

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**FORM S-3
REGISTRATION STATEMENT**
UNDER

THE SECURITIES ACT OF 1933

OPGEN, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

06-1614015
(I.R.S. Employer
Identification Number)

9717 Key West Avenue, Suite 100
Rockville, MD 20850
(301) 869-9683

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Oliver Schacht, Ph.D.
Chief Executive Officer
9717 Key West Avenue, Suite 100
Rockville, MD 20850
(301) 869-9683

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

With a copy to:
Peter Jaslow, Esquire
Ballard Spahr LLP
1735 Market Street, 51st Floor
Philadelphia, PA 19103
(215) 665-8500

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following 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, 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.

If this form is a registration statement filed 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.

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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act (Check one):

Large Accelerated Filer
Non-Accelerated Filer

Accelerated Filer
Smaller Reporting Company
Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

The information in this preliminary prospectus is not complete and may be changed. The holders of the common stock may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated November 13, 2023

PRELIMINARY PROSPECTUS



10,892,728 Shares of Common Stock Issuable Upon the Exercise of Common Warrants

This prospectus relates to the resale by the selling stockholder named herein, from time to time, of up to 10,892,728 shares of our common stock, par value \$0.01 per share, or the Common Stock, issuable upon exercise of common stock purchase warrants, which were or may be issued pursuant to that certain warrant inducement agreement, dated as of October 12, 2023, or the Warrant Inducement Agreement, by and between OpGen, Inc. and the selling stockholder. Such shares of Common Stock underlying the common stock purchase warrants are collectively referred to herein as the Warrant Shares. We are registering the Warrant Shares on behalf of the selling stockholder, to be offered and sold from time to time, to satisfy certain registration rights that we have granted to the selling stockholder pursuant to the Warrant Inducement Agreement.

The selling stockholder may resell or dispose of the Warrant Shares to or through underwriters, broker-dealers, agents, or through any other means described in the section of this prospectus entitled "[Plan of Distribution](#)." The selling stockholder will bear its commissions and discounts, if any, attributable to the sale or disposition of the Warrant Shares. We will bear all costs, expenses and fees in connection with the registration of the Warrant Shares. We will not receive any of the proceeds from the sale of the Warrant Shares by the selling stockholder.

Our Common Stock is traded on the Nasdaq Capital Market under the symbol "OPGN." On November 10, 2023, the closing price of our Common Stock was \$0.51 per share.

Investing in our securities involves a high degree of risk, including that the trading price of our Common Stock has been subject to volatility. Before making an investment decision, please read the information under "[Risk Factors](#)" beginning on page 8 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 November 13, 2023

TABLE OF CONTENTS

Page

PROSPECTUS SUMMARY	1
ABOUT THIS PROSPECTUS	4
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	4
RISK FACTORS	6
USE OF PROCEEDS	9
SELLING STOCKHOLDER	9
PLAN OF DISTRIBUTION	11
LEGAL MATTERS	11
EXPERTS	12
WHERE YOU CAN FIND MORE INFORMATION	12
INCORPORATION BY REFERENCE	12

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 6 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.

OpGen Overview

We are a precision medicine company harnessing the power of molecular diagnostics and informatics to help combat infectious disease. Along with its subsidiaries, Curetis GmbH and Ares Genetics GmbH, we are developing and commercializing molecular microbiology solutions helping to guide clinicians with more rapid and actionable information about life threatening infections to improve patient outcomes, and decrease the spread of infections caused by multidrug-resistant microorganisms, or MDROs. Our current product portfolio includes Unyvero, and the ARES Technology Platform including ARESdb, Next Generation Sequencing (NGS) technology and artificial intelligence (AI)-powered bioinformatics solutions for antimicrobial resistance (AMR) surveillance, outbreak analysis, and antibiotic response prediction including ARESiss, ARESid, ARESasp, and AREScloud.

Our focus is on our combined broad portfolio of products, which include high impact rapid diagnostics and bioinformatics to interpret AMR genetic data. We will continue to develop and seek FDA and other regulatory clearances or approvals, as applicable, for additional diagnostic tests. We will continue to offer the FDA-cleared Unyvero LRT and LRT BAL Panels, as well as the Unyvero UTI Panel as a research use only (RUO) product to hospitals, public health departments, clinical laboratories, pharmaceutical companies and contract research organizations (CRO). We are also continuing to commercialize our CE-marked Unyvero Panels in Europe and other global markets through distributors.

Warrant Inducement Transaction

On October 12, 2023, we entered into a warrant inducement agreement, or the Warrant Inducement Agreement, with a holder of certain existing warrants, or the Existing Warrants, to purchase shares of our common stock, par value \$0.01 per share, or the Common Stock. Pursuant to the Warrant Inducement Agreement, the holder agreed to exercise for cash their Existing Warrants to purchase up to 10,892,728 shares of our Common Stock at an exercise price of \$0.7785 per share, the exercise price per share of the Existing Warrants, during the period from the date of the Warrant Inducement Agreement until 7:30 a.m., Eastern Time, on October 26, 2023. Pursuant to an amendment that we entered into with the holder on October 26, 2023, such offer period was extended to December 31, 2023.

