PROSPECTUS

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-239240

450,000 Shares of Common Stock

This prospectus relates to the resale from time to time by the selling stockholder identified in this prospectus of up to 450,000 shares (the "Shares") of our common stock, par value $0.01 per share (the "Common Stock"), that are issuable upon conversion of certain convertible notes of OpGen, Inc. (the "Convertible Notes") as further described in this prospectus.

The Shares may be sold from time to time by the selling stockholder directly or through one or more broker-dealers, in one or more transactions on the Nasdaq Capital Market, in the over-the-counter market, in negotiated transactions or otherwise, at prices related to the prevailing market prices or at negotiated prices, all as more fully described in the section entitled "Plan of Distribution" beginning on page 11 of this prospectus.

We are not selling any Shares under this prospectus and will not receive any proceeds from the sale by the selling stockholder of such Shares.

Our common stock is traded on the Nasdaq Capital Market under the symbol "OPGN." On June 29, 2020, the closing price of our common stock was $2.04 per share.

Investing in our securities involves a high degree of risk. Before making an investment decision, please read the information under "Risk Factors" beginning on page 9 of this prospectus and under similar headings in any amendment or supplement to this prospectus or in any filing with the Securities and Exchange Commission that is incorporated by reference herein.

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

The date of this Prospectus is June 29, 2020

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our securities. You should read this entire prospectus carefully, especially the "Risk Factors" section beginning on page 9 and our financial statements and the related notes incorporated by reference into this prospectus, before making an investment decision. As used in this prospectus, the terms "OpGen," "the Company," "we," "us," and "ours" refer to OpGen, Inc.

Business Combination Transaction with Curetis N.V.

On April 1, 2020, or the Closing Date, the Company completed its business combination transaction, or the Transaction, with Curetis N.V., a public company with limited liability under the laws of the Netherlands, or the Seller,, as contemplated by the Implementation Agreement, dated as of September 4, 2019, or the Implementation Agreement, by and among the Company, the Seller, and Crystal GmbH, a private limited liability company organized under the laws of the Federal Republic of Germany and wholly owned subsidiary of the Company, or the Purchaser. Pursuant to the Implementation Agreement, the Purchaser acquired all of the shares of Curetis GmbH, a private limited liability company organized under the laws of the Federal Republic of Germany, or Curetis, and certain other assets and liabilities of the Seller, as further described below, and paid, as the sole consideration, 2,028,208 shares of the Company's common stock, par value $0.01 per share, or the Common Stock, to the Seller, and reserved for future issuance (a) 134,356 shares of Common Stock, in connection with its assumption of the Seller's 2016 Stock Option Plan, as amended (the "Seller Stock Option Plan"), and the outstanding awards thereunder, and (b) 500,000 shares of Common Stock to be issued upon the conversion, if any, of certain convertible notes issued by the Seller, of which 390,891 shares have been issued as of June 12, 2020, in satisfaction of approximately $768,000 of outstanding principal and indebtedness under the assumed convertible notes. The 2,028,208 shares of Common Stock issued to the Seller represented approximately 13.8% of the outstanding Common Stock of the Company as of the Closing Date.

At the closing, the Company assumed all of the liabilities of the Seller solely and exclusively related to the acquired business, which is providing innovative solutions, through development of proprietary platforms, diagnostic content, applied bioinformatics, lab services, research services and commercial collaborations and agreements, for molecular microbiology, diagnostics designed to address the global challenge of detecting severe infectious diseases and identifying antibiotic resistances in hospitalized patient, or the Curetis business. Pursuant to the Implementation Agreement, the Company also assumed and adopted the Seller Stock Option Plan as an Amended and Restated Stock Option Plan of the Company. In connection with the foregoing, the Company assumed all awards thereunder that were outstanding as of the Closing Date and converted such awards into options to purchase shares of the Company's Common Stock pursuant to the terms of the applicable award. In addition, the Company assumed, at the closing, all of the outstanding convertible notes issued by Seller in favor of YA II PN, LTD, or Yorkville, which is the selling stockholder under this prospectus, pursuant to the previously disclosed Assignment of the Agreement for the Issuance of and Subscription to Notes Convertible into Shares, dated February 24, 2020, or the Assignment Agreement, and entered into pursuant to the Implementation Agreement. In this prospectus, we refer to the combined business following the consummation of the Transaction as "Newco."

