIN. We plan to work with government agencies in the United States to obtain funding in order to comply with the requirements of a Biologics License Application submission, including funding to initiate an adult safety clinical trial subject to discussions with the FDA.

In July 2021, we completed our rolling submission to Health Canada for COVAXIN. The rolling submission process, which was conducted through our Canadian subsidiary, Vaccigen Ltd., was recommended and accepted under the Minister of Health's Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19 and transitioned to a New Drug Submission, or NDS, for COVID-19. In August 2022, we withdrew our NDS based on discussions with Health Canada and are evaluating the requirements for resubmitting an updated NDS. In Mexico, the Comisión Federal para la Protección contra Riesgos Sanitarios authorized emergency use for COVAXIN for adults ages 18 years and older, which remains active. We are in discussions with Consejo Nacional de Ciencia y Tecnología in Mexico regarding our submission for emergency use authorization for COVAXIN for pediatric use in ages five to 18 years.

Inhaled Mucosal Vaccines

In September 2022, we entered into an exclusive license agreement, or the WU License Agreement, with The Washington University in St. Louis, pursuant to which we obtained the rights to develop, manufacture, and commercialize an inhaled mucosal COVID-19 vaccine for the prevention of COVID-19 in the United States, Europe, and Japan. The WU License Agreement was amended in January 2023 to add the countries of South Korea, Australia, and China to the territory rights, and together with the United States, Europe, and Japan, the Mucosal Vaccine Territory. Utilizing these rights, we are developing a novel inhaled mucosal vaccine platform, which includes OCU500, a bivalent COVID-19 vaccine; OCU510, a seasonal quadrivalent flu vaccine; and OCU520, a combination quadrivalent seasonal flu and bivalent COVID-19 vaccine. As these vaccine candidates are being developed to be administered through inhalation, we believe they have the potential to generate rapid local immunity in the upper airways and lungs where viruses enter and infect the body, which we believe may help reduce or prevent infection and transmission as well as provide protection against new virus variants. OCU510 is being developed for the global market. We intend to initiate IND-enabling studies and work closely with government agencies to obtain funding for the development of these inhaled mucosal vaccines.

Novel Biologic Therapy for Retinal Diseases

We are developing OCU200, which is a novel fusion protein containing parts of human tumstatin and transferrin. OCU200 is designed to treat DME, DR, and wet AMD. We have completed the technology transfer of manufacturing processes to our contract development and manufacturing organization and have produced clinical trial materials to initiate a Phase 1 clinical trial. We submitted an IND application to the FDA in February 2023 to initiate a Phase 1 clinical trial targeting DME.

Company Information

We were originally incorporated as a Massachusetts corporation in 2000 under the name Histogenics Corporation. In 2006, we underwent a corporate reorganization pursuant to which we were reincorporated as a Delaware corporation. On September 27, 2019, we completed a reverse merger, or the Merger, with Ocugen OpCo, Inc., or OpCo, in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of April 5, 2019, by and among OpCo, Restore Merger Sub, Inc., our wholly owned subsidiary, or Merger Sub, and us, as amended, or the Merger Agreement, pursuant to which Merger Sub merged with and into OpCo, with OpCo surviving as our wholly owned subsidiary. Immediately after the completion of the Merger, we changed our name to Ocugen, Inc. and the business previously conducted by OpCo became the business conducted by us. Our common stock trades on The Nasdaq Capital Market, or Nasdaq, under the symbol "OCGN."

Our principal offices are located at 11 Great Valley Parkway, Malvern, Pennsylvania 19355, and our telephone number is (484) 328-4701. Our website address is www.ocugen.com. Our website and the information contained on, or that can be accessed through, our website shall not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. See "Where You Can Find More Information" and "Incorporation of Information by Reference."

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described under the heading "Risk Factors" contained in the accompanying prospectus supplement and any related free writing prospectus, and discussed in the section titled "Risk Factors" contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2021, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, our quarterly reports, and documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering. See "Where You Can Find More Information." The risks described in the Annual Report and such subsequent filings are not the only risks that we face. Additional risks not presently known to us or that we do not currently consider significant may also have an adverse effect on us. If any of the risks actually occur, our business, results of operations, cash flows, or financial condition could suffer. We cannot assure you that any of the events discussed in the risk factors will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition, and cash flows and if so, our future prospects would likely be materially and adversely affected. If any of such events were to happen, the trading price and value of our securities could decline, and you could lose all or part of your investment. You should understand that it is not possible to predict or identify all such risks. Consequently, you should not consider the risk factors to be a complete discussion of all potential risks or uncertainties. Please also carefully read the section below titled "Special Note Regarding Forward-Looking Statements."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus and the documents incorporated by reference herein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans, and objectives of management are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will," "would" or the negative of such terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Such statements are based on assumptions and expectations that may not be realized and are inherently subject to risks, uncertainties, and other factors, many of which cannot be predicted with accuracy and some of which might not even be anticipated.

The forward-looking statements in this prospectus and the documents incorporated by reference herein include, among other things, statements about:

- our estimates regarding expenses, future revenues, and capital requirements, as well as the timing, availability of, and the need for, additional financing to continue to advance our product candidates;
- our ability to obtain sufficient additional funding to continue to advance our product candidates;
- our activities with respect to OCU400, including the results from our Phase 1/2 clinical trial and our ability to successfully initiate and subsequently complete a Phase 3 clinical trial and a pediatric Phase 1/2 clinical trial;
- our ability to successfully submit an amendment to the IND application to the FDA for NeoCart and to subsequently initiate a Phase 3 clinical trial;
- our activities with respect to COVAXIN, a vaccine candidate for the prevention of COVID-19 caused by SARS-CoV-2 in humans, in collaboration
 with Bharat Biotech, including our plans and expectations regarding clinical development, manufacturing, pricing, regulatory review and
 compliance, reliance on third parties, and commercialization;
- the ability of our collaboration partner, Bharat Biotech, to successfully respond to the deficiencies identified in an inspection conducted by the World Health Organization, or the WHO, and any potential impact of these deficiencies on the regulatory and commercialization pathway, clinical and commercial supply, and the technology transfer for COVAXIN;
- our ability to obtain funding from government agencies in the United States and other countries to continue the development of our vaccine candidates;
- the uncertainties associated with the clinical development and regulatory approval of our product candidates, including potential delays in the initiation, commencement, enrollment, and completion of current and future clinical trials;
- our ability to realize any value from product candidates and preclinical programs being developed and anticipated to be developed in light of inherent risks and difficulties involved in successfully commercializing products and the risk that our products, if approved, will not achieve broad market acceptance;
- uncertainties in obtaining successful clinical trial results for product candidates and unexpected costs that may result therefrom;

- our ability to comply with regulatory schemes and other regulatory developments applicable to our business in the United States and other countries; including the extent to which developments with respect to the COVID-19 pandemic will affect the regulatory pathway available for COVID-19 vaccines in such countries:
- the performance of third-parties upon which we depend, including contract development and manufacturing organizations, suppliers, manufacturers, group purchasing organizations, distributors, and logistics providers;
- the pricing and reimbursement of our product candidates, if commercialized;
- our ability to obtain and maintain patent protection, or obtain licenses to intellectual property and defend our intellectual property rights against third-parties;
- our ability to maintain our relationships, profitability, and contracts with our key collaborators and commercial partners and our ability to establish additional collaborations and partnerships;
- · our ability to recruit and retain key scientific, technical, commercial, and management personnel and to retain our executive officers;
- our ability to comply with stringent United States and applicable foreign government regulations with respect to the manufacturing of pharmaceutical products, including current GMP compliance, and other relevant regulatory authorities;
- the extent to which health epidemics and other outbreaks of communicable diseases, including the COVID-19 pandemic, geopolitical turmoil, macroeconomic conditions, social unrest, political instability, terrorism, or acts of war could disrupt our business and operations, including impacts on our development programs, global supply chain, and collaborators and manufacturers; and
- the other risks, uncertainties and factors discussed under the heading "Risk Factors" in our most recent Annual Report on Form 10-K, as revised and supplemented by those risks described from time to time in other reports which we file with the SEC.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in or incorporated by reference into this prospectus, particularly under "Risk Factors" that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations, or investments we may make.

You should read this prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. You should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus and in the applicable prospectus supplement. See "Risk Factors."

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement relating to a specific offering, we intend to use the net proceeds from the sale of securities by us under this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures, acquisitions of new technologies or businesses, and investments. Additional information on the use of net proceeds from the sale of securities by us under this prospectus will be set forth in the prospectus supplement relating to the specific offering. We will not receive any proceeds from the sale of securities being offered by any selling securityholders.

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of our capital stock is subject to and qualified in its entirety by reference to our sixth amended and restated certificate of incorporation, as amended, or the Certificate, and our amended and restated bylaws, or Bylaws, copies of which are on file with the SEC as exhibits to previous SEC filings. Please refer to "Where You Can Find More Information" below for directions on obtaining these documents.

Our authorized capital stock consists of 305,000,000 shares, 295,000,000 of which are designated as common stock with a par value of \$0.01 per share and 10,000,000 of which are designated as preferred stock with a par value of \$0.01 per share.

As of February 21, 2023, (i) our capital stock was held of record by approximately 22 stockholders and (ii) there were 226,417,682 shares of common stock outstanding, 54,745 shares of preferred stock outstanding, warrants to purchase an aggregate of 798,352 shares of common stock outstanding, options to purchase an aggregate of 14,140,244 shares of common stock, and 3,650,936 restricted stock units outstanding.

Common Stock

Shares of our common stock have the following rights, preferences, and privileges:

Voting Rights

Each holder of common stock is entitled to one vote per share on all matters submitted to a vote of stockholders. We have not provided for cumulative voting in the election of directors. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election. Except as otherwise required by law, holders of our common stock are not entitled to vote on any amendment to the Certificate that relates solely to the terms of an outstanding series of preferred stock if the holders of such series are entitled to vote thereon pursuant to the Certificate or any certificate of designation.

Dividends

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of assets legally available at the times and in the amounts that our board of directors may determine from time to time. The timing, declaration, amount, and payment of future dividends will depend on our financial condition, earnings, capital requirements, and debt service obligations, as well as legal requirements, regulatory constraints, industry practice, and other factors that its board of directors deems relevant. Our board of directors will make all decisions regarding our payment of dividends from time to time in accordance with applicable law.

Liquidation

Upon our liquidation, dissolution, or winding-up, the holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any outstanding preferred stock.

No Preemptive or Similar Rights

The holders of our common stock do not have any preemptive rights or preferential rights to subscribe for shares of our capital stock or any other securities. Our common stock is not subject to any redemption or sinking fund provisions.

Transfer Agent and Registrar

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

Listing

Our common stock is listed on Nasdaq under the symbol "OCGN." The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on Nasdaq or the other securities exchange of the securities covered by the applicable prospectus supplement.

Preferred Stock

We may issue, from time to time in one or more series, the terms of which may be determined at the time of issuance by our board of directors, without further action by our stockholders, shares of preferred stock and such shares may include voting rights, preferences as to dividends and liquidation, conversion rights, redemption rights, and sinking fund provisions. The shares of each series of preferred stock shall have preferences, limitations, and relative rights, including voting rights, identical with those of other shares of the same series and, except to the extent provided in the description of such series, of those of other series of preferred stock.