In order to permit the exercise of the Existing Warrants pursuant to the rules of the NASDAQ Capital Market, the holder agreed to pay as additional consideration \$0.25 per share of Common Stock issued upon exercise of the Existing Warrants. The aggregate gross proceeds to be received by us will depend on the number of Existing Warrants actually exercised by the Holder. If all of the Existing Warrants are exercised in connection with the Warrant Inducement Agreement, we would anticipate receiving aggregate gross proceeds of up to approximately \$11.2 million from the exercise of the Existing Warrants before deducting financial advisory fees and other expenses payable by us. There is, however, no guarantee that all of the Existing Warrants will be exercised by the Holder in accordance with the Inducement Agreement. As of October 31, 2023, the holder has exercised 2,000,000 shares of Common Stock under the Existing Warrants pursuant to the Warrant Inducement Agreement for aggregate gross proceeds to the Company of \$2.057 million before deducting financial advisory fees and other expenses payable by the Company.

In consideration of the holder’s agreement to exercise the Existing Warrants in accordance with the Warrant Inducement Agreement, we agreed to issue new warrants, or the Inducement Warrants, to purchase shares of Common Stock equal to 100% of the number of shares of Common Stock issued upon exercise of the Existing Warrants, or the Warrant Shares. We agreed in the Warrant Inducement Agreement to register for resale by the holder the Warrant Shares underlying the Inducement Warrants. We will not receive any of the proceeds of sales by the holder of any of the Warrant Shares covered by this prospectus.

Recent Developments

Preferred Stock Purchase Agreement

On October 11, 2023, we entered into a Preferred Stock Purchase Agreement, or the Preferred Stock Purchase Agreement, with a single investor, or the Investor, pursuant to which we agreed to issue and sell to the Investor in a private placement 1,000 shares of our Series D Preferred Stock, par value \$0.01 per share, or the Preferred Stock. Each share of Preferred Stock was sold at a price of \$1,000 per share for aggregate gross proceeds of \$1.0 million before deducting offering expenses. The sale of the Preferred Stock was conducted in connection with the negotiation of a potential strategic transaction involving us and the Investor. The Company intends to use the proceeds of offering to fund our operations while it pursues a potential strategic transaction with the Investor. Any such strategic transaction will be pursuant to a definitive agreement entered into by us and the Investor.

Going Concern

The Company is a guarantor of its subsidiary Curetis GmbH's ("Curetis") debt to the European Investment Bank (the "EIB"). Although Curetis and the Company's subsidiary Ares Genetics GmbH filed for bankruptcy protection in November 2023, unless Curetis' debt is fully satisfied in connection with such insolvency proceedings, the Company would likely remain responsible for such debt. In such event, if the EIB enforces the guaranty against the Company, our cash reach would be dependent on the remaining debt owed to EIB. However, if our cash reach is insufficient, the Company may need to seek bankruptcy protection in the United States. This has led management to conclude that there is substantial doubt about the Company's ability to continue as a going concern. Even if the EIB does not enforce the guaranty, our remaining cash reach is very limited. Accordingly, in the event the Company is unable to access additional capital during the fourth quarter of 2023, the Company will not have sufficient cash flows and liquidity to finance its business operations beyond the fourth quarter of 2023 as currently contemplated.

To meet its capital needs and improve its liquidity position, the Company is considering multiple alternatives, including, but not limited to, restructuring or refinancing its debt, seeking additional debt or equity capital, reducing or delaying business activities, selling assets, other strategic financings or transactions and other measures, including obtaining relief under applicable bankruptcy laws. Such alternatives included the sale of Preferred Stock, described above, to an Investor in connection with the continued pursuit of a strategic transaction. There can be no assurance that the Company will be able to identify or execute on any of these alternatives, including a potential strategic transaction with the Investor, on acceptable terms or that any of these alternatives will be successful.

Nasdaq De-listing Notice

On June 5, 2023, we received a notice from The Nasdaq Stock Market LLC, or Nasdaq, notifying us that, based upon the closing bid price of our common stock, for the 30 consecutive business days prior to the notice, the Company no longer met the requirement to maintain a minimum closing bid price of \$1.00 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq's Listing Rule 5810(c)(3)(A), we have a period of 180 calendar days to regain compliance with the rule. We have until December 4, 2023 to regain such compliance, but do not believe we will be able to do so without implementing a reverse stock split or completing a strategic transaction.

If we are not in compliance with the minimum bid price requirement by December 4, 2023 we would be required to meet the continued listing requirements for market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, with the exception of the minimum bid price requirement, in order to be granted an additional 180-day grace period. While there can be no assurances that we will meet such requirements, if we do meet such requirements, we may be able to apply for such additional 180-day grace period. However, we do not believe that such additional 180-day grace period will allow the Company to comply with the minimum closing bid price requirement, so we expect to receive a delisting notice from Nasdaq if a reverse stock split is not approved or a strategic transaction is not completed.

Company Information

OpGen, Inc. was incorporated in Delaware in 2001. Our principal executive office is located at 9717 Key West Avenue, Suite 100, Rockville, MD 20850, and our telephone number is (301) 869-9683. We also have operations in Germany and Austria. 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

Securities offered by the selling stockholder	10,892,728 Warrant Shares
Terms of the offering	The selling stockholder will determine when and how it will sell the Warrant Shares offered in this prospectus, as described in " Plan of Distribution ."
Use of proceeds	We will not receive any proceeds from the sale of the Warrant Shares covered by this prospectus.
Risk factors	See " Risk Factors " beginning on page 8, 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 November 10, 2023 the last reported sale price of our Common Stock was \$0.51 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.