OpGen Overview

OpGen is a precision medicine company harnessing the power of molecular diagnostics and informatics to help combat infectious disease. The Company is developing molecular information products and services for global healthcare settings, helping to guide clinicians with more rapid and actionable information about life threatening infections, improve patient outcomes, and decrease the spread of infections caused by multidrug-resistant microorganisms, or MDROs. Its proprietary DNA tests and informatics address the rising threat of antibiotic resistance by helping physicians and other healthcare providers optimize care decisions for patients with acute infections.

The Company's molecular diagnostics and informatics products, product candidates and services combine its Acuitas molecular diagnostics and Acuitas Lighthouse informatics platform for use with its proprietary, curated MDRO knowledgebase. The Company is working to deliver products and services, some in development, to a global network of customers and partners.

- The Company's Acuitas molecular diagnostic tests provide rapid microbial identification and antibiotic resistance gene information. These products include its Acuitas antimicrobial resistance, or AMR, Gene Panel Urine test in development for patients at risk for complicated urinary tract infection, or cUTI, and its Acuitas AMR Gene Panel test for use with bacterial isolates in development for testing bacterial isolates, and its QuickFISH and PNA FISH FDA-cleared and CE-marked diagnostics used to rapidly detect pathogens in positive blood cultures. Each of the Acuitas AMR Gene Panel tests is available for sale for research use only, or RUO and is not for use in diagnostic procedures.

- The Company's Acuitas Lighthouse informatics systems are cloud-based HIPAA compliant informatics offerings that combine clinical lab test results with patient and hospital information to provide analytics and actionable insights to help manage MDROs in the hospital and patient care environment. Components of the informatics systems include the Acuitas Lighthouse Knowledgebase and the Acuitas Lighthouse Software. The Acuitas Lighthouse Knowledgebase is a relational database management system and a proprietary data warehouse of genomic data matched with antibiotic susceptibility information for bacterial pathogens. The Acuitas Lighthouse Software system includes the Acuitas Lighthouse Portal, a suite of web applications and dashboards, the Acuitas Lighthouse Prediction Engine, which is a data analysis software, and other supporting software components. The Acuitas Lighthouse Software can be customized and made specific to a healthcare facility or collaborator, such as a pharmaceutical company. The Acuitas Lighthouse Software is not distributed commercially for antibiotic resistance prediction and is not for use in diagnostic procedures.

The Company's operations are subject to certain risks and uncertainties. The risks include the risk that the Company will not receive 510(k) clearance for its Acuitas AMR Gene Panel test for use with bacterial isolates on a timely basis, or at all, the timing and ultimate success of future 510(k) and De Novo submissions for additional Acuitas AMR Gene Panel tests and Acuitas Lighthouse Software, rapid technology changes, the need to retain key personnel, the need to protect intellectual property and the need to raise additional capital financing on terms acceptable to the Company. The Company's success depends, in part, on its ability to develop, obtain regulatory approval for and commercialize its proprietary technology as well as raise additional capital.

Curetis Overview

The Curetis business develops, manufactures and commercializes innovative solutions for molecular microbiology. The Curetis business is based on two complementary business pillars:

- The Unyvero A50 is a high-plex polymerase chain reaction, or PCR, platform for comprehensive and rapid diagnosis of severe infectious diseases in hospitalized patients. The platform is based on proven, intelligently integrated technologies, allowing for the testing of broad panels of pathogens and antibiotic resistance markers and the processing of a large variety of native patient samples with an intuitive workflow. The Unyvero A50 high-plex PCR platform's advantage is the timely access to comprehensive, actionable and reliable data. Curetis' molecular tests for different indications are commercially available in Europe, the United States, Asia and the Middle East. Curetis is also developing the Unyvero A30 *RQ* Analyzer, which is designed to serve as a platform with low-to medium-plex capabilities that it ultimately intends to commercially leverage predominantly in collaborations with one or more diagnostics industry partners.