The laws of the state of Delaware, the state of our incorporation, provide that the holders of preferred stock will have the right to vote separately, as a class, on any proposal involving fundamental changes in the rights of holders of such preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

The issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of common stock or adversely affect the rights and powers, including voting rights, of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control of Ocugen or the removal of management, which could depress the market price of our common stock.

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

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- · the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into common stock or other securities of the Company, and, if applicable, the conversion price (or how it will be calculated), the conversion period and any other terms of conversion (including any anti-dilution provisions, if any);
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated), the exchange period and any other terms of exchange (including any anti-dilution provisions, if any);
- · voting rights, if any, of the preferred stock; and
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights.

The transfer agent and registrar for any series of preferred stock will be set forth in each applicable prospectus supplement.

Description of Other Securities Outstanding

Series A Convertible Preferred Stock

Our board of directors provided for the issuance of Series A Convertible Preferred Stock, or the Series A Preferred, pursuant to the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock, or the Series A Certificate of Designation. Holders of Series A Preferred are entitled to receive dividends on Series A Preferred equal (on an as-converted to common stock basis) to and in the same form as dividends actually paid on shares of common stock, when and if such dividends are paid. Except as provided by law and certain protective provisions set forth in the Series A Certificate of Designation, the Series A Preferred has no voting rights. Upon the liquidation or dissolution of Ocugen, holders of Series A Preferred will be entitled to receive the same amount that a holder of common stock would receive if the preferred stock were fully converted to common stock. Shares of Series A Preferred are convertible to common stock at the option of the holder, on the terms and subject to the conditions set forth in the Series A Certificate of Designation.

The foregoing summary of the terms of the Series A Preferred is subject to and qualified in its entirety by reference to the Certificate and the Series A Certificate of Designation, copies of which are on file with the SEC as exhibits to previous SEC filings. Please refer to "Where You Can Find More Information" below for directions on obtaining these documents.

Series B Convertible Preferred Stock

Our board of directors provided for the issuance of Series B Convertible Preferred Stock, or the Series B Preferred, pursuant to the Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock, or the Series B Certificate of Designation. Up to 54,745 shares are designated as Series B Preferred. Holders of Series B Preferred are entitled to receive dividends on Series B Preferred equal (on an as-converted to common stock basis) to and in the same form as dividends actually paid on shares of common stock, when and if such dividends are paid. Except as provided by law and certain protective provisions set forth in the Series B Certificate of Designation, the Series B Preferred has no voting rights. Upon the liquidation or dissolution of Ocugen, holders of Series B Preferred will be entitled to receive the same amount that a holder of common stock would receive if the preferred stock were fully converted to common stock.

Each share of Series B Preferred is convertible, at the option of the holder, into 10 shares of our common stock only after (i) we received stockholder approval to increase the number of authorized shares of common stock under the Certificate and (ii) our receipt of shipments by Bharat Biotech of the first 10 million doses of COVAXIN manufactured by Bharat Biotech pursuant to a supply agreement, and further on the terms and subject to the conditions set forth in the Series B Certificate of Designation. The conversion rate of the Series B Preferred is subject to adjustment in the event of a stock dividend, stock split, reclassification, or similar event with respect to the Company's common stock.

On March 1, 2021, we entered into a Preferred Stock Purchase Agreement, or the Purchase Agreement, pursuant to which we agreed to issue and sell 54,745 shares of Series B Preferred at a price per share equal to \$109.60, to Bharat Biotech. Under the terms of the Purchase Agreement, we agreed to file and to maintain a registration statement on Form S-3 covering the resale of the common stock into which the Series B Preferred Stock may be converted. The foregoing summary of the terms of the Series B Preferred is subject to and qualified in its entirety by reference to the Certificate and the Series B Certificate of Designation, copies of which are on file with the SEC as exhibits to previous SEC filings. Please refer to "Where You Can Find More Information" below for directions on obtaining these documents.

Common Stock Purchase Warrants

Between November 2016 and March 2019, OpCo issued a series of common stock purchase warrants, or the Common Stock Purchase Warrants, to certain investors pursuant to a stockholders' agreement and to two employees pursuant to their respective employment agreements. Upon the closing of the Merger, the Common Stock Purchase Warrants became exercisable for shares of our common stock. As of December 31, 2022, warrants to purchase 0.6 million shares of common stock were outstanding and exercisable. The Common Stock Purchase Warrants have exercise prices ranging from \$4.90 to \$7.56 and expire between 2026 and 2027.

In July 2021, we entered into a consulting agreement with regard to our Canadian operations, or the Canada Consulting Agreement. Compensation under the Canada Consulting Agreement included the issuance of warrants to purchase up to 0.2 million shares of our common stock, or the Canada Warrants, and cash payments of up to \$3.0 million, both dependent upon the achievement of certain milestones related to COVAXIN. The Canada Warrants were issued on July 15, 2021 and have an exercise price of \$6.36 per share. The Canada Warrants terminate on July 15, 2031, unless earlier terminated in accordance with their terms.

Anti-Takeover Effects of Provisions of Our Certificate of Incorporation, our Bylaws and Delaware Law

Various provisions contained in the Certificate, the Bylaws, and Delaware law could delay, deter, or discourage some transactions involving an actual or potential change in control of Ocugen, including acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Certificate of Incorporation and Bylaws

Preferred Stock

The Certificate authorizes our board of directors 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" for additional information. Under this authority, our board of directors 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 or exchange offer for a substantial amount of 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 acquiror to obtain control of us by means of a merger, tender or exchange offer, proxy contest or otherwise, and thereby protect the continuity of the company's management. The issuance of shares of preferred stock may have the effect of delaying, deferring, or preventing a change in control of us without any action by our stockholders.

Classified Board

The Certificate and the Bylaws provide that the directors, other than those who may be elected by the holders of any series of preferred stock under specified circumstances, shall be divided into three classes. Such classes shall be as nearly equal in number of directors as reasonably possible. The election of the classes is staggered, such that only approximately one third of our board of directors is up for election in any given year. Each director shall serve for a term ending on the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected. Each director shall serve until such director's successor shall have become duly elected and qualified, or until such director's prior death, resignation, retirement, disqualification, or other removal.

Election of Directors

The Certificate does not provide for cumulative voting in the election of directors. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Board Vacancies: Removal

The Certificate provides that any vacancy occurring on our board of directors will be filled by a majority of directors then in office, even if less than a quorum. The Certificate also provides that our directors can only be removed for cause upon the vote of more than two-thirds of the votes entitled to be cast by holders of all the then-outstanding shares of capital stock, voting together as a single class.

Special Meetings of Stockholders; Number of Directors and No Action by Written Consent of Stockholders

The Certificate and the Bylaws provide that only the board of directors, the chairman of the board of directors, or the president may call a special meeting of our stockholders. The Bylaws provide that the authorized number of directors be changed only by resolution of the board of directors. The Bylaws provide that the stockholders may act only upon a duly called annual or special meeting and no action may be effected by written consent.

Advance Notification of Shareholder Nominations and Proposals

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

Amendments to Certificate and Bylaws

The amendment of any of the above provisions (except for the provision making it possible for the board of directors to issue undesignated preferred stock) and the exclusive form and indemnification provisions described below, would require approval by a stockholder vote by the holders of at least a two thirds of the voting power of the then outstanding voting stock.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Exclusive Jurisdiction for Certain Actions

The Certificate provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action arising pursuant to any provision of the DGCL, or (iv) any action asserting a claim governed by the internal affairs doctrine. This exclusive forum provision would not apply to suits brought to enforce any liability or duty created by the Securities Act or the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

The enforceability of similar federal court choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find this type of provision to be inapplicable or unenforceable. If a court were to find either of the choice of forum provisions contained in the Certificate to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

The choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, and other employees and result in increased costs for investors to bring a claim.

Indemnification

The Certificate includes provisions that limit the liability of our directors for monetary damages for breach of their fiduciary duty as directors, except for liability that cannot be eliminated under the DGCL. Accordingly, our directors will not be personally liable for monetary damages for breach of their fiduciary duty as directors, except for liabilities:

- · for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for unlawful payments of dividends or unlawful stock repurchases or redemptions, as provided under Section 174 of the DGCL; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment or repeal of these provisions will require the approval of the holders of shares representing at least two-thirds of the shares entitled to vote in the election of directors, voting as one class. The Certificate and Bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. The Certificate and Bylaws also permit us to purchase insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions as its officer, director, employee, or agent, regardless of whether Delaware law would permit indemnification. We have entered into separate indemnification agreements with our directors and executive officers that require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors and to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified. We believe that the limitation of liability provision in the Certificate and the indemnification agreements facilitate our ability to continue to attract and retain qualified individuals to serve as directors and officers.

The limitation of liability and indemnification provisions in the Certificate and Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of the debt securities that we may offer under this prospectus, any of which may be issued as convertible or exchangeable debt securities. We will set forth the particular terms of the debt securities we offer in a prospectus supplement. The extent, if any, to which the following general provisions apply to particular debt securities will be described in the applicable prospectus supplement. The following description of general terms relating to the debt securities, and the indenture under which the debt securities will be issued are summaries only and therefore are not complete. You should read the indenture and the prospectus supplement regarding any particular issuance of debt securities.

The debt securities we may offer may be either senior debt securities, senior subordinated debt securities, or subordinated debt securities. We will issue any debt securities under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and any amendment or supplement thereto and those made part of the indenture by reference to the Trust Indenture Act of 1939, or the Trust Indenture Act, as in effect on the date of the indenture. We have filed or will file a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included.

The following statements relating to the debt securities and the indenture are summaries, qualified in their entirety by reference to the detailed provisions of the indenture and the final form indenture which will be filed with a future prospectus supplement and any amendment or supplement thereto.

General

We can issue an unlimited amount of debt securities under the indenture that may be in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

- · the title of the series;
- · the aggregate principal amount;
- the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;
- · any limit on the aggregate principal amount;
- the date or dates on which principal is payable;
- the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates;
- the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;
- the place or places where principal and, if applicable, premium and interest, is payable;
- the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;
- the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;
- whether the debt securities are to be issuable in the form of certificated securities (as described below) or global securities (as described below);
- the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities;
- · the currency of denomination;
- the designation of the currency, currencies, or currency units in which payment of principal and, if applicable, premium and interest, will be made;
- if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined:

- · if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;
- the provisions, if any, relating to any collateral provided for such debt securities;
- any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture;
- any events of default, if not otherwise described below under "Defaults and Notice";
- the terms and conditions, if any, for conversion into or exchange for shares of our common stock or preferred stock;
- · any depositaries, interest rate calculation agents, exchange rate calculation agents, or other agents;
- · any guaranties of the debt securities;
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to other of our indebtedness; and
- the terms and conditions, if any, pursuant to which the debt securities, in whole or in part, shall be defeasible.

All debt securities of one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of any holder, for issuances of additional debt securities of that series with the same terms as the original debt securities of that series (other than the issue price and the interest accrued prior to the issue date of the additional debt securities). We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement. We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Exchange and/or Conversion Rights

We may issue debt securities which can be exchanged for or converted into shares of our common stock or preferred stock. If we do, we will describe the terms of exchange or conversion in the prospectus supplement relating to these debt securities.