Note Regarding Trademarks

We own various U.S. federal trademark registrations and applications and unregistered trademarks and service marks, including OpGen®, Curetis®, Unyvero®, ARES® and ARES GENETICS®, and Acuitas®. 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 and Section 21E of the Securities Exchange Act of 1934, as amended, or 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 liquidity and working capital requirements, including our cash requirements over the next 12 months;
- the impact, timing, outcome and risks of the insolvency proceedings of our subsidiaries Curetis GmbH and Ares Genetics GmbH;
- the result of any alternatives to mitigate our cash position, including restructuring or refinancing of our debt, seeking additional debt or equity capital, reducing or delaying our business activities, selling assets, other strategic transactions or other measures, including obtaining relief under U.S. or foreign bankruptcy laws, and the terms, value and timing of any transaction resulting from such alternatives;
- our ability to continue to operate in the ordinary course of business without disruption while the insolvency proceedings of our subsidiaries Curetis GmbH and Ares Genetics GmbH are pending;
- our ability to satisfy our debt obligations, including following and in connection with our subsidiaries' insolvency proceedings;
- our ability to successfully identify, negotiate and consummate a strategic transaction;
- our use of proceeds from capital financing transactions;
- our ability to maintain compliance with the ongoing listing requirements for the Nasdaq Capital Market;
- the completion of our development efforts for our Unyvero UTI panel, Unyvero A30 RQ platform and ARESdb and the timing of regulatory submissions;
- our ability to meet our obligations and extend our relationships under our collaboration and distribution agreements;
- our ability to obtain regulatory clearance for and commercialize our product and services offerings;
- our ability to sustain or grow our customer base for our Unyvero IVD and Acuitas AMR Gene Panel products as well as our current research use only (RUO) products;
- regulations and changes in laws or regulations applicable to our business, including regulation by the FDA, European Union, including new IVDR requirements, and China's NMPA;
- adverse effects on our business condition and results of operations from general economic and market conditions and overall fluctuations in the United States and international markets, including deteriorating market conditions due to investor concerns regarding inflation and Russia's war against Ukraine and Hamas' war against Israel;
- adverse developments affecting the financial services industry, including events or concerns involving liquidity, defaults or non-performance by financial institutions that could adversely affect our business, financial condition or results of operations;
- 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.

Risks Related to this Offering

The number of shares being registered for resale is significant in relation to the number of our outstanding shares of Common Stock.

We have filed a registration statement of which this prospectus is a part to register the shares offered hereunder for sale into the public market by the selling stockholder. These shares represent a large number of shares of our Common Stock, and if sold in the market all at once or at about the same time, could depress the market price of our Common Stock during the period the registration statement remains effective and could also affect our ability to raise equity capital.

The market price of our common stock and the trading volume of our common stock has been and may continue to be, highly volatile, and such volatility could cause the market price of our common stock to decrease.

Since January 1, 2022, the market price of our common stock fluctuated from a low of \$0.165 per share to a high of \$22.20 per share, and our stock price continues to fluctuate. The market price and trading volume of our common stock may continue to fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- our ability to grow our revenue and customer base;
- the announcement or the market introduction of new products or product enhancements by us or our competitors;
- the trading volume of our common stock;
- developments concerning regulatory oversight and approvals;
- variations in our and our competitors’ results of operations;
- changes in earnings estimates or recommendations by securities analysts, if our common stock is covered by analysts;
- successes or challenges in our collaborative arrangements or alternative funding sources;
- developments in the health care and life science industries;
- the results of product liability or intellectual property lawsuits;
- adverse effects on our business condition and results of operations from general economic and market conditions and overall fluctuations in the United States and international markets, including deteriorating market conditions due to investor concerns regarding inflation and Russia’s war on Ukraine;
- future issuances of common stock or other securities;
- the addition or departure of key personnel;
- announcements by us or our competitors of acquisitions, investments or strategic alliances; and
- general market conditions and other factors, including factors unrelated to our operating performance.

Further, the stock market in general, and the market for health care and life sciences companies in particular, has recently experienced extreme price and volume fluctuations. The volatility of our common stock is further exacerbated due to its low trading volume. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock and the loss of some or all of your investment.

We may issue additional common stock resulting in stock ownership dilution.

Future dilution may occur due to additional future equity issuances and/or equity financing events by us, including any potential future restructuring of our outstanding indebtedness. In addition, we may raise additional capital through the sale of equity or convertible debt securities, which would further dilute the ownership interests of our stockholders. We also have a significant number of stock options, restricted stock units and warrants outstanding. To the extent that outstanding stock options or warrants have been or may be exercised or other shares issued, you may experience further dilution.

Trading of our common stock is limited, and trading restrictions imposed on us by applicable regulations may further reduce trading in our common stock, making it difficult for our stockholders to sell their shares; and future sales of Common Stock could reduce our stock price.

Trading of our Common Stock is currently conducted on the Nasdaq Capital Market. The liquidity of our Common Stock is limited, including in terms of the number of shares that can be bought and sold at a given price and reduction in security analysts' and the media's coverage of us, if any. These factors may result in different prices for our common stock than might otherwise be obtained in a more liquid market and could also result in a larger spread between the bid and asked prices for our Common Stock. In addition, in the absence of a large market capitalization, our Common Stock is less liquid than the stock of companies with broader public ownership, and, as a result, the trading prices of our Common Stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate his investment in our Common Stock. Trading of a relatively small volume of our Common Stock may have a greater impact on the trading price of our stock. We cannot predict the prices at which our Common Stock will trade in the future, if at all.

Our subsidiaries Curetis GmbH and Ares Genetics GmbH filed for bankruptcy protection under German and Austrian laws, respectively, which may cause our common stock to decrease in value.