- The ARES AMR database, or ARES*db*, is a comprehensive database of the genetics of antimicrobial resistance, or AMR, which permits Curetis to increasingly utilize the proprietary biomarker content in its own assay and cartridge development, as well as to build an independent business in next-generation sequencing, or NGS, based offerings for AMR research and diagnostics in collaboration with partners in the life science, pharmaceutical and diagnostics industries. ARES*db* is not commercially available in the United States for diagnostic use, as it has not been cleared by the FDA. In September 2019, Ares Genetics, a wholly owned subsidiary of Curetis, or Ares Genetics, signed a technology evaluation agreement with an undisclosed global IVD corporation. In the first phase of the collaboration, expected to take about 10 months, Ares Genetics expects to further enrich ARES*db* with a focus on certain pathogens relevant in a first, undisclosed infectious disease indication.

Curetis GmbH's offices and R&D laboratories are based in Holzgerlingen, near Stuttgart with its cartridge manufacturing facility in Bodelshausen also in southern Germany, in addition to subsidiaries located in San Diego, California, USA and Vienna, Austria.

Newco Overview

We anticipate that the focus of Newco will be on combined broad portfolio of products of OpGen and Curetis, which include high impact rapid diagnostics and bioinformatics to interpret AMR genetic data. The products we expect Newco to focus on are for lower respiratory infection and urinary tract or invasive joint infection:

- The Unyvero Lower Respiratory Tract, or LRT, test is the first FDA cleared test that can be used for more than 90% of infection cases of hospitalized pneumonia patients. According to the National Center for Health Statistics (2018), pneumonia is a leading cause of admissions to the hospital and is associated with substantial morbidity and mortality. The Unyvero LRT automated test detects 19 pathogens within less than five hours, with approximately two minutes of hands-on time and provides clinicians with a comprehensive overview of 10 genetic antibiotic resistance markers. We are also commercializing the Unyvero LRT test for testing bronchoalveolar lavage, or BAL, specimens of U.S. patients with lower respiratory tract infections following FDA clearance received by Curetis in December 2019. We believe the Unyvero LRT test has the ability to help address a significant, previously unmet medical need that causes over $10 billion in annual costs for the U.S. healthcare system, according to the Centers for Disease Control, or CDC.

- The Acuitas AMR Gene Panel (Urine) test is being developed for patients at risk for cUTI, and is designed to test for up to five pathogens and up to 47 antimicrobial resistance genes. When paired with the Acuitas Lighthouse software, we believe the test will be able to help improve management of the more than one million patients in the United States with cUTI. The AMR Gene Panel (Urine) is in testing for preparation of a De Novo submission with the FDA. We are pursuing a Class I designation through a De Novo Request for the test in connection with an initial clinical indication to test bacterial isolates.

Newco will have an extensive offering of additional *in vitro* diagnostic tests including CE-marked Unyvero tests for implant and tissue infections, intra-abdominal infections, cUTI, and blood stream infections, and the QuickFISH and PNA FISH FDA-cleared and CE-marked diagnostics used to rapidly detect pathogens in positive blood cultures, which we believe have an established market position in the United States.

Newco's combined AMR informatics offerings, once all such products are cleared for marketing, if ever, will offer important new tools to clinicians treating patients with AMR infections. OpGen has collaborated with Merck, Inc. to establish the Acuitas Lighthouse Knowledgebase, which is currently commercially available in the United States for RUO. The Acuitas Lighthouse Knowledgebase includes approximately 15,000 bacterial isolates from the Merck SMART surveillance network of 192 hospitals in 52 countries and other sources. The Curetis ARES*db* is a comprehensive database of genetic and phenotypic information. ARES*db* was originally designed based on the SIEMENS microbiology strain collection covering resistant pathogens over the last 30 years and its development has significantly expanded to now include approximately 55,000 sequenced isolate strains and phenotypic correlation data against over 100 antibiotics. In September 2019, Ares Genetics signed a technology evaluation agreement with an undisclosed global IVD corporation. In the first phase of the collaboration, expected to take about 10 months, Ares Genetics expects to further enrich ARES*db* with a focus on certain pathogens relevant in a first, undisclosed infectious disease indication. We anticipate that Newco will utilize the proprietary biomarker content in these databases, as well as to build an independent business in NGS and AI based offerings for AMR research and diagnostics in collaboration with partners in the life science, pharmaceutical and diagnostics industries.