Transfer and Exchange

We may issue debt securities that will be represented by either:

- · "book-entry securities," which means that there will be one or more global securities registered in the name of a depositary or a nominee of a depositary; or
- · "certificated securities," which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

Certificated Debt Securities

If you hold certificated debt securities issued under an indenture, you may transfer or exchange such debt securities in accordance with the terms of the indenture. You will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

Global Securities

The debt securities of a series may be issued in the form of one or more global securities that will be deposited with a depositary or its nominees identified in the prospectus supplement relating to the debt securities. Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a global security may not be registered for transfer or exchange except as a whole by the depositary for such global security to a nominee of the depositary and except in the circumstances described in the prospectus supplement relating to the debt securities. For more information, please see "Global Securities" below.

Protection in the Event of Change of Control

Any provision in an indenture that governs our debt securities covered by this prospectus that includes any covenant or other provision providing for a put or increased interest or that would otherwise afford holders of its debt securities additional protection in the event of a recapitalization transaction, a change of control of Ocugen, or a highly leveraged transaction will be described in the applicable prospectus supplement.

Covenants

Unless otherwise indicated in this prospectus or the applicable prospectus supplement, our debt securities may not have the benefit of any covenant that limits or restricts our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We will describe in the applicable prospectus supplement any material covenants in respect of a series of debt securities.

Consolidation, Merger, and Sale of Assets

We may agree in any indenture that governs the debt securities of any series covered by this prospectus that it will not consolidate with or merge into any other person or convey, transfer, sell, or lease our properties and assets substantially as an entirety to any person, unless:

- we are the surviving entity of any such merger or consolidation or the entity formed by such merger or consolidation shall be organized under the laws of the United States of America, or any state thereof or the District of Columbia, and shall expressly assume by a supplemental indenture all of our obligations related to such debt securities; and
- · immediately before and immediately after the merger or consolidation, no default or event of default shall have occurred and be continuing.

Notwithstanding the foregoing, the indenture may allow certain transactions, including, but not limited to, a merger between us and our wholly owned subsidiary or a merger between us and our affiliate for the purpose of converting the Company into a corporation under the laws of the United States of America, or any state thereof or the District of Columbia, or for the purpose of creating or collapsing a holding company structure.

Defaults and Notice

The debt securities of any series will contain events of default to be specified in the applicable prospectus supplement, which may include, without limitation:

- failure to pay the principal of, or premium, if any, on, any debt security of such series when due and payable (whether at maturity, upon redemption, acceleration or otherwise);
- failure to make a payment of any interest on any debt security of such series when due and payable and such failure continues for a period of 30 days;
- our failure to perform or observe any other covenants or agreements in the indenture with respect to the debt securities of such series and such failure continues for a period of 60 days after written notice from the trustee or holders of 25% in the aggregate principal amount of the then-outstanding debt securities of such series; and
- · certain events relating to our or our significant subsidiaries' bankruptcy, insolvency, or reorganization.

If an event of default with respect to debt securities of any series shall occur and be continuing, we may agree that the trustee or the holders of at least 25% in aggregate principal amount of the then-outstanding debt securities of such series may declare the principal amount of all debt securities of such series or such other amount or amounts as the debt securities or supplemental indenture with respect to such series may provide, to be due and payable immediately. Any provisions pertaining to events of default and any remedies associated therewith will be described in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus may require that the trustee under such indenture shall, within 90 days after the trustee knows of the occurrence of a default, give to holders of debt securities of any series notice of all uncured defaults with respect to such series known to it. However, except in the case of a default that results from the failure to make any payment of the principal of, or interest or premium, if any, on the debt securities of any series, the trustee may withhold such notice if it in good faith determines that the withholding of such notice is in the interest of the holders of debt securities of such series. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus will contain a provision entitling the trustee to be indemnified by holders of debt securities before instituting a proceeding or pursuing a remedy under the indenture at the request of such holders. Any such indenture may provide that the holders of at least a majority in aggregate principal amount of the then-outstanding debt securities of any series may direct the time, method, and place of conducting any proceedings for any remedy available to the trustee, or of exercising any trust or power conferred upon the trustee with respect to the debt securities of such series. However, the trustee under any such indenture may decline to follow any such direction if, among other reasons, the trustee determines that the actions or proceedings as directed may not lawfully be taken, would involve the trustee in personal liability or would be unduly prejudicial to the holders of the debt securities of such series not joining in such direction.

Any indenture that governs our debt securities covered by this prospectus may permit the holders of such debt securities to institute a proceeding with respect to such indenture, subject to certain conditions, which will be specified in the applicable prospectus supplement and which may include that the holders of at least 25% in aggregate principal amount of the debt securities of such series then-outstanding make a prior written request upon the trustee to exercise its power under the indenture and offer reasonable indemnity to the trustee. Even so, such holders may have an absolute right to receipt of the principal of, or premium, if any, and interest when due, to require conversion or exchange of debt securities if such indenture provides for convertibility or exchangeability at the option of the holder and to institute suit for the enforcement of such rights. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

Modification of the Indenture

We and the trustee may modify any indenture that governs our debt securities of any series covered by this prospectus with or without the consent of the holders of such debt securities, under certain circumstances to be described in a prospectus supplement.

Defeasance; Satisfaction and Discharge

The prospectus supplement will outline the conditions under which we may elect to have certain of our obligations under the indenture discharged and under which the indenture obligations will be deemed to be satisfied. Any indenture that governs our debt securities covered by this prospectus may provide that we may discharge our obligations under such debt securities and the indenture with respect to such debt securities if:

either (A) there shall have been canceled by the trustee under the indenture, or delivered to the trustee for cancellation, all debt securities of such series theretofore authenticated and delivered or (B) all such debt securities not theretofore delivered to the trustee for cancellation have become due and payable or will become due and payable within one year or are to be called for redemption within one year under irrevocable arrangements for the giving of notice of redemption by the trustee;

- we have irrevocably deposited or caused to be deposited with the trustee funds in an amount sufficient to pay and discharge the entire indebtedness on the debt securities not theretofore delivered to the trustee for cancellation, for principal, premium, if any, and interest to the maturity or date of redemption;
- we have paid all other sums payable by it under the indenture or deposited all other required sums with the trustee; and
- the deposit will not result in a breach or violation of, or constitute a default under, any other instrument or agreement to which we are a party or to which we are bound.

Any indenture that governs our debt securities covered by this prospectus may provide that we may be discharged from our obligations with respect to any debt securities, subject to certain exceptions. Further, any indenture that governs our debt securities covered by this prospectus may provide that we may be released from our obligations under certain sections of such indenture, subject to certain exceptions. In either case, such indenture may provide that certain conditions must be satisfied prior to such discharge or release, including, but not limited to:

- we shall have irrevocably deposited with the trustee, in trust, for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the holders of the debt securities, (a) money, (b) U.S. or foreign government obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment, money, or (c) a combination thereof, in an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal, accrued interest, and premium, if any;
- there shall be no continuing default or event of default with respect to such debt securities at the time of the deposit or after giving effect thereto;
- there shall not be certain conflicting interest for purposes of the Trust Indenture Act;
- · such actions shall not result in a breach or violation of, or constitute a default under, any other agreement or instrument to which we are bound;
- we shall have delivered a legal opinion relating to certain tax matters; and
- · we shall have delivered a legal opinion and certain other certificates relating to the satisfaction of the required conditions.

Regarding the Trustee

We will identify the trustee and any relationship that it may have with such trustee, with respect to any series of debt securities, in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of the Company, the indenture and the Trust Indenture Act limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any "conflicting interest" within the meaning of the Trust Indenture Act, it must eliminate such conflict or resign.

No Personal Liability of Directors, Officers, Employees, or Stockholders

None of our past, present, or future directors, officers, employees, or stockholders, as such, will have any liability for any of our obligations under the debt securities or the indenture or for any claim based on, or in respect or by reason of, such obligations or their creation. By accepting a debt security, each holder waives and releases all such liability. This waiver and release is part of the consideration for the issue of the debt securities. However, this waiver and release may not be effective to waive liabilities under U.S. federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

Governing Law

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

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement and free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock, or debt securities and may be issued in one or more series. 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 will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. The following summary is subject to, and qualified in its entirety by reference to, all the provisions 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 the 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;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants, including anti-dilution provisions of the warrants, if any;
- · the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange or market;
- · U.S. 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;
- · receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or
- · exercise any rights as stockholders of Ocugen.

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 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.

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 the 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 the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

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 U.S. federal income tax considerations applicable to the units; and
- · any other terms of the units and their constituent securities.

GLOBAL SECURITIES

Book-Entry, Delivery, and Form

Unless we indicate differently in any applicable prospectus supplement or free writing prospectus, each debt security, warrant, and unit initially will be issued in book-entry form and represented by one or more global notes or global securities, or, collectively, global securities. The global securities will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, as depositary, or DTC, and registered in the name of Cede & Co., the nominee of DTC. Unless and until it is exchanged for individual certificates evidencing securities under the limited circumstances described below, a global security may not be transferred except as a whole by the depositary to its nominee or by the nominee to the depositary, or by the depositary or its nominee to a successor depositary or to a nominee of the successor depositary.

DTC has advised us that it is:

- a limited-purpose trust company organized under the New York Banking Law;
- 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" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC holds securities that its participants deposit with DTC. DTC also facilitates the settlement among its participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in participants' accounts, thereby eliminating the need for physical movement of securities certificates. "Direct participants" in DTC include securities brokers and dealers, including underwriters, banks, trust companies, clearing corporations, and 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 Clearing 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, which we sometimes refer to as indirect participants, that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC.

Purchases of securities under the DTC system must be made by or through direct participants, which will receive a credit for the securities on DTC's records. The ownership interest of the actual purchaser of a security, which we sometimes refer to as a beneficial owner, is in turn recorded on the direct and indirect participants' records. Beneficial owners of securities will not receive written confirmation from DTC of their purchases. However, beneficial owners are expected to receive written confirmations providing details of their transactions, as well as periodic statements of their holdings, from the direct or indirect participants through which they purchased securities. Transfers of ownership interests in global securities are to be accomplished by entries made on the books of participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in the global securities, except under the limited circumstances described below.

To facilitate subsequent transfers, all global securities deposited by direct participants with DTC will be registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of securities with DTC and their registration in the name of Cede & Co. or such other nominee will not change the beneficial ownership of the securities. DTC has no knowledge of the actual beneficial owners of the securities. DTC's records reflect only the identity of the direct participants to whose accounts the securities are credited, which may or may not be the beneficial owners. The participants are responsible for keeping account of their holdings on behalf of their customers.

So long as the securities are in book-entry form, you will receive payments and may transfer securities only through the facilities of the depositary and its direct and indirect participants. We will maintain an office or agency in the location specified in the prospectus supplement for the applicable securities, where notices and demands in respect of the securities and the indenture may be delivered to us and where certificated securities may be surrendered for payment, registration of transfer, or exchange.