As previously reported in the Company's Current Report on Form 8-K filed with the SEC on November 7, 2023, the Company's subsidiaries Curetis and Ares Genetics filed for bankruptcy protection under German and Austrian laws, respectively. Any trading in our common stock during the pendency of such insolvency proceedings may be highly speculative and pose substantial risks to investors of our common stock, as the price of our common stock may decrease in value or experience substantial volatility. There is substantial uncertainty that the Company would recover any amounts in connection with such insolvency proceedings, including, in particular, as a result of Curetis' indebtedness. In addition, the Company is a guarantor of Curetis' debt with the EIB and will remain liable under such guaranty for the debt if not fully satisfied by recoveries received by the EIB in connection with the insolvency proceedings.

We are subject to other risks and uncertainties associated with our subsidiaries' insolvency proceedings.

Our operations and ability to develop and execute our business plan, our financial condition, our liquidity, and our continuation as a going concern are subject to the risks and uncertainties associated with the insolvency proceedings of our subsidiaries. As a result of the insolvency proceedings, the insolvency administrators appointed for the companies will assume control over the assets and liabilities of Curetis and Ares Genetics, which eliminates our authority over the subsidiaries and will materially affect our ability to operate in the ordinary course of business. As a result, the Company plans to focus on the functions needed to pursue potential strategic alternatives. There is no guarantee that any such strategic alternatives will be available to the Company on reasonable terms or that any such alternatives will be successful.

In addition, we are subject to the following additional risks relating to such bankruptcies:

- the preservation and sale of the businesses of the subsidiaries as part of the insolvency proceedings may not be successful;
- we may incur higher costs in connection with such insolvency proceedings and related matters;
- our ability to obtain sufficient financing to allow us to continue to operate while we seek an alternative transaction or to allow us to emerge from bankruptcy and execute our business plan post-emergence;
- our ability to maintain our relationships with our suppliers, service providers, customers, employees and other third parties;
- our ability to maintain contracts that are critical to our operations;
- our ability to attract, motivate and retain key employees, including our current management;
- the ability of third parties to seek and obtain court approval to terminate contracts and other agreements with us; and
- the actions and decisions of our stockholders, creditors and other third parties who have interests in such insolvency proceedings may be inconsistent with our plans.

Our subsidiaries may be subject to claims that will not be discharged in the insolvency proceedings, which could have a material adverse effect on our business, cash flows, liquidity, financial condition, and results of operations.

The insolvency proceedings may result in discharging a debtor from, among other things, substantially all debts arising prior to the insolvency proceedings. Thus, while generally all claims against us that arose prior to the filing by our subsidiaries for bankruptcy protection would be discharged in connection with such insolvency proceedings, certain exceptions may arise. Any claims not ultimately discharged could be asserted against us and may have an adverse effect on our business, cash flows, liquidity, financial condition, and results of operations on a post-reorganization basis. In addition, because we are a guarantor of Curetis' debt to EIB, we would likely remain responsible for Curetis' debt unless it is fully satisfied in connection with the resolution of Curetis' and Ares Genetics' insolvency proceedings.

If we operate under the bankruptcy court's protection for a long period of time, or for a longer period of time than expected, our business may be harmed.

Our future results may be dependent on our ability to successfully complete a strategic transaction or successful execution of our business plan. Our being subject to a long period of operations under the bankruptcy court's protection could have a material adverse effect on our business, financial condition, results of operations, and liquidity. So long as the insolvency proceedings continue, our management will be required to spend a significant amount of time and effort dealing with the insolvency proceedings instead of focusing exclusively on a strategic transaction or our business operations. A prolonged period of operating under the bankruptcy court's protection may also make it more difficult to retain management and other key personnel necessary to the success and growth of our business. In addition, the longer the insolvency proceedings continue, the more likely it is that our clients, investors, strategic partners, and service providers will lose confidence in our ability to reorganize our businesses successfully and seek to establish alternative commercial relationships, as applicable. Furthermore, so long as the insolvency proceedings continue, we will be required to incur substantial costs for professional fees and other expenses associated with the administration of the proceedings. These fees and expenses will take a priority over many other claims and expenses. We cannot predict the ultimate amount of all settlement terms for the liabilities that will be subject to any resolution of our subsidiaries' insolvency proceedings.

As a result of Curetis' and Ares Genetics' insolvency proceedings, our historical financial information may not be indicative of our future financial performance, which may be volatile.

During Curetis' and Ares Genetics' insolvency proceedings, we expect our financial results to be volatile as we will be unable to operate in the ordinary course of business if we cannot preserve the operations of Curetis and Ares Genetics as part of the proceedings. In addition, restructuring activities and expenses, contract terminations and rejections, and claims assessments may impact our consolidated financial statements. As a result, our historical financial performance is likely not indicative of our financial performance after the date of the filing of the insolvency proceedings.

USE OF PROCEEDS

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

SELLING STOCKHOLDER

We have prepared this prospectus to allow the selling stockholder to sell or otherwise dispose of, from time to time, up to 10,892,728 Warrant Shares.

On October 12, 2023, we entered into the Warrant Inducement Agreement with the selling stockholder, who is the holder of certain Existing Warrants. Pursuant to the Warrant Inducement Agreement, the selling stockholder agreed to exercise for cash their Existing Warrants to purchase up to 10,892,728 shares of our Common Stock at an exercise price of \$0.7785 per share, the exercise price per share of the Existing Warrants, during the period from the date of the Warrant Inducement Agreement until 7:30 a.m., Eastern Time, on October 26, 2023. Pursuant to an amendment that we entered into with the selling stockholder on October 26, 2023, such offer period was extended to December 31, 2023.