The Unyvero A50 tests for up to 130 diagnostic targets (pathogens and resistance genes) in under five hours with approximately two minutes of hands-on time. The system was first CE Marked in 2012 and was FDA cleared in 2018 along with the LRT test through *De Novo* process. As of December 31, 2019, there is an installed base of 173 Unyvero A50 Analyzers globally. The Unyvero A30 *RQ* is a new device designed to address the low to mid-plex testing market for 5-30 DNA targets and to provide results in 45 to 90 minutes with 2-5 minutes of hands on time. The Unyvero A30 has a small laboratory footprint and has an attractive cost of goods profile. Curetis has been following a partnering strategy for the Unyvero A30.

Newco has extensive partner and distribution relationships to help accelerate the establishment of a global infectious disease diagnostic testing and informatics business. Partners will include A. Menarini Diagnostics for pan-European distribution to currently 11 countries; MGI/BGI for NGS-based molecular microbiology applications in China; and Beijing Clear Biotech Co. Ltd. for Unyvero A50 product distribution in China. Newco has a network currently consisting of 18 distributors covering 43 countries.

Newco will continue to develop and seek FDA and other regulatory clearances or approvals, as applicable, for the Acuitas AMR Gene Panel (Urine) diagnostic test and the Acuitas Lighthouse Software products. Newco will continue to offer the Acuitas AMR Gene Panel (Isolates) and Acuitas Lighthouse Software as well as the Unyvero UTI Panel as RUO products to hospitals, public health departments, clinical laboratories, pharmaceutical companies and contract research organizations, or CROs.

Yorkville Financing

As discussed above, at the closing of the Transaction pursuant to the Assignment Agreement, the Company assumed all of the outstanding convertible notes, or the Convertible Notes, issued by Curetis in favor of Yorkville, under that certain Agreement for the Issuance of and Subscription to Notes Convertible into Shares and Share Subscription Warrants, dated October 2, 2018, by and between Curetis and Yorkville. Pursuant to the Assignment Agreement, upon assumption of the Convertible Notes by the Company, the Convertible Notes ceased to be convertible into shares of Curetis and instead became convertible into shares of Common Stock of the Company. Under the Assignment Agreement, an amount of 500,000 shares of Common Stock that comprise a portion of the consideration payable by the Company under the Implementation Agreement were reserved for issuance upon conversion of the Convertible Notes. The Company also agreed to register for sale up to 1,000,000 shares of its Common Stock issuable upon conversion of the Convertible Notes. In furtherance of such agreement, this prospectus and the registration statement of which it is a part relates to the sale of up to 450,000 shares of Common Stock issuable upon conversion of the Convertible Notes.

Each Convertible Note has a maturity of 12 months from its date of issuance. The Company, has the right to extend such maturity by an additional 12-month period, while paying a cash fee equal to 5% of the principal amount of the relevant Convertible Notes. Subject to certain limitations, the maturity period can be extended up to four times.

The Convertible Notes do not accrue interest, except in the case of an event of default under the Convertible Notes, in which case the Convertible Notes shall accrue default interest at a rate of 15% per annum until the earlier of the date that the event of default is cured or the date on which the Convertible Notes have been fully converted or redeemed.

The Convertible Notes may be converted at any time until they are fully redeemed. Upon conversion of the Convertible Notes, the number of shares of Common Stock will be calculated by dividing the aggregate principal amount of the relevant Convertible Notes by 93% of the lowest daily volume weighted average price of the Company common stock on the Nasdaq Capital Market over the 10 trading days prior to the conversion date.

The Convertible Notes may be freely transferred, except to retail investors, and subject to compliance with applicable securities laws. The Convertible Notes contain anti-dilution protection, which protects the holder of the security from equity dilution resulting from later issues of shares at a lower price or value than that provided for in the security. The protection in the Convertible Notes takes the form of tying the conversion price of the Convertible Notes to the prevailing market price of the underlying shares of Common Stock so that changes to the share price due to share issuances, share splits or other potentially dilutive events will result in a corresponding change in the number of shares of Common Stock issuable upon conversion of a Convertible Note.