Conveyance of notices and other communications by DTC to direct participants, by direct participants to indirect participants and by direct participants and indirect participants, to beneficial owners will be governed by arrangements among them, subject to any legal requirements in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the securities of a particular series are being redeemed, DTC's practice is to determine by lot the amount of the interest of each direct participant in the securities of such series to be redeemed.

Neither DTC nor Cede & Co. (or such other DTC nominee) will consent or vote with respect to the securities. Under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those direct participants to whose accounts the securities of such series are credited on the record date, identified in a listing attached to the omnibus proxy.

So long as securities are in book-entry form, we will make payments on those securities to the depositary or its nominee, as the registered owner of such securities, by wire transfer of immediately available funds. If securities are issued in definitive certificated form under the limited circumstances described below and if not otherwise provided in the description of the applicable securities herein or in the applicable prospectus supplement, we will have the option of making payments by check mailed to the addresses of the persons entitled to payment or by wire transfer to bank accounts in the United States designated in writing to the applicable trustee or other designated party at least 15 days before the applicable payment date by the persons entitled to payment, unless a shorter period is satisfactory to the applicable trustee or other designated party.

Redemption proceeds, distributions, and dividend payments on the securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit direct participants' accounts upon DTC's receipt of funds and corresponding detail information from us on the payment date in accordance with their respective holdings shown on DTC records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in "street name." Those payments will be the responsibility of participants and not of DTC or us, subject to any statutory or regulatory requirements in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC, is our responsibility, disbursement of payments to direct participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of direct and indirect participants.

Except under the limited circumstances described below, purchasers of securities will not be entitled to have securities registered in their names and will not receive physical delivery of securities. Accordingly, each beneficial owner must rely on the procedures of DTC and its participants to exercise any rights under the securities and the indenture.

The laws of some jurisdictions may require that some purchasers of securities take physical delivery of securities in definitive form. Those laws may impair the ability to transfer or pledge beneficial interests in securities.

DTC may discontinue providing its services as securities depositary with respect to the securities at any time by giving reasonable notice to us. Under such circumstances, in the event that a successor depositary is not obtained, securities certificates are required to be printed and delivered.

As noted above, beneficial owners of a particular series of securities generally will not receive certificates representing their ownership interests in those securities. However, if:

- DTC notifies us that it is unwilling or unable to continue as a depositary for the global security or securities representing such series of securities or if DTC ceases to be a clearing agency registered under the Exchange Act at a time when it is required to be registered and a successor depositary is not appointed within 90 days of the notification to us or of our becoming aware of DTC's ceasing to be so registered, as the case may be;
- · we determine, in our sole discretion, not to have such securities represented by one or more global securities; or
- an event of default has occurred and is continuing with respect to such series of securities,

we will prepare and deliver certificates for such securities in exchange for beneficial interests in the global securities. Any beneficial interest in a global security that is exchangeable under the circumstances described in the preceding sentence will be exchangeable for securities in definitive certificated form registered in the names that the depositary directs. It is expected that these directions will be based upon directions received by the depositary from its participants with respect to ownership of beneficial interests in the global securities.

Euroclear and Clearstream

If so provided in the applicable prospectus supplement, you may hold interests in a global security through Clearstream Banking S.A., or Clearstream, or Euroclear Bank S.A./N.V., as operator of the Euroclear System, or Euroclear, either directly if you are a participant in Clearstream or Euroclear or indirectly through organizations which are participants in Clearstream or Euroclear. Clearstream and Euroclear will hold interests on behalf of their respective participants through customers' securities accounts in the names of Clearstream and Euroclear, respectively, on the books of their respective U.S. depositaries, which in turn will hold such interests in customers' securities accounts in such depositaries' names on DTC's books.

Clearstream and Euroclear are securities clearance systems in Europe. Clearstream and Euroclear hold securities for their respective participating organizations and facilitate the clearance and settlement of securities transactions between those participants through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of certificates.

Payments, deliveries, transfers, exchanges, notices, and other matters relating to beneficial interests in global securities owned through Euroclear or Clearstream must comply with the rules and procedures of those systems. Transactions between participants in Euroclear or Clearstream, on one hand, and other participants in DTC, on the other hand, are also subject to DTC's rules and procedures.

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers, and other transactions involving any beneficial interests in global securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers, and other institutions are open for business in the United States.

Cross-market transfers between participants in DTC, on the one hand, and participants in Euroclear or Clearstream, on the other hand, will be effected through DTC in accordance with the DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by their respective U.S. depositaries; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (European time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depositary to take action to effect final settlement on its behalf by delivering or receiving interests in the global securities through DTC, and making or receiving payment in accordance with normal procedures for sameday fund settlement. Participants in Euroclear or Clearstream may not deliver instructions directly to their respective U.S. depositaries.

Due to time zone differences, the securities accounts of a participant in Euroclear or Clearstream purchasing an interest in a global security from a direct participant in DTC will be credited, and any such crediting will be reported to the relevant participant in Euroclear or Clearstream, during the securities settlement processing day (which must be a business day for Euroclear or Clearstream) immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a global security by or through a participant in Euroclear or Clearstream to a direct participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

Other

The information in this section of this prospectus concerning DTC, Clearstream, Euroclear, and their respective book-entry systems has been obtained from sources that we believe to be reliable, but we do not take responsibility for this information. This information has been provided solely as a matter of convenience. The rules and procedures of DTC, Clearstream, and Euroclear are solely within the control of those organizations and could change at any time. Neither we nor the trustee nor any agent of ours or of the trustee has any control over those entities and none of us takes any responsibility for their activities. You are urged to contact DTC, Clearstream and Euroclear or their respective participants directly to discuss those matters. In addition, although we expect that DTC, Clearstream, and Euroclear will perform the foregoing procedures, none of them is under any obligation to perform or continue to perform such procedures and such procedures may be discontinued at any time. Neither we nor any agent of ours will have any responsibility for the performance or nonperformance by DTC, Clearstream, and Euroclear or their respective participants of these or any other rules or procedures governing their respective operations.

SELLING SECURITYHOLDERS

Selling securityholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, our securities. If this prospectus is used by selling securityholders for the resale of any securities registered under this registration statement pursuant to a registration rights agreement between us and such selling securityholders or otherwise, information about such selling securityholders, their beneficial ownership of our securities, and their relationship with us will be set forth in a prospectus supplement.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades, or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

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

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions, or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers, or agents in connection with the offering of the securities, and any discounts, concessions, or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers, and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers, and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock or preferred stock will be listed on the Nasdaq Capital Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers, and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

Unless indicated otherwise in the applicable prospectus supplement, the validity of the issuance of the securities offered hereby will be passed upon for us by Goodwin Procter LLP, Philadelphia, PA. As appropriate, legal counsel representing the underwriters, dealers, or agents will be named in the accompanying prospectus supplement and may opine to certain legal matters.

EXPERTS

The consolidated financial statements of Ocugen, Inc. appearing in Ocugen, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2021, and the effectiveness of Ocugen, Inc.'s internal control over financial reporting as of December 31, 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.



\$175,000,000

Common Stock Preferred Stock Debt Securities Warrants Units

Prospectus February 28, 2023



547,450 Shares of Common Stock issuable upon conversion of Series B Convertible Preferred Stock

801,832 Shares of Common Stock issuable or issued upon exercise of Common Stock Purchase Warrants

This prospectus relates to the offer and sale from time to time by the selling stockholders named herein, or the selling stockholders, of (i) up to 547,450 shares of our common stock, \$0.01 par value per share, or the Preferred Conversion Shares, issuable upon conversion of shares of our Series B Convertible Preferred Stock, or Series B Preferred, and (ii) 801,832 shares of our common stock, \$0.01 par value per share, or the Warrant Conversion Shares, issuable or issued upon the exercise of certain common stock purchase warrants, or Common Stock Purchase Warrants. The Preferred Conversion Shares and Warrant Conversion Shares, or the securities, were acquired by the selling stockholders in private placements that are more fully described in the section entitled "Selling Stockholders." We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of shares by the selling stockholders.

The prices at which such selling stockholders may dispose of their shares will be determined by the selling stockholders or their transferees. We will not receive proceeds from any sale of shares of common stock by the selling stockholders, but we have agreed to pay certain registration expenses relating to such shares of common stock. The selling stockholders from time to time may offer and sell the shares held directly to purchasers or through underwriters, broker-dealers, or agents, who may receive compensation in the form of discounts, commissions, or concessions. For further information regarding the possible methods by which the shares may be distributed, see "Plan of Distribution."

Our common stock is traded on The Nasdaq Capital Market, or Nasdaq, under the symbol "OCGN." On February 27, 2023, the closing sale price of our common stock on Nasdaq was \$0.976 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" IN OUR FILINGS WITH THE SECURITIES AND EXCHANGE COMMISSION THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS, AS DESCRIBED UNDER "RISK FACTORS" ON PAGE 7.

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

Prospectus dated February 28, 2023

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. By using a shelf registration statement, the selling stockholders may sell securities from time to time and in one or more offerings as described in this prospectus. Information about the selling stockholders may change over time. Any changed information given to us by the selling stockholders will be set forth in a prospectus supplement if and when necessary. Further, in some cases, the selling stockholders will also be required to provide a prospectus supplement containing specific information about the terms on which they are offering and selling shares of common stock. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. Any prospectus supplement or free writing prospectus may add, update, or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any 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 (and any applicable prospectus supplement or free writing prospectuses), together with the additional information described under the heading "Where You Can Find More Information" and "Incorporation by Reference."

Neither we nor any selling stockholder has authorized any dealer, agent, or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement or related free writing prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement or related free writing prospectus. This prospectus and the accompanying prospectus supplement and related free writing prospectus, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying prospectus supplement and related free writing prospectus, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should assume that the information appearing in this prospectus and the accompanying prospectus supplement is accurate only as of the date on its respective cover, that the information appearing in any related 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 incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement, or any applicable free writing prospectus may involve estimates, assumptions, and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus, the applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

Unless the context otherwise requires, references in this prospectus to "Ocugen," the "Company," "we," "our," or "us" refer to Ocugen, Inc. and its subsidiaries. See "About Ocugen, Inc.—Company Information."

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork, and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

ABOUT OCUGEN, INC.

Overview

We are a biotechnology company focused on discovering, developing, and commercializing novel gene and cell therapies and vaccines that improve health and offer hope for patients across the globe.

Our cutting-edge technology pipeline includes:

- Modifier Gene Therapy Platform Based on the use of nuclear hormone receptors, or NHRs, we believe our modifier gene therapy platform has the potential to address many retinal diseases, including retinitis pigmentosa, or RP, Leber congenital amaurosis, or LCA, dry age-related macular degeneration, or AMD, and Stargardt disease, with a single mutation-agnostic therapy.
- Regenerative Medicine Cell Therapy Platform Our Phase 3-ready regenerative medicine cell therapy platform technology, NeoCart (autologous chondrocyte-derived neocartilage), is being developed for the repair of knee cartilage injuries in adults.
- Vaccines COVAXIN is our whole-virion inactivated intramuscular COVID-19 vaccine candidate, which we are developing for the North American market. We are also developing a novel inhaled mucosal vaccine platform, which includes OCU500, a bivalent COVID-19 vaccine; OCU510, a seasonal quadrivalent flu vaccine; and OCU520, a combination quadrivalent seasonal flu and bivalent COVID-19 vaccine.
- Novel Biologic Therapy for Retinal Diseases OCU200 is a novel fusion protein containing parts of human tumstatin and transferrin. OCU200 is designed to treat diabetic macular edema, or DME, diabetic retinopathy, or DR, and wet AMD.