In consideration of the selling stockholder's agreement to exercise the Existing Warrants in accordance with the Warrant Inducement Agreement, we agreed to issue the Inducement Warrants to purchase shares of Common Stock equal to 100% of the number of shares of Common Stock issued upon exercise of the Existing Warrants. We agreed in the Warrant Inducement Agreement to register for resale by the selling stockholder the Warrant Shares underlying the Inducement Warrants and have filed with the SEC a registration statement on Form S-3, of which this prospectus forms a part, with respect to the resale or other disposition of the securities offered from time to time by the selling stockholder under this prospectus. We will not receive any of the proceeds of sales by the holder of any of the Warrant Shares covered by this prospectus.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares of our Common Stock. Unless otherwise indicated below, to our knowledge, the selling stockholder named in the table below has sole voting and investment power with respect to the shares of Common Stock beneficially owned by them. The number of shares of Common Stock beneficially owned prior to the offering for each selling stockholder includes (i) all shares of our Common Stock held by such selling stockholder prior to the transactions contemplated by the Warrant Inducement Agreement plus (ii) all shares of our Common Stock that may be received by such selling stockholder pursuant to the transactions contemplated by the Warrant Inducement Agreement and being offered pursuant to the prospectus, as well as (iii) all options or other derivative securities held by such selling stockholder, which are exercisable within 60 days of September 30, 2023. The percentages of shares owned after the offering are based on 20,906,252 shares of our Common Stock outstanding as of September 30, 2023, which includes the outstanding securities offered by this prospectus. The inclusion of any shares in this table does not constitute an admission of beneficial ownership by the person named below.

The selling stockholder may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act, some or all of their shares of Common Stock since the date on which the information in the table below is presented. Information about the selling stockholder may change over time.

Name of Selling Stockholder	Beneficial Ownership Prior to this Offering		Securities Being Offered	Beneficial Ownership After this Offering	
	Number	Percent		Number	Percent
Armistice Capital, LLC (1)	10,892,728	(2) 52%	10,892,728 (3)	—	—

(1) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund"), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the Selling Stockholder from exercising that portion of the warrants that would result in the Selling Stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

(2) Consists of 2,000,000 Warrant Shares and 8,892,728 shares of Common Stock underlying the Existing Warrants. In addition, upon exercise of the remaining Existing Warrants, the selling stockholder will be entitled to receive up to 8,892,728 additional Warrant Shares. While the Warrant Shares are being registered under the registration statement of which this prospectus forms a part, pursuant to the terms of the Inducement Warrants, the Master Fund is not permitted to exercise such warrants to purchase Common Stock to the extent that such exercise would result in it beneficially owning more than 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of such warrants.

(3) The selling stockholder holds (i) Existing Warrants to acquire 8,892,728 shares of Common Stock underlying such Existing Warrants, and (ii) New Warrants to acquire 2,000,000 Warrant Shares. Upon exercise of the Existing Warrants, the selling stockholder will be entitled to receive up to 8,892,728 additional Warrant Shares. As set forth in note (2) above, the Warrant Shares are subject to a 4.99% blocker. The table above reflects the number of shares of Common Stock that would be issuable upon full conversion and exercise of such reported securities without giving effect to the applicable blockers.

Certain Relationships and Related Party Transactions

On October 12, 2023, we entered into the Warrant Inducement Agreement with the selling stockholder, who is the holder of the Existing Warrants. Pursuant to the Warrant Inducement Agreement, the selling stockholder agreed to exercise for cash their Existing Warrants to purchase up to 10,892,728 shares of our Common Stock at an exercise price of \$0.7785 per share, the exercise price per share of the Existing Warrants, during the period from the date of the Warrant Inducement Agreement until 7:30 a.m., Eastern Time, on October 26, 2023. Pursuant to an amendment that we entered into with the selling stockholder on October 26, 2023, such offer period was extended to December 31, 2023.

In order to permit the exercise of the Existing Warrants pursuant to the rules of the NASDAQ Capital Market, the selling stockholder agreed to pay as additional consideration \$0.25 per share of Common Stock issued upon exercise of the Existing Warrants. The aggregate gross proceeds to be received by us will depend on the number of Existing Warrants actually exercised by the selling stockholder. If all of the Existing Warrants are exercised in connection with the Warrant Inducement Agreement, we would anticipate receiving aggregate gross proceeds of up to approximately \$11.2 million from the exercise of the Existing Warrants before deducting financial advisory fees and other expenses payable by us. There is, however, no guarantee that all of the Existing Warrants will be exercised by the selling stockholder in accordance with the Inducement Agreement. As of October 31, 2023, the selling stockholder has exercised 2,000,000 shares of Common Stock under the Existing Warrants pursuant to the Warrant Inducement Agreement for aggregate gross proceeds to the Company of \$2.057 million before deducting financial advisory fees and other expenses payable by the Company. In consideration of the selling stockholder's agreement to exercise the Existing Warrants in accordance with the Warrant Inducement Agreement, we agreed to issue the Inducement Warrants to purchase shares of Common Stock equal to 100% of the number of shares of Common Stock issued upon exercise of the Existing Warrants.