Company Information

OpGen was incorporated in Delaware in 2001. On July 14, 2015, OpGen completed the Merger with AdvanDx. Pursuant to the terms of a Merger Agreement, Velox Acquisition Corp., OpGen's wholly-owned subsidiary formed for the express purpose of effecting the Merger, merged with and into AdvanDx with AdvanDx surviving as OpGen's wholly-owned subsidiary. On April 1, 2020, the Company completed the Transaction, pursuant to which it acquired Curetis. The Company's headquarters and principal operations are in Gaithersburg, Maryland, and our telephone number is (240) 813-1260. Our website address is www.opgen.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

THE OFFERING

Common stock offered by the selling stockholder	Up to 450,000 shares of our common stock
Terms of the offering	The selling stockholder will determine when and how it will sell the common stock offered in this prospectus, as described in "Plan of Distribution."
Use of proceeds	We will not receive any proceeds from the sale of the shares of common stock covered by this prospectus.
Risk factors	See "Risk Factors" beginning on page 9, for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Nasdaq Capital Market symbol	Our Common Stock is listed on the Nasdaq Capital Market under the symbol “OPGN.” On June 29, 2020 the last reported sale price of our common stock was $2.04 per share.

ABOUT THIS PROSPECTUS

This prospectus is part of a resale registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC. By using a resale registration statement, the selling stockholder may sell from time to time in one or more offerings the Common Stock described in this prospectus.

This prospectus provides you with a general description of the Company and our securities. For further information about our business and our securities, you should refer to the registration statement and the reports incorporated by reference in this prospectus, as described in "Where You Can Find More Information."

We have not authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus may be used only in jurisdictions where offers and sales of these securities are permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, or any sale of our common stock. Our business, financial condition and results of operations may have changed since those dates.

We own various U.S. federal trademark registrations and applications and unregistered trademarks and servicemarks, including OpGen®, Curetis®, Unyvero®, ARES® and ARES GENETICS®, Acuitas®, Acuitas Lighthouse®, AdvanDx®, QuickFISH®, and PNA FISH®. All other trademarks, servicemarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are sometimes referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies, products or services.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements, other than statements of historical fact, included or incorporated in this prospectus regarding our strategy, future operations, collaborations, intellectual property, cash resources, financial position, future revenues, projected costs, prospects, plans, and objectives of management are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "continue," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described under the heading "Risk Factors." In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances included herein may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- our ability to integrate the OpGen, Curetis, and Ares Genetics businesses;
- our liquidity and working capital requirements, including our cash requirements over the next 12 months;
- our ability to maintain compliance with the ongoing listing requirements for the Nasdaq Capital Market;
- receipt of regulatory clearance of our submitted 510(k) pre-market submission for our Acuitas AMR Gene Panel test for use with bacterial isolates;
- the impact of the coronavirus pandemic on our business and operations;
- the completion of our development efforts for the Acuitas AMR Gene Panel Urine test and Acuitas Lighthouse Software, Unyvero IJI and SHR panels, Unyvero A30 *RQ* platform and Aresdb and the timing of regulatory submissions;
- our ability to sustain or grow our customer base for our current research use only and rapid pathogen ID testing products;
- regulations and changes in laws or regulations applicable to our business, including regulation by the FDA;
- anticipated trends and challenges in our business and the competition that we face;
- the execution of our business plan and our growth strategy;
- our expectations regarding the size of and growth in potential markets;
- our opportunity to successfully enter into new collaborative or strategic agreements;
- compliance with the U.S. and international regulations applicable to our business; and
- our expectations regarding future revenue and expenses.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. In addition, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. These risks should not be construed as exhaustive and should be read in conjunction with our other disclosures, including but not limited to the risks described under the heading “Risk Factors.” Other risks may be described from time to time in our filings made under the securities laws. New risks emerge from time to time. It is not possible for our management to predict all risks. All forward-looking statements in this prospectus speak only as of the date made and are based on our current beliefs and expectations. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

RISK FACTORS

Investing in our securities involves substantial risks. In addition to other information contained in this prospectus and in any accompanying prospectus supplement, before investing in our securities, you should carefully consider the risks described under the heading “Risk Factors” in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K and in any other documents incorporated by reference into this prospectus, as updated by our future filings. These risks are not the only ones faced by us. Additional risks not known or that are deemed immaterial could also materially and adversely affect our financial condition, results of operations, our products, business and prospects. Any of these risks might cause you to lose all or a part of your investment.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale or other disposition of the Shares held by the selling stockholder pursuant to this prospectus.