Modifier Gene Therapy Platform

We are developing a modifier gene therapy platform designed to fulfill unmet medical needs related to retinal diseases, including inherited retinal diseases, or IRDs, such as RP, LCA, and Stargardt disease, as well as dry AMD with a single mutation-agnostic therapy. Our modifier gene therapy platform is based on the use of NHRs, which have the potential to restore homeostasis — the basic biological processes in the retina. Unlike single-gene replacement therapies, which only target one genetic mutation, we believe that our modifier gene therapy platform, through its use of NHRs, represents a novel approach that has the potential to address multiple retinal diseases caused by mutations in multiple genes with one product, and potentially address complex diseases that are potentially caused by imbalances in multiple gene networks.

We believe that OCU400 has the potential to be broadly effective in restoring retinal integrity and function across a range of genetically diverse IRDs, including RP and LCA. OCU400 has received Orphan Drug Designation, or ODD, from the United States Food and Drug Administration, or FDA, for nuclear receptor subfamily 2 group E member 3, or *NR2E3*,-related RP and LCA and Orphan Medicinal Product Designation, or OMPD, from the European Commission, based on the recommendation of the European Medicines Agency, for RP and LCA. We previously received ODDs from the FDA for the treatment of certain disease genotypes: *NR2E3*, centrosomal protein 290, or *CEP290*, rhodopsin, or *RHO*, and phosphodiesterase 6B mutation-associated inherited retinal degenerations.

We are conducting a Phase 1/2 clinical trial to assess the safety of unilateral subretinal administration of OCU400 in patients with *NR2E3* and *RHO*-related RP and *CEP290*-related LCA in the United States. We have completed dosing patients with RP in the dose-escalation portion of the clinical trial, which enrolled 10 subjects to receive a low, medium, or high dose of OCU400 in the subretinal space. We are continuing to enroll subjects with RP and LCA in this clinical trial to receive the high dose, which was determined to be the maximum tolerable dose from the dose-escalation portion of the clinical trial. We intend to initiate a Phase 1/2 pediatric clinical trial for OCU400 for the treatment of RP and LCA in the second quarter of 2023 and a Phase 3 clinical trial for OCU400 for the treatment of RP and LCA near the end of 2023, subject to discussions with the FDA.

We are also developing OCU410 and OCU410ST to utilize the nuclear receptor genes RAR-related orphan receptor A for the treatment of dry AMD and Stargardt disease, respectively. We are currently executing Investigational New Drug, or IND-enabling studies and intend to submit IND applications in the second quarter of 2023 to initiate Phase 1/2 clinical trials.

Regenerative Medicine Cell Therapy Platform

NeoCart is a Phase 3-ready, regenerative medicine cell therapy technology that combines breakthroughs in bioengineering and cell processing to enhance the autologous cartilage repair process. NeoCart is a three-dimensional tissue-engineered disc of new cartilage that is manufactured by growing chondrocytes, the cells responsible for maintaining cartilage health. The chondrocytes are derived from the patient on a unique scaffold. In this therapy, healthy cartilage tissue is grown and implanted in the patient. We believe NeoCart has the potential to accelerate healing and reduce pain by reconstructing a patient's previously damaged knee cartilage. It is designed to treat pain at the source, improve function, and potentially prevent a patient's progression to osteoarthritis. The FDA granted a regenerative medicine advanced therapy designation to NeoCart for the repair of full-thickness lesions of knee cartilage injuries in adults. We received concurrence from the FDA on the confirmatory Phase 3 clinical trial design. We are renovating an existing facility into a current Good Manufacturing Practice, or GMP, facility in accordance with the FDA's regulations in support of NeoCart manufacturing for Phase 3 clinical trial material. We intend to initiate the Phase 3 clinical trial in the first half of 2024, subject to discussions with the FDA.

Vaccines

Intramuscular COVID-19 Vaccine

We have a Co-Development, Supply and Commercialization Agreement, or the Covaxin Agreement, with Bharat Biotech International Limited, or Bharat Biotech, pursuant to which we obtained an exclusive right and license under certain of Bharat Biotech's intellectual property rights, with the right to grant sublicenses, to develop, manufacture, and commercialize COVAXIN for the prevention of COVID-19, caused by SARS-CoV-2, in the United States, its territories, and possessions, Canada, and Mexico, or the Ocugen Covaxin Territory. COVAXIN is a whole-virion inactivated intramuscular COVID-19 vaccine candidate and is formulated with the inactivated SARS-CoV-2 virus, an antigen, and an adjuvant.

In January 2023, we announced top-line results from our Phase 2/3 immuno-bridging and broadening clinical trial in the United States evaluating COVAXIN for adults ages 18 years and older. The clinical trial was designed to evaluate whether the immune response observed in participants in a Phase 3 clinical trial previously conducted by Bharat Biotech in India is similar to a demographically representative, adult population in the United States. The clinical trial met both co-primary immunogenicity endpoints. There were no cases of adverse events or serious adverse events related to the vaccination with COVAXIN. We plan to work with government agencies in the United States to obtain funding in order to comply with the requirements of a Biologics License Application submission, including funding to initiate an adult safety clinical trial subject to discussions with the FDA.

In July 2021, we completed our rolling submission to Health Canada for COVAXIN. The rolling submission process, which was conducted through our Canadian subsidiary, Vaccigen Ltd., was recommended and accepted under the Minister of Health's Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19 and transitioned to a New Drug Submission, or NDS, for COVID-19. In August 2022, we withdrew our NDS based on discussions with Health Canada and are evaluating the requirements for resubmitting an updated NDS. In Mexico, the Comisión Federal para la Protección contra Riesgos Sanitarios authorized emergency use for COVAXIN for adults ages 18 years and older, which remains active. We are in discussions with Consejo Nacional de Ciencia y Tecnología in Mexico regarding our submission for emergency use authorization for COVAXIN for pediatric use in ages five to 18 years.

Inhaled Mucosal Vaccines

In September 2022, we entered into an exclusive license agreement, or the WU License Agreement, with The Washington University in St. Louis, pursuant to which we obtained the rights to develop, manufacture, and commercialize an inhaled mucosal COVID-19 vaccine for the prevention of COVID-19 in the United States, Europe, and Japan. The WU License Agreement was amended in January 2023 to add the countries of South Korea, Australia, and China to the territory rights, and together with the United States, Europe, and Japan, the Mucosal Vaccine Territory. Utilizing these rights, we are developing a novel inhaled mucosal vaccine platform, which includes OCU500, a bivalent COVID-19 vaccine; OCU510, a seasonal quadrivalent flu vaccine; and OCU520, a combination quadrivalent seasonal flu and bivalent COVID-19 vaccine. As these vaccine candidates are being developed to be administered through inhalation, we believe they have the potential to generate rapid local immunity in the upper airways and lungs where viruses enter and infect the body, which we believe may help reduce or prevent infection and transmission as well as provide protection against new virus variants. OCU510 is being developed for the global market. We intend to initiate IND-enabling studies and work closely with government agencies to obtain funding for the development of these inhaled mucosal vaccines.

Novel Biologic Therapy for Retinal Diseases

We are developing OCU200, which is a novel fusion protein containing parts of human turnstatin and transferrin. OCU200 is designed to treat DME, DR, and wet AMD. We have completed the technology transfer of manufacturing processes to our contract development and manufacturing organization and have produced clinical trial materials to initiate a Phase 1 clinical trial. We submitted an IND application to the FDA in February 2023 to initiate a Phase 1 clinical trial targeting DME.

Company Information

We were originally incorporated as a Massachusetts corporation in 2000 under the name Histogenics Corporation. In 2006, we underwent a corporate reorganization pursuant to which we were reincorporated as a Delaware corporation. On September 27, 2019, we completed a reverse merger, or the Merger, with Ocugen OpCo, Inc., or OpCo, in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of April 5, 2019, by and among OpCo, Restore Merger Sub, Inc., our wholly owned subsidiary, or Merger Sub, and us, as amended, or the Merger Agreement, pursuant to which Merger Sub merged with and into OpCo, with OpCo surviving as our wholly owned subsidiary. Immediately after the completion of the Merger, we changed our name to Ocugen, Inc. and the business previously conducted by OpCo became the business conducted by us. Our common stock trades on The Nasdaq Capital Market, or Nasdaq, under the symbol "OCGN."

Our principal offices are located at 11 Great Valley Parkway, Malvern, Pennsylvania 19355, and our telephone number is (484) 328-4701. Our website address is www.ocugen.com. Our website and the information contained on, or that can be accessed through, our website shall not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. See "Where You Can Find More Information" and "Incorporation of Information by Reference."

Summary Risk Factors

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described in "Part I, Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2021 and under similar headings in documents filed after the date hereof with the SEC. These risks and uncertainties include, but are not limited to, the following:

- We have incurred significant losses and negative cash flows from operations since our inception. We may incur losses over the next several years and may never achieve or maintain profitability. These factors raise substantial doubt about our ability to continue as a going concern absent obtaining significant additional funding.
- We will need substantial additional funding. If we are unable to raise capital when needed, we could be forced to delay, reduce, or eliminate our
 product development programs or commercialization efforts.
- We will need additional capital in order to enable us to successfully develop our product candidates, and such funding may not be available on acceptable terms, or at all. Raising additional capital may cause dilution to stockholders, restrict our operations, or require us to relinquish rights to our technologies or product candidates.

- We are substantially dependent on the success of our product candidates. We cannot guarantee that our product candidates will successfully complete development, receive regulatory approval, or be successfully commercialized.
- Our product candidates generated from our modifier gene therapy platform are based on a novel technology and face an uncertain regulatory
 environment, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory
 approval.
- COVAXIN has been evaluated by Bharat Biotech in a Phase 3 clinical trial in India in adults, who were healthy or had stable chronic medical conditions ages 18 and older, and approved for EUL by the WHO. We have conducted a Phase 2/3 immuno-bridging and broadening clinical trial and will need to conduct a safety clinical trial to support a BLA submission for COVAXIN for adult use in the United States. We may be unable to successfully produce and commercialize a vaccine that effectively and safely treats the virus in a timely manner, if at all, and ultimately may be unable to obtain regulatory approval for adult use in the United States.
- We have obtained the rights to develop, manufacture, and commercialize COVAXIN in Canada and Mexico. We have no experience in obtaining marketing approvals for, or commercializing products in Canada or Mexico. Our results of operations may be negatively impacted if we are unable to successfully commercialize COVAXIN in Canada or Mexico.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, our completion of clinical trials and receipt of necessary regulatory approvals could be delayed or prevented.
- We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.
- We have no prior experience in the marketing, sale, and distribution of biotechnology products and there can be no assurance that our product candidates, if approved, will be successfully commercialized.
- We face significant competition from other pharmaceutical and biotechnology companies, academic institutions, government agencies, and other research organizations. Our operating results will suffer if we fail to compete effectively.
- If third-party payors do not reimburse patients for our products candidates, if approved, or if reimbursement levels are set too low for us to sell our
 product candidates at a profit, our ability to successfully commercialize our product candidates, if approved, and our results of operations will be
 harmed.
- We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials we may initiate, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials or failing to comply with regulatory requirements.
- If we encounter difficulties in negotiating commercial manufacturing and supply agreements with third-party manufacturers and suppliers of our product candidates or any product components, our ability to commercialize our product candidates, if approved, would be impaired.
- If the manufacturers upon whom we rely fail to produce our product candidates or product components pursuant to the terms of contractual arrangements with us or fail to comply with stringent regulations applicable to biotechnology manufacturers, we may face delays in the development and commercialization of, or be unable to meet demand for, our product candidates, if approved, and may lose potential revenues.
- We may seek to collaborate with third parties for the development or commercialization of our product candidates. We may not be successful in
 establishing or maintaining collaborative relationships, any of which could adversely affect our ability to develop and commercialize our product
 candidates.
- We may be unable to obtain and maintain patent protection for our technology and product candidates, or the scope of the patent protection obtained may not be sufficiently broad or enforceable, such that our competitors could develop and commercialize technology and product similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.
- We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming, and unsuccessful.