Pursuant to the Warrant Inducement Agreement, we agreed to file a registration statement on Form S-3 (or other appropriate form if the Company is not eligible to use Form S-3) to register the resale of the Warrant Shares upon exercise of the Inducement Warrants within thirty (30) days of the closing of the transactions contemplated by the Inducement Agreement, and to use commercially reasonable efforts to have such registration statement declared effective by the SEC within ninety (90) days following the date of filing the registration statement and to keep the registration statement effective at all times until no holder of the Inducement Warrants owns any Inducement Warrants or Warrant Shares. In the event that the Company fails to timely deliver to the holder the Warrant Shares without restrictive legends, the Company agreed to pay certain liquidated damages to the Holder. We are registering the shares to be sold by the selling stockholder under the registration statement of which this prospectus is a part to satisfy our obligation under the Inducement Agreement.

On May 1, 2023, we entered into a Securities Purchase Agreement (the "May 2023 Purchase Agreement") with the selling stockholder, pursuant to which we issued and sold to the selling stockholder (i) 605,000 shares of Common Stock, (ii) pre-funded warrants to purchase up to an aggregate of 3,890,825 shares of Common Stock (the "May 2023 Pre-funded Warrants"), and (iii) common warrants to purchase up to an aggregate of 4,495,825 shares of Common Stock (the "May 2023 Common Warrants" and together with the Pre-funded Warrants, the "May 2023 Warrants"). In connection with such offering, we also entered into a warrant amendment agreement with the selling stockholder, pursuant to which we amended certain existing warrants to purchase up to 6,396,903 shares of Common Stock that were previously issued in 2018, 2021, 2022 and 2023 to the selling stockholder, with exercise prices ranging from \$2.65 to \$7.54 per share (the "Amended Warrants"). The Existing Warrants that are subject to the Inducement Agreement consist of the May 2023 Warrants and the Amended Warrants.

PLAN OF DISTRIBUTION

The selling stockholder, and its pledgees, donees, transferees or other successors in interest, may from time to time offer and sell, separately or together, some or all of the Warrant Shares covered by this prospectus. Registration of the Warrant Shares covered by this prospectus does not mean, however, that those Warrant Shares necessarily will be offered or sold.

The Warrant Shares covered by this prospectus may be sold from time to time, at market prices prevailing at the time of sale, at prices related to market prices, at a fixed price or prices subject to change or at negotiated prices, by a variety of methods including the following:

- in the Nasdaq Capital Market;
- in privately negotiated transactions;
- through broker-dealers, who may act as agents or principals;
- through one or more underwriters on a firm commitment or best-efforts basis;
- in a block trade in which a broker-dealer will attempt to sell a block of securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- directly to one or more purchasers;
- through agents; or
- in any combination of the above.

In effecting sales, brokers or dealers engaged by the selling stockholder may arrange for other brokers or dealers to participate. Broker-dealer transactions may include:

- purchases of the Warrant Shares by a broker-dealer as principal and resales of the Warrant Shares by the broker-dealer for its account pursuant to this prospectus;
- ordinary brokerage transactions; or
- transactions in which the broker-dealer solicits purchasers on a best efforts basis.

To our knowledge, the selling stockholder has not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of the Warrant Shares covered by this prospectus. At any time a particular offer of the securities covered by this prospectus is made, a revised prospectus or prospectus supplement, if required, will be distributed which will set forth the aggregate amount of Warrant Shares covered by this prospectus being offered and the terms of the offering, including the name or names of any underwriters, dealers, brokers or agents. In addition, to the extent required, any discounts, commissions, concessions and other items constituting underwriters' or agents' compensation, as well as any discounts, commissions or concessions allowed or reallowed or paid to dealers, will be set forth in such revised prospectus supplement. Any such required prospectus supplement, and, if necessary, a post-effective amendment to the registration statement of which this prospectus is a part, will be filed with the SEC to reflect the disclosure of additional information with respect to the distribution of the securities covered by this prospectus.

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. for the years ended December 31, 2022 and 2021 have been audited by CohnReznick LLP, independent registered public accounting firm, as set forth in their report thereon appearing in OpGen Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022, and incorporated by reference herein. Such consolidated financial statements are incorporated by reference herein in reliance upon such report, which includes an explanatory paragraph on OpGen Inc.'s ability to continue as a going concern, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We filed with the SEC a registration statement under the Securities Act of 1933 for the securities offered by 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 securities, 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, 2022, filed with the SEC on March 30, 2023;
- our Quarterly Reports on Form 10-Q for the quarter ended [March 31, 2023](#), filed with the SEC on May 15, 2023, and the quarter ended [June 30, 2023](#), filed with the SEC on August 14, 2023;
- our Current Reports on Form 8-K, filed with the Commission on [January 4, 2023](#) (Items 3.03, 5.03, 8.01 and 9.01), [January 11, 2023](#) (Items 1.01, 8.01 and 9.01), [January 20, 2023](#) (Items 4.01 and 9.01), [January 23, 2023](#) (Items 8.01 and 9.01), [February 17, 2023](#) (Items 8.01 and 9.01), [March 14, 2023](#) (Item 4.01), [April 18, 2023](#) (Items 8.01 and 9.01), [April 19, 2023](#) (Items 8.01 and 9.01), [May 4, 2023](#) (Items 1.01, 8.01 and 9.01), [June 7, 2023](#) (Items 5.07 and 9.01), [June 9, 2023](#) (Items 3.01 and 9.01), [June 26, 2023](#) (Items 8.01 and 9.01), [June 30, 2023](#) (Items 5.07 and 9.01), [July 5, 2023](#) (Items 1.01 and 9.01), [September 7, 2023](#) (Items 5.02, 8.01 and 9.01), [September 8, 2023](#) (Items 5.07 and 9.01), [October 11, 2023](#) (Items 8.01 and 9.01), [October 11](#) (Items 1.01, 3.02, 3.03, 5.03, 8.01 and 9.01), [October 16, 2023](#) (Items 1.01, 3.02, 8.01 and 9.01), [October 26, 2023](#) (Items 1.01, 3.02 and 9.01), and [November 7, 2023](#) (Items 8.01 and 9.01);
- our proxy statement for the [Annual Meeting of Stockholders](#) held on June 7, 2023, filed with the SEC on April 26, 2023; 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.
9717 Key West Avenue, Suite 100
Rockville, MD 20850
Attention: Albert Weber, Corporate Secretary
Telephone No.: (301) 869-9683