DETERMINATION OF OFFERING PRICE

The prices at which the Shares may actually be sold will be determined by the prevailing public market price for shares of common stock, by negotiations between the selling stockholders and buyers of our common stock in private transactions or as otherwise described in “Plan of Distribution.”

SELLING STOCKHOLDER

We are registering the resale of up to 450,000 shares of Common Stock issuable upon conversion of the Convertible Notes held by Yorkville, the selling stockholder in this prospectus, to permit it, or its permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to resell or otherwise dispose of such shares in the manner contemplated under the section entitled "Plan of Distribution" in this prospectus (as may be supplemented and amended).

The selling stockholder may sell some, all or none of the Shares. We do not know how long the selling stockholder will hold the Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale or other disposition of any of the Shares. The Shares covered hereby may be offered from time to time by the selling stockholder. As a result, we cannot estimate the number of Shares the selling stockholder will beneficially own after termination of sales under this prospectus. In addition, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of its Shares since the date on which it provided information for this table.

The following table sets forth information as of June 16, 2020, and includes the number of shares of our Common Stock beneficially owned by the selling stockholder prior to the offering, the number of shares of Common Stock offered by the selling stockholder, and the number of shares of Common Stock that will be owned by the selling stockholder upon completion of the offering or offerings pursuant to this prospectus, assuming that the selling stockholder sells all of the Shares. Only the selling stockholder listed below or their transferees, pledgees, donees, assignees, distributees, successors and others who later come to hold any of such selling stockholder’s interest may offer and sell Shares pursuant to this prospectus. The selling stockholder may offer the shares listed in the table below for sale pursuant to this prospectus and any accompanying prospectus supplement from time to time.

Name of Selling Stockholder	Beneficial Ownership Prior to this Offering		Shares Being Offered	Beneficial Ownership After this Offering	
	Number	Percent	(1)	Number	Percent
YA II PN, Ltd.	0	*	450,000	0	*

* Represents beneficial ownership of less than 1%.

(1) The shares being offered consist solely of shares of Common Stock underlying the Convertible Notes.

Relationship with Selling Stockholder

As discussed in greater detail above under the section "Prospectus Summary—Yorkville Financing," on February 24, 2020, we entered into the Assignment Agreement with the selling stockholder to assume the Convertible Notes, and agreed with the selling stockholder to file a registration statement to enable the resale of the shares of common stock covered by this prospectus.

PLAN OF DISTRIBUTION

We are registering the Shares issued to the selling stockholder to permit the resale of these Shares by the selling stockholder from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholder of the Shares.

Yorkville, the selling stockholder, may sell all or a portion of the Shares beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the Shares are sold through underwriters or broker-dealers, the selling stockholder will be responsible for underwriting discounts or commissions or agent's commissions. The Shares may be sold on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the Shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- broker-dealers may agree with the selling stockholder to sell a specified number of such Shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law (including underwritten transactions).

The selling stockholder may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling stockholder has informed us that they do not have any agreement or understanding, directly or indirectly, with any person to distribute the shares covered under this prospectus. If the selling stockholder notifies us that a material arrangement has been entered into with a broker-dealer for the sale of some or all of the Shares through a block trade, secondary distribution or a purchase by a broker or dealer, we may be required to file a prospectus supplement pursuant to the applicable rules promulgated under the Securities Act.

Broker-dealers, underwriters and agents engaged by the selling stockholder may arrange for other broker-dealers, underwriters or agents to participate in sales. Broker-dealers, underwriters or agents may receive commissions, discounts or concessions from the selling stockholder (or, if any broker-dealer acts as agent for the purchase of Shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA rules.

In connection with the sale of the Shares, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Shares in the course of hedging the positions they assume. The selling stockholder may also sell the Shares and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholder 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 shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholder and any broker-dealers, underwriters or agents that are involved in selling the Shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers, underwriters or agents 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. If the selling stockholder qualifies as an "underwriter," it will be subject to the prospectus delivery requirements of Section 5(b)(2) of the Securities Act.