- Certain aspects of our product candidates are protected by patents exclusively licensed from other companies or institutions. If these third parties terminate their agreements with us or fail to maintain or enforce the underlying patents or licenses thereto, or we otherwise lose our rights to these patents, our competitive position and our market share in the markets for any of our approved products will be harmed.
- Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.
- The trading price of the shares of our common stock could be highly volatile, and purchasers of our common stock could incur substantial losses.
- · Our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.
- If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired, investors may lose confidence in our financial reporting, and the trading price of our common stock may decline.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties discussed in the section titled "Risk Factors" contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2021, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, our quarterly reports, and documents incorporated by reference and any prospectus supplements or free writing prospectus that we may authorize for use in connection with this offering. See "Where You Can Find More Information." The risks described in the Annual Report and such subsequent filings are not the only risks that we face. Additional risks not presently known to us or that we do not currently consider significant may also have an adverse effect on us. If any of the risks actually occur, our business, results of operations, cash flows, or financial condition could suffer. We cannot assure you that any of the events discussed in the risk factors will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition, and cash flows and if so, our future prospects would likely be materially and adversely affected. If any of such events were to happen, the trading price and value of our securities could decline, and you could lose all or part of your investment. You should understand that it is not possible to predict or identify all such risks. Consequently, you should not consider the risk factors to be a complete discussion of all potential risks or uncertainties. Please also carefully read the section below titled "Special Note Regarding Forward-Looking Statements."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus and the documents incorporated by reference herein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans, and objectives of management are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will," "would" or the negative of such terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Such statements are based on assumptions and expectations that may not be realized and are inherently subject to risks, uncertainties, and other factors, many of which cannot be predicted with accuracy and some of which might not even be anticipated.

The forward-looking statements in this prospectus and the documents incorporated by reference herein include, among other things, statements about:

- our estimates regarding expenses, future revenues, and capital requirements, as well as the timing, availability of, and the need for, additional financing to continue to advance our product candidates;
- our ability to obtain sufficient additional funding to continue to advance our product candidates;
- our activities with respect to OCU400, including the results from our Phase 1/2 clinical trial and our ability to successfully initiate and subsequently complete a Phase 3 clinical trial and a pediatric Phase 1/2 clinical trial;
- our ability to successfully submit an amendment to the IND application to the FDA for NeoCart and to subsequently initiate a Phase 3 clinical trial:
- our activities with respect to COVAXIN, a vaccine candidate for the prevention of COVID-19 caused by SARS-CoV-2 in humans, in collaboration
 with Bharat Biotech, including our plans and expectations regarding clinical development, manufacturing, pricing, regulatory review and
 compliance, reliance on third parties, and commercialization;
- the ability of our collaboration partner, Bharat Biotech, to successfully respond to the deficiencies identified in an inspection conducted by the World Health Organization, or the WHO, and any potential impact of these deficiencies on the regulatory and commercialization pathway, clinical and commercial supply, and the technology transfer for COVAXIN;
- our ability to obtain funding from government agencies in the United States and other countries to continue the development of our vaccine candidates;
- the uncertainties associated with the clinical development and regulatory approval of our product candidates, including potential delays in the initiation, commencement, enrollment, and completion of current and future clinical trials;
- our ability to realize any value from product candidates and preclinical programs being developed and anticipated to be developed in light of
 inherent risks and difficulties involved in successfully commercializing products and the risk that our products, if approved, will not achieve broad
 market acceptance;
- · uncertainties in obtaining successful clinical trial results for product candidates and unexpected costs that may result therefrom;

- our ability to comply with regulatory schemes and other regulatory developments applicable to our business in the United States and other countries; including the extent to which developments with respect to the COVID-19 pandemic will affect the regulatory pathway available for COVID-19 vaccines in such countries:
- the performance of third-parties upon which we depend, including contract development and manufacturing organizations, suppliers, manufacturers, group purchasing organizations, distributors, and logistics providers;
- the pricing and reimbursement of our product candidates, if commercialized;
- our ability to obtain and maintain patent protection, or obtain licenses to intellectual property and defend our intellectual property rights against third-parties;
- our ability to maintain our relationships, profitability, and contracts with our key collaborators and commercial partners and our ability to establish additional collaborations and partnerships;
- · our ability to recruit and retain key scientific, technical, commercial, and management personnel and to retain our executive officers;
- our ability to comply with stringent United States and applicable foreign government regulations with respect to the manufacturing of pharmaceutical products, including current GMP compliance, and other relevant regulatory authorities;
- the extent to which health epidemics and other outbreaks of communicable diseases, including the COVID-19 pandemic, geopolitical turmoil, macroeconomic conditions, social unrest, political instability, terrorism, or acts of war could disrupt our business and operations, including impacts on our development programs, global supply chain, and collaborators and manufacturers; and
- the other risks, uncertainties and factors discussed under the heading "Risk Factors" in our most recent Annual Report on Form 10-K, as revised and supplemented by those risks described from time to time in other reports which we file with the SEC.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in or incorporated by reference into this prospectus, particularly under "Risk Factors" that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations, or investments we may make. You should read this prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. You should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus and in the applicable prospectus supplement. See "Risk Factors."

USE OF PROCEEDS

We will not receive any proceeds from any sales of shares of our common stock by the selling stockholders pursuant to this prospectus. However, we will receive proceeds from any cash exercise of the Common Stock Purchase Warrants. The selling stockholders have the right to exercise or have exercised the Common Stock Purchase Warrants to purchase up to 801,832 shares of our common stock at a weighted average exercise price of \$6.23 per share. Certain warrants may be exercised on a cashless basis, in whole or in part, if elected by the selling stockholder. We intend to use the proceeds from any cash exercise for working capital and general corporate purposes. There is no assurance that the Common Stock Purchase Warrants will be exercised at all or exercised for cash. The Common Stock Purchase Warrants expire between 2026 and 2027.

We have agreed to bear the expenses in connection with the registration of the shares of common stock to be offered by this prospectus by the selling stockholders, other than any broker or underwriter fees, discounts, or commissions, which will be borne by the selling stockholders.

SELLING STOCKHOLDERS

This prospectus relates to the potential resale, from time to time, by the selling stockholders named in this prospectus, of the following securities:

- up to 547,450 shares of common stock, or the Preferred Conversion Shares, that are issuable upon the conversion of shares of the Series B Convertible Preferred Stock, or Series B Preferred, currently outstanding; and
- up to 801,832 shares of common stock, or the Warrant Conversion Shares, that are issuable or issued upon the exercise of certain common stock purchase warrants, or the Common Stock Purchase Warrants.

Preferred Conversion Shares

On March 1, 2021, we entered into a Preferred Stock Purchase Agreement, pursuant to which we agreed to issue and sell 54,745 shares of our newly designated Series B Preferred at a price per share equal to \$109.60, to our co-development partner, Bharat Biotech. The shares were issued on March 18, 2021 in a private placement transaction. We issued the shares of Series B Preferred as an advance payment for the supply of COVAXIN to be provided by Bharat Biotech pursuant to a supply agreement, or the Supply Agreement, to be entered into with respect to the parties' Co-Development, Supply and Commercialization Agreement dated as of January 31, 2021, or the Co-Development Agreement. Under the Co-Development Agreement as amended, Bharat Biotech granted to us the exclusive right under certain intellectual property owned by Bharat to develop, manufacture and commercialize COVAXIN, Bharat Biotech's vaccine candidate for the prevention of COVID-19 in humans, in and for the United States, its territories and possessions, Canada, and Mexico.

Each share of Series B Preferred is convertible, at the option of the holder, into 10 shares of our common stock only after (i) we received stockholder approval to increase the number of authorized shares of common stock under the Certificate and (ii) our receipt of shipments by Bharat Biotech of the first 10 million doses of COVAXIN manufactured by Bharat Biotech pursuant to a supply agreement, and further on the terms and subject to the conditions set forth in the Series B Certificate of Designation. The conversion rate of the Series B Preferred is subject to adjustment in the event of a stock dividend, stock split, reclassification, or similar event with respect to the Company's common stock.

Pursuant to the Preferred Stock Purchase Agreement, we agreed to file with the SEC and to maintain a registration statement on Form S-3 covering the resale of the common stock issuable upon the conversion of the Series B Preferred.

Warrant Conversion Shares

Between November 2016 and March 2019, OpCo issued a series of common stock purchase warrants, or the Common Stock Purchase Warrants, to certain investors pursuant to a stockholders' agreement and to two employees pursuant to their respective employment agreements. Upon the closing of the Merger, the Common Stock Purchase Warrants became exercisable for shares of our common stock. As of December 31, 2022, warrants to purchase 0.6 million shares of common stock were outstanding and exercisable. The Common Stock Purchase Warrants have exercise prices ranging from \$4.90 to \$7.56 and expire between 2026 and 2027.

Selling Stockholders

We are registering the above-referenced Preferred Conversion Shares and Warrant Conversion Shares to permit the selling stockholders and their pledgees, donees, transferees, or other successors-in-interest that receive their shares after the date of this prospectus to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" herein.

The following table sets forth the name of the selling stockholders, the number of shares owned by the selling stockholders, the number of shares that may be offered under this prospectus, and the number of shares of our common stock owned by each selling stockholder assuming the conversion and sale of all of the Preferred Conversion Shares and Warrant Conversion Shares, respectively. The number of shares in the column "Number of Shares Being Registered for Resale" represents all of the shares that the selling stockholders may offer under this prospectus. The selling stockholders may sell some, all, or none of their shares. We do not know how long the selling stockholders will hold the shares before selling them, and we currently have no agreements, arrangements, or understandings with the selling stockholders regarding the sale or other disposition of any of the shares. For more information about our relationships with certain selling stockholders and their affiliates, see Item 13. "Certain Relationships and Related Transactions, and Director Independence" in our <u>Annual Report on Form 10-K for the year ended December 31, 2021</u>, which is incorporated herein by reference.