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The costs and expenses payable by the Company in connection with the offerings described in this registration statement are set forth below. The selling stockholder will not bear any portion of such expenses.

SEC registration fee	\$	859.35
Legal fees and expenses	\$	20,000.00*
Accounting fees and expenses	\$	10,000.00*
Printer costs and expenses	\$	200.00*
Total	\$	31,059.35

*Estimated as permitted under Rule 511 of Regulation S-K.

Item 15. Indemnification of Directors and Officers.

The Registrant maintains insurance providing for indemnification of its officers and directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions.

Delaware Corporations

Section 145 of the Delaware General Corporation Law, or DGCL, provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Section 145 further provides that a corporation similarly may indemnify any such person serving in any such capacity who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or such other court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

Certificate of Incorporation and Bylaws

The Registrant's amended and restated certificate of incorporation, as amended, provides that a director of the Registrant shall not be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. If the DGCL is hereafter amended to authorize the further elimination or limitation of the liability of directors, then the liability of the directors of the Registrant, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended DGCL. Any repeal or modification of this paragraph by the stockholders of the Registrant shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the corporation at the time of such repeal or modification. The Registrant's certificate of incorporation further provides that the Registrant's officers and directors shall be indemnified by the Registrant as provided in the Registrant's bylaws.

Under the provisions of the Registrant's bylaws, as amended, any person who is or was a party or is threatened to be made a party of any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was a director, officer, employee or agent of the Registrant or is or was serving at the Registrant's request as a director, officer, employee or agent of another company or other entity shall be indemnified by the Registrant against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The Registrant shall further indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Registrant to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another corporation or other entity against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Registrant. Notwithstanding the foregoing, no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in, or not opposed to, the Registrant's best interests and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

In addition, to the extent that such a person is successful on the merits or otherwise in defense of any action, suit, or proceeding brought against him or her by reason of the fact that he or she is the Registrant's director, officer, employee or agent, he or she shall be indemnified against expenses, including attorneys' fees, actually and reasonably incurred in connection therewith.

The Registrant's bylaws, as amended, provide that expenses (including attorneys' fees) incurred by a director or officer in defending a civil, criminal, administrative, or investigative action, suit or proceeding may be paid by the Registrant in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Registrant. Such expenses, including attorneys' fees, incurred by other employees and agents may be paid upon such terms and conditions as the Board of Directors deems appropriate.

Any indemnification under the provisions summarized above (unless ordered by a court) shall be made by the Registrant only as authorized in each specific case upon a determination that indemnification of such person is proper under the circumstances because he or she has met the applicable standard of conduct set forth in the applicable provision. Such determination shall be made (1) by a majority vote of the Registrant's directors who are not parties to the action, suit or proceeding (even though less than a quorum), (2) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (3) by the stockholders.

The Registrant maintains director and officer insurance with respect to those claims described above in customary amounts.

The above discussion of the certificate of incorporation and bylaws of the Registrant and the DGCL is not intended to be exhaustive and is qualified in its entirety by such certificates of incorporation, bylaws and the DGCL.

The Registrant has entered into indemnification agreements with each of our directors and executive officers. These agreements provide that we will indemnify each of our directors, such executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us and/or in furtherance of our rights. Additionally, each of our directors may have certain rights to indemnification, advancement of expenses and/or insurance provided by their affiliates, which indemnification relates to and might apply to the same proceedings arising out of such director's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors are primary and any obligation of the affiliates of those directors to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act.

Item 16. Exhibits.

The following exhibits are filed as part of, or incorporated by reference into this registration statement:

<u>Exhibit Number</u>	<u>Identification of Exhibit</u>
4.1	Form of Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 10-K, filed on March 24, 2020).
4.2	Form of Inducement Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed with the SEC on October 16, 2023).
4.3	Form of Existing Warrant (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed with the SEC on May 4, 2023)
5.1 *	Opinion of Ballard Spahr LLP
10.1	Form of Warrant Inducement Agreement, dated October 12, 2023, by and between OpGen, Inc. and the warrant holder thereto (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on October 16, 2023).
10.2	Form of Amendment Agreement to Warrant Inducement Agreement, dated October 26, 2023, by and between OpGen, Inc. and the warrant holder thereto (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on October 26, 2023).
10.3	Form of Warrant Exercise Agreement, dated March 9, 2021, by and between OpGen, Inc. and the Holder (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on March 9, 2021).
23.1 *	Consent of CohnReznick LLP
23.2 *	Consent of Ballard Spahr LLP (included in Exhibit 5.1)
24.1 *	Power of Attorney (on signature page)

* Filed herewith.

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 in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective 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 (1)(i), (1)(ii) and (1)(iii) of this section 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 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:

(i) If the registrant is relying on Rule 430B:

(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; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness, 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 first use, 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 date of first use.