All costs and expenses incurred in connection with the registration under the Securities Act of the offering made hereby will be paid by us, other than any brokerage fees and commissions, fees and disbursements of legal counsel for the selling stockholder and stock transfer and other taxes attributable to the sale of the Shares, which will be paid by the applicable selling stockholder.

Because the selling stockholder may be deemed to be an "underwriter" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus.

To the extent required, the Shares to be sold; the names of the selling stockholder; the respective purchase prices and public offering prices; the names of any agents, dealers or underwriters; 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 that includes this prospectus. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholder and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

Certain legal matters with respect to the securities offered hereby have been passed upon by Ballard Spahr LLP.

EXPERTS

The consolidated financial statements of OpGen, Inc. and its subsidiaries as of December 31, 2019 and 2018, and for the years then ended, have been incorporated by reference herein in reliance upon the report, also incorporated by reference herein, of CohnReznick LLP, an independent registered public accounting firm, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2019 consolidated financial statements contains an explanatory paragraph that states that the Company has experienced losses and negative cash flows from operations since its inception, has an accumulated deficit, and has debt obligations which raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

We filed with the SEC a registration statement under the Securities Act of 1933 for the Shares under this prospectus. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedule that were filed with the registration statement. Statements contained in this prospectus about the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov.

We file periodic reports under the Securities Exchange Act of 1934, including annual, quarterly and special reports, and other information with the Securities and Exchange Commission. These periodic reports and other information are available for inspection and copying at the SEC regional offices, public reference facilities and on the website of the SEC referred to above.

We make available free of charge on or through our internet website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information found on our website, www.opgen.com, other than as specifically incorporated by reference in this prospectus, is not part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” in this prospectus the information in other documents that we file with it, which means that we can disclose important information to you by referring you to those documents containing such information. This prospectus is part of a registration statement we filed with the SEC. You should rely on the information incorporated by reference in this prospectus and the registration statement. The information incorporated by reference is considered to be part of this prospectus and information we file later with the SEC will automatically update and supersede this information and information contained in documents filed earlier with the SEC. We incorporate by reference the documents listed below, any filings made with the SEC after the date of the initial registration statement and prior to effectiveness of the registration statement, and any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering; provided, that we are not incorporating by reference any documents or information deemed to have been furnished and not filed in accordance with SEC rules. The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 24, 2020;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on May 8, 2020;
- our Current Reports on Form 8-K filed with the SEC on January 23, 2020 (Item 8.01); January 30, 2020 (Item 8.01 and 9.01); February 12, 2020 (Items 1.01 and 9.01); February 12, 2020 (Items 8.01 and 9.01); February 20, 2020 (Items 8.01 and 9.01); February 28, 2020 (Items 1.01 and 9.01); March 10, 2020 (Items 8.01 and 9.01); and March 16, 2020 (Items 8.01 and 9.01); March 19, 2020 (Items 8.01 and 9.01); March 24, 2020 (Items 8.01 and 9.01, but only exhibit 99.2 thereof) March 30, 2020 (Items 5.07, 8.01 and 9.01); April 2, 2020 (Items 2.01, 5.02, 8.01 and 9.01), as amended on June 15, 2020; April 16, 2020 (Item 8.01); April 28, 2020 (Items 1.01, 2.03 and 9.01); May 7, 2020 (Item 5.02); May 11, 2020 (Items 8.01 and 9.01); and June 3, 2020 (Items 8.01 and 9.01);
- our proxy statement for the Annual Meeting of Stockholders held on August 2019, filed with the SEC on July 12, 2019; and
- the description of our common stock contained in the Registration Statement on Form 8-A filed on April 30, 2015 and any amendments to such Registration Statement filed subsequently thereto, including all amendments or reports filed for the purpose of updating such description.

We will furnish to you, on written or oral request, a copy of any or all of the documents that have been incorporated by reference, including exhibits to these documents. You may request a copy of these filings at no cost by writing or telephoning our Secretary at the following address and telephone number:

OpGen, Inc.
Attention: Timothy C. Dec, Corporate Secretary
708 Quince Orchard Road, Suite 205
Gaithersburg, MD 20878
Telephone No.: (240) 813-1260