The information set forth below is based upon information obtained from the selling stockholders and upon information in our possession regarding the issuance of shares Series B Preferred Stock and the Common Stock Purchase Warrants to the respective selling stockholders. The percentages of shares beneficially owned is based on 226,417,682 shares of our common stock outstanding as of February 21, 2023. Beneficial ownership is determined in accordance with the rules of the SEC. Generally, a person "beneficially owns" shares of our Common Stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days. The beneficial ownership information presented in this table is not necessarily indicative of beneficial ownership for any other purpose.

	Shares Ber Owned P the Off	rior to	Number of Shares Being Registered for	Shares Beneficially Owned After the Offering		
Name of Selling Stockholder	Shares	Percentage	Resale(1)	Shares	Percentage	
Bharat Biotech International Limited	547,450	*0/0	547,450		*0/0	
Gupiao Trust dated March 20, 2019 (2)	876,904	*	145,473	731,431	*	
Drishti LLC	413,188	*	392,787	20,401	*	
Scotland Parkway LLC	29,679	*	29,679	_	*	
Bharath R. Potti	1,984	*	1,984	_	*	
Ram Potti & Sudha Potti, jointly	3,968	*	3,968	_	*	
Jeenarine Narine & Yearani Narine	11,905	*	11,905	_	*	
JAAA Holding Company LLC	1,984	*	1,984	_	*	
RSL Associates LLC	1,984	*	1,984	_	*	
The Hampl Family Investments LLC	7,937	*	7,937	_	*	
Amit Nigalaye	3,968	*	3,968	_	*	
Anjali Nigalaye	3,968	*	3,968	_	*	
Charlie Kang	139,026	*	139,026	_	*	
Frank Leo	4,573	*	4,573	_	*	
KVM Holdings, LLC (3)	1,145,704	*	405	1,145,299	*	
Uday Kompella (4)	821,204	*	354	820,850	*	
JSC "Lancaster Group Kazakhstan"	564,748	*	19,843	544,905	*	
Abdi İbrahim Uluslararası İlaç Yatırımları Sanayi ve						
Ticaret A.Ş.	762,748	*	19,843	742,905	*	
Erden Timur	34,725	*	1,653	33,072	*	
Ozcan Tahincioglu	69,451	*	3,307	66,144	*	
Shankar Musunuri (5)	4,109,847	1.80%	7,596	4,102,251	1.79%	

* Less than 1%

- (1) Represents the number of shares being registered on behalf of the selling stockholders pursuant to the registration statement, of which this prospectus forms a part, which may be less than the total number of shares beneficially owned by such selling stockholder.
- (2) Dr. Zhang, a member of our board of directors, is the beneficiary of the Gupiao Trust and has voting and investment power over the securities held by the Gupiao Trust.
- (3) Dr. Musunuri is our Chairman and Chief Executive Officer. Dr. Musunuri is a member and officer of KVM Holdings, LLC and has voting and investment power over the securities held by KVM Holdings, LLC.
- (4) Dr. Kompella is a member of our board of directors. Consists of (i) 550,674 shares of common stock, 354 shares of common stock issuable upon exercise of warrants exercisable within 60 days of February 21, 2023, and 115,760 shares of common stock issuable upon exercise of stock options exercisable within 60 days of February 21, 2023 held by Dr. Kompella; and (ii) 154,416 shares of common stock held by Kompella LLC. Dr. Kompella has voting and investment power over the shares of common stock held by Kompella LLC.
- (5) Dr. Musunuri is our Chairman and Chief Executive Officer. Consists of (i) 483,636 shares of common stock; 7,191 shares of common stock issuable upon exercise of warrants exercisable within 60 days of February 21, 2023; and 2,473,316 shares of common stock issuable upon exercise of stock options exercisable within 60 days of February 21, 2023 held by Dr. Musunuri; and (ii) 1,145,299 shares of common stock and 405 shares of common stock issuable upon exercise of warrants exercisable within 60 days of February 21, 2023, in each case held by KVM Holdings LLC.

PLAN OF DISTRIBUTION

We are registering the Preferred Conversion Shares and Warrant Conversion Shares, or collectively, the securities, to permit the resale of such securities by the selling stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the securities. However, we will receive proceeds from any cash exercise of the Common Stock Purchase Warrants. We will bear all fees and expenses incident to our obligation to register the securities in this offering. Sales by the selling stockholders may not require the provision of a prospectus supplement.

The securities may be sold from time to time directly by the selling stockholders, including their donees, pledgees, transferees, and other successors in interest, or, alternatively, through underwriters, broker-dealers or agents, or through any combination of the foregoing methods. If the securities are sold through underwriters, broker-dealers or agents, the selling stockholders will be responsible for underwriting discounts or commissions or agents' commissions, if any. The securities may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale or at negotiated prices. Such sales may be effected in transactions, which may involve block transactions:

- · on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- · in the over-the-counter market;
- otherwise than on such exchanges or services or in the over-the-counter market; or
- · through the writing of options.

In addition, the selling stockholders may resell all or a portion of the securities in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling the securities to or through underwriters, broker-dealers, or agents, such underwriters, broker-dealers, or agents may receive commissions in the form of discounts, concessions, or commissions from the selling stockholders or commissions from purchasers of the securities for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with sales of the securities or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging in positions they assume. The selling stockholders may also sell securities short and deliver securities covered by this prospectus to close out short positions and to return borrowed securities in connection with such short sales. The selling stockholders may also loan or pledge the securities to broker-dealers that in turn may sell such securities, to the extent permitted by applicable law. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities from time to time pursuant to this prospectus or any amendment or supplement to this prospectus under any applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the securities in other circumstances in which case the transferees, donees, pledgees, or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer or agents participating in the distribution of the securities may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling stockholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. If required, the specific securities to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, broker-dealer or underwriter and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless such securities have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the securities registered pursuant to the registration statement, of which this prospectus is a part.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the securities by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to the securities. All of the foregoing may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Goodwin Procter LLP, Philadelphia, PA.

EXPERTS

The consolidated financial statements of Ocugen, Inc. appearing in Ocugen, Inc.'s <u>Annual Report (Form 10-K) for the year ended December 31, 2021</u>, and the effectiveness of Ocugen, Inc.'s internal control over financial reporting as of December 31, 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form S-3 filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements, or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated herein by reference for a copy of such contract, agreement or other document. We are currently subject to the reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, proxy statements, and other information with the SEC. Our SEC filings are available to you on the SEC's website at www.sec.gov and in the "Investors" section of our website at www.ocugen.com. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- Our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 28, 2022;
- Our Quarterly Reports on Form 10-Q for the periods ended March 31, 2022, filed with the SEC on May 6, 2022, June 30, 2022, filed with the SEC on August 5, 2022, and September 30, 2022 filed with the SEC on November 8, 2022;
- Our Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports related to such items) filed with the SEC on March 4, 2022, March 11, 2022, March 23, 2022, April 4, 2022, April 12, 2022, April 18, 2022, April 20, 2022, May 6, 2022, May 23, 2022, May 24, 2022, June 7, 2022, June 10, 2022, August 16, 2022, August 17, 2022, August 26, 2022, September 14, 2022, September 28, 2022, November 8, 2022, December 16, 2022, January 9, 2023, January 9, 2023, and February 6, 2023;
- · Our <u>Definitive Proxy Statement on Schedule 14A filed with the SEC on April 28, 2022</u>, to the extent incorporated by reference into Part III of the <u>Annual Report on Form 10-K for the fiscal year ended December 31, 2021</u>; and
- The description of our securities contained in our registration statement on <u>Form 8-A filed with the SEC on November 18, 2014 (File No. 001-36751)</u>, together with any amendments or reports filed for the purposes of updating this description, including <u>Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 28, 2022.</u>

We also incorporate by reference any future filings (other than any filings or portions of such reports that are not deemed "filed" under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents by writing or telephoning us at the following address or phone number:

Ocugen, Inc. Attention: Corporate Secretary 11 Great Valley Parkway Malvern, Pennsylvania, 19355 (484) 328-4701

PART II INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the fees and expenses, other than any underwriting discounts and commissions, payable by us in connection with the issuance and distribution of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee.

	A	Amount	
SEC registration fee	\$	19,285	
Nasdaq Capital Market supplemental listing fee		(1)	
FINRA filing fee (if applicable)		(1)	
Accounting fees and expenses		(1)	
Legal fees and expenses		(1)	
Transfer agent and registrar fees and expenses		(1)	
Trustee fees and expenses		(1)	
Warrant agent fees and expenses		(1)	
Printing and miscellaneous fees and expenses		(1)	
Blue Sky, qualification fees and expenses		(1)	
Total	\$	(1)	

(1) These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

The Registrant is governed by the Delaware General Corporation Law, or DGCL. Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was or is an officer, director, employee, or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit, or proceeding, provided such officer, director, employee, or agent acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that such person's conduct was unlawful. A Delaware corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending, or contemplated action or suit by or in the right of such corporation, under the same conditions, except that such indemnification is limited to expenses (including attorneys' fees) actually and reasonably incurred by such person, and except that no indemnification is permitted without judicial approval if such person is adjudged to be liable to such corporation. Where an officer or director of a corporation must indemnify that person against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred in connection therewith.

The Registrant's Sixth Amended and Restated Certificate of Incorporation, or the Certificate, includes provisions that limit the liability of the Registrant's directors for monetary damages for breach of their fiduciary duty as directors, except for liability that cannot be eliminated under the DGCL.

Accordingly, the Registrant's directors will not be personally liable for monetary damages for breach of their fiduciary duty as directors, except for liabilities:

- for any breach of the director's duty of loyalty to the Registrant or its stockholders;
- · for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

- for unlawful payments of dividends or unlawful stock repurchases or redemptions, as provided under Section 174 of the DGCL; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment or repeal of these provisions will require the approval of the holders of shares representing at least two-thirds of the shares entitled to vote in the election of directors, voting as one class. The Certificate and the Registrant's amended and restated bylaws, or the Bylaws, provide that the Registrant will indemnify its directors and officers to the fullest extent permitted by Delaware law. The Certificate and Bylaws also permit the Registrant to purchase insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions as its officer, director, employee or agent, regardless of whether Delaware law would permit indemnification. The Registrant has agreed to indemnify its directors and executive officers against certain liabilities and expenses that may arise by reason of their status or service as directors or executive officers. The Registrant believes that the limitation of liability provision in the Certificate and the indemnification agreements facilitate its ability to continue to attract and retain qualified individuals to serve as directors and officers. The limitation of liability and indemnification provisions in the Certificate and Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit the Registrant and its stockholders. A stockholder's investment may be harmed to the extent the Registrant pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Item 16. Exhibits

Exhibit		Description							
1.1	*	Form of Underwriting Agreement							
<u>3.1</u>		Sixth Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K as filed on							
		<u>December 8, 2014, and incorporated herein by reference)</u>							
<u>3.2</u>		Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (filed as Exhibit 3.3 to the							
		Registrant's Current Report on Form 8-K as filed on September 16, 2016, and incorporated herein by reference)							
<u>3.3</u>		Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (filed as Exhibit 3.5 to the							
		Registrant's Annual Report on Form 10-K as filed on March 19, 2021, and incorporated herein by reference)							
<u>3.4</u>		Amendment to Sixth Amended and Restated Certificate of Incorporation related to the Reverse Stock Split and the Authorized Share							
		Increase (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K as filed on October 1, 2019, and incorporated herein by							
		<u>reference)</u>							
<u>3.5</u>		Amendment to Sixth Amended and Restated Certificate of Incorporation related to the Name Change (filed as Exhibit 3.2 to the							
		Registrant's Current Report on Form 8-K as filed on October 1, 2019, and incorporated herein by reference)							
<u>3.6</u>		Amendment to Sixth Amended and Restated Certificate of Incorporation related to the Increase in Authorized Shares of Common Stock							
		(filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q as filed on May 7, 2021, and incorporated herein by reference).							
<u>3.7</u>		Amended and Restated Bylaws (filed as Exhibit 3.3 to the Registrant's Current Report on Form 8-K as filed on October 1, 2019, and							
		<u>incorporated herein by reference)</u>							
<u>4.1</u>		Form of Common Stock Certificate (filed as Exhibit 4.1 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1							
		(SEC File No. 333- 199202), as filed on November 26, 2014, and incorporated herein by reference)							
4.2	*	Form of Preferred Stock Certificate and Certificate of Designation of Preferred Stock.							
<u>4.3</u>		Form of Indenture (filed as Exhibit 4.3 to the Registrant's Registration Statement on Form S-3 ASR (SEC File No. 333-254550), as filed							
		on March 22, 2021 and incorporated herein by reference).							
4.4	*	Form of Debt Securities.							
4.5	*	Form of Common Stock Warrant Agreement and Warrant Certificate.							
4.6	*	Form of Preferred Stock Warrant Agreement and Warrant Certificate.							

- * Form of Debt Securities Warrant Agreement and Warrant Certificate.
- 4.8 * Form of Unit Agreement.
- <u>Opinion of Goodwin Procter LLP.</u>
- 23.1 Consent of Goodwin Procter LLP (included in Exhibit 5.1).
- 23.2 Consent of Independent Registered Public Accounting Firm Ernst & Young LLP.
- 24.1 Power of attorney (included on the signature page hereto).
- 25.1 ** Statement of Eligibility of Trustee Under Debt Indenture.
- 107 Fee Table.
- * To be filed by amendment, including, if necessary, a post-effective amendment, or as an exhibit to a document to be incorporated by reference in connection with the offering of the securities registered hereunder.
- ** To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended, and the rules and regulations promulgated thereunder.

Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the SEC under section 305(b)(2) of the Trust Indenture Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Borough of Malvern, Commonwealth of Pennsylvania, on February 28, 2023.

<u>oct</u>	GEN, INC.
By:	/s/ Shankar Musunuri
	Shankar Musunuri, Ph.D., MBA
	Chief Executive Officer and Chairman

POWER OF ATTORNEY

We, the undersigned officers and directors of Ocugen, Inc., hereby severally constitute and appoint Shankar Musunuri and Jessica Crespo, our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution in her or him for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or her or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Shankar Musunuri Shankar Musunuri	Chairman, Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2023
/s/ Jessica Crespo Jessica Crespo	Chief Accounting Officer and Senior Vice President, Finance (Principal Financial and Accounting Officer)	February 28, 2023
/s/ Kirsten Castillo Kirsten Castillo	Director	February 28, 2023
/s/ Uday B. Kompella Uday B. Kompella	Director	February 28, 2023
/s/ Ramesh Kumar Ramesh Kumar	Director	February 28, 2023
/s/ Prabhavathi Fernandes Prabhavathi Fernandes	Director	February 28, 2023
/s/ Marna Whittington Marna Whittington	Director	February 28, 2023
/s/ Junge Zhang Junge Zhang	Director	February 28, 2023

February 28, 2023

Ocugen, Inc. 11 Great Valley Parkway Malvern. PA 19355

Re: <u>Securities Being Registered under Registration Statement on Form S-3</u>

We have acted as counsel to you in connection with your filing of a Post-Effective Amendment No. 1 (the "Amendment") to the Registration Statement on Form S-3 (File No. 333-254550) (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the offering by Ocugen, Inc., a Delaware corporation (the "Company"), of up to \$175,000,000 of any combination of (i) the Company's common stock, par value \$0.01 per share ("Common Stock"), (ii) the Company's preferred stock, par value \$0.01 per share ("Preferred Stock"), (iii) the Company's debt securities ("Debt Securities"), (iv) warrants to purchase Common Stock, Preferred Stock, Debt Securities or Units (as defined below) ("Warrants") and (v) units comprised of Common Stock, Preferred Stock, Debt Securities, Warrants and other securities in any combination ("Units"). The Common Stock, Preferred Stock, Debt Securities, Warrants and Units are sometimes referred to collectively herein as the "Securities." Pursuant to the Amendment, up to \$175,000,000 of Securities may be issued in an unspecified number (with respect to Common Stock, Preferred Stock, Warrants and Units) or up to \$175,000,000 in an unspecified principal amount (with respect to Debt Securities). The Registration Statement provides that the Securities may be offered separately or together, in separate series, in amounts, at prices and on terms to be set forth in one or more prospectus supplements (each a "Prospectus Supplement") to the prospectus contained in the Registration Statement.

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinions set forth below are limited to the Delaware General Corporation Law and the law of New York.

For purposes of the opinions set forth below, without limiting any other exceptions or qualifications set forth herein, we have assumed that (i) each of the Debt Securities, Warrants and Units, and the indentures, warrant agreements, unit agreements and other agreements governing Securities offered pursuant to the Registration Statement will be governed by the internal law of New York and (ii) after the issuance of any Securities offered pursuant to the Registration Statement, the total number of issued shares of Common Stock or Preferred Stock, as applicable, together with the total number of shares of such stock issuable upon the exercise, exchange, conversion or settlement, as the case may be, of any exercisable, exchangeable or convertible security (including without limitation any Unit), as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock or Preferred Stock, as applicable, then available for issuance under the Company's certificate of incorporation as then in effect (the "Charter").

Ocugen, Inc. February 28, 2023 Page 2

For purposes of the opinions set forth below, we refer to the following as the "Future Approval and Issuance" of Securities:

- with respect to any of the Securities, (a) the approval by the Company of the amount, terms and issuance of such Securities (the "Approval") and (b) the issuance of such Securities in accordance with the Approval upon the receipt by the Company of the consideration (which, in the case of shares of Common Stock or Preferred Stock, is not less than the par value of such shares) to be paid in accordance with the Approval;
- with respect to Preferred Stock, (a) the establishment of the terms of such Preferred Stock by the Company in conformity with the Charter and applicable law and (b) the execution, acknowledgement and filing with the Delaware Secretary of State, and the effectiveness of, a certificate of designations to the Charter setting forth the terms of such Preferred Stock in accordance with the Charter and applicable law;
- with respect to Debt Securities, (a) the approval, execution and delivery of the indenture or a supplemental indenture relating to such Securities by the Company and the trustee and/or (b) the establishment of the terms of such Securities by the Company in conformity with the indenture or supplemental indenture and applicable law, and (c) the execution, authentication and issuance of such Securities in accordance with the indenture or supplemental indenture and applicable law; and
- with respect to Warrants or Units, (a) the approval, execution and delivery by the Company and any other parties thereto of any agreement under which such Securities are to be issued, and (b) the establishment of the terms of such Securities and the issuance of such Securities in conformity with those terms, the terms of any applicable agreement and applicable law.

Based upon the foregoing, and subject to the additional qualifications set forth below, we are of the opinion that:

- 1. Upon the Future Approval and Issuance of shares of Common Stock, such shares of Common Stock will be validly issued, fully paid and nonassessable.
- 2. Upon the Future Approval and Issuance of shares of Preferred Stock, such shares of Preferred Stock will be validly issued, fully paid and nonassessable.

Ocugen, Inc. February 28, 2023 Page 3

- 3. Upon the Future Approval and Issuance of Debt Securities, such Debt Securities will be valid and binding obligations of the Company.
- 4. Upon the Future Approval and Issuance of Warrants, such Warrants will be valid and binding obligations of the Company.
- 5. Upon the Future Approval and Issuance of Units, such Units will be valid and binding obligations of the Company.

The opinions expressed above are subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors and to general principles of equity.

This opinion letter and the opinions it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in Post-Effective Amendment No. 1 to the Registration Statement (Form S-3 No. 333-254550) and related Prospectus of Ocugen, Inc. for the registration of Common Stock, Preferred Stock, Debt Securities, Warrants, and Units and to the incorporation by reference therein of our reports dated February 28, 2022, with respect to the consolidated financial statements of Ocugen, Inc., and the effectiveness of internal control over financial reporting of Ocugen, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania February 28, 2023

Calculation of Filing Fee Tables

Form S-3 (Form Type)

Ocugen, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit (2)	Maximum Aggregate Offering Price ered Securities	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
	Primary Offer	ing of Securities:		1	tewly Regist	crea Securities						
Fees to Be Paid	Equity	Common Stock, par value \$0.01 per share (3)	457(r)	\$	\$	\$		\$				
Fees to Be Paid	Equity	Preferred Stock, par value \$0.01 per share (4)	457(r)									
Fees to Be Paid	Debt	Debt Securities (5)	457(r)									
Fees to Be Paid	Equity	Warrants (6)	457(r)									
Fees to Be Paid	Equity	Units (7)	457(r)									
Fees to Be Paid	Unallocated (Universal) Shelf	(1)	457(o)	\$175,000,000		\$175,000,000	\$0.0001102	\$19,285				
Fees to Be Paid	Total Registrat	tion Fee:		\$175,000,000	N/A	\$175,000,000		\$19,285				
Carry Forward Securities												
Carry Forward Securities	Equity	Common Stock, par value \$0.01 per share										
	Total Offering Amounts					\$175,000,000		\$19,285				
	Total Fees Previously Paid											
	Total Fee Offsets											
Net Fee Due							\$19,285					

- The amount to be registered consists of up to \$175,000,000 of an indeterminate amount of common stock, preferred stock, debt securities, warrants and/or units. There is also being registered hereunder such currently indeterminate number of (i) shares of common stock or other securities of the registrant as may be issued upon conversion of, or in exchange for, convertible or exchangeable debt securities and/or preferred stock registered hereby, or (ii) shares of preferred stock, common stock, debt securities or units as may be issued upon exercise of warrants registered hereby, as the case may be, including under any applicable antidilution provisions. Any securities registered hereunder may be sold separately or together with other securities registered hereunder.
- The proposed maximum offering price per security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.

 Including such indeterminate amount of common stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock
- registered hereby, or upon exercise of warrants registered hereby, as the case may be.

 Including such indeterminate amount of preferred stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock registered hereby, or upon exercise of warrants registered hereby, as the case may be.
- (5) Including such indeterminate principal amount of debt securities as may be issued from time to time at indeterminate prices or upon exercise of warrants registered hereby, as the case may be.
- Warrants may be sold separately or together with any of the securities registered hereby and may be exercisable for shares of common stock or preferred stock registered hereby.
- Because the warrants will provide a right only to purchase such securities offered hereunder, no additional registration fee is required.

 Each unit will be issued under a unit agreement and will represent an interest in two or more securities registered pursuant to this registration statement, which may or may not be separable from one another. Because the units will provide a right only to purchase such securities offered hereunder, no additional registration fee is required.