(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 further 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, 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 of whether such indemnification by it is against public policy as expressed in said act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockville, State of Maryland on the 13th day of November, 2023.

OpGen, Inc.

By: /s/ Oliver Schacht
Oliver Schacht, Ph.D.
Chief Executive Officer and Director
(principal executive officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Oliver Schacht, Ph.D. and Albert Weber as true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments) to this registration statement and any additional registration statements filed pursuant to Rule 462, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission (the SEC), and generally to do all such things in their names and behalf in their capacities as officers and directors to enable the Company to comply with the provisions of the Securities Act of 1933 and all requirements of the SEC, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, ratifying and confirming all that said attorney-in-fact and agent, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Oliver Schacht</u> Oliver Schacht, Ph.D.	Chief Executive Officer and Director (principal executive officer)	November 13, 2023
<u>/s/ Albert Weber</u> Albert Weber	Chief Financial Officer (principal financial officer and principal accounting officer)	November 13, 2023
<u>/s/ Mario Crovetto</u> Mario Crovetto	Director	November 13, 2023
<u>/s/ R. Donald Elsey</u> R. Donald Elsey	Director	November 13, 2023
<u>/s/ Prabhavathi Fernandes, Ph.D.</u> Prabhavathi Fernandes, Ph.D.	Director	November 13, 2023
<u>/s/ Evan Jones</u> Evan Jones	Director	November 13, 2023
<u>/s/ William Rhodes</u> William Rhodes	Director	November 13, 2023
<u>/s/ Yvonne Schlaepfi</u> Yvonne Schlaepfi	Director	November 13, 2023

1735 Market Street, 51st Floor
Philadelphia, PA 19103-7599
TEL 215.665.8500
FAX 215.864.8999
www.ballardspahr.com

November 13, 2023

OpGen, Inc.
9717 Key West Ave, Suite 100
Rockville, MD 20850

RE: OpGen, Inc. Offering

Ladies and Gentlemen:

We have acted as counsel to OpGen, Inc., a Delaware corporation (the "Company"), and are rendering this opinion in connection with the preparation of a Registration Statement on Form S-3 (the "Registration Statement") filed by the Company with the U.S. Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), on November 10, 2023, with respect to the resale of up to 10,892,728 shares of the Company's common stock, par value \$0.01 per share (the "Common Stock") issuable upon exercise of certain common stock purchase warrants (the "Warrants") and the shares underlying such Warrants, the "Warrant Shares") that may be issued from time to time to the stockholder of the Company identified in the Registration Statement as selling stockholder (the "Selling Stockholder"), pursuant to that certain Warrant Inducement Agreement, dated October 12, 2023 (the "Warrant Inducement Agreement"). The Warrant Shares are to be sold by the Selling Stockholder from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act pursuant to a prospectus to be filed with the Registration Statement as may be supplemented by one or more prospectus supplement that may be filed under the Securities Act.

We have examined originals or copies (certified or otherwise identified to our satisfaction) of (i) the Amended and Restated Certificate of Incorporation of the Company together with all amendments thereto; (ii) the Certificate of Correction to the Amended and Restated Certificate of Incorporation; (iii) the Amended and Restated Bylaws of the Company, as amended; (iv) the Registration Statement and the exhibits thereto and the prospectus contained therein; (v) the Warrant Inducement Agreement; (vi) the form of Warrants; (vii) such other corporate records, agreements, documents and instruments; and (viii) such certificates or comparable documents of public officials and other sources, believed by us to be reliable, and of officers and representatives of the Company, and have made such inquiries of such officers and representatives, as we have deemed relevant and necessary as a basis for the opinions hereinafter set forth.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based upon and subject to the limitations, qualifications and assumptions set forth herein, we are of the opinion that the Warrant Shares have been duly and validly authorized and reserved for issuance, and when issued upon the exercise of the applicable Warrants in accordance with the terms therein, will be validly issued, fully paid and non-assessable.

With regard to our opinion above: (i) our opinion is subject to, and may be limited by, (a) applicable bankruptcy, reorganization, insolvency, moratorium, fraudulent conveyance, debtor and creditor, and similar laws which relate to or affect creditors' rights generally, and (b) the effect of general principles of equity, whether considered in proceeding in equity or at law (including, without limitation, the availability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith and fair dealing and the discretion of the court before which a proceeding is brought; and (ii) we express no opinion with respect to any provision of the Warrants that: (a) relates to the subject matter jurisdiction of any federal court of the United States of America or any federal appellate court to adjudicate any controversy related to the Warrants; (b) specifies provisions may be waived in writing, to the extent that an oral agreement or implied agreement by trade practice or course of conduct has been created that modifies such provision; (c) contains a waiver of an inconvenient forum; (d) provides for liquidated damages, buy-in damages, default interest, late charges, monetary penalties, prepayment or make-whole payments or other economic remedies; (e) relates to advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitations, trial by jury, service of process or procedural rights; (f) restricts non-written modifications and waivers; (g) provides for the payment of legal and other professional fees where such payment is contrary to law or public policy; (h) relates to exclusivity, election or accumulation of rights or remedies; or (i) provides that provisions of the Warrants are severable to the extent an essential part of the agreed exchange is determined to be invalid and unenforceable.

We express no opinion as to the laws of any jurisdiction other than the federal laws of the United States of America and the laws of the State of Delaware. Our opinion is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Our opinion is based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act and to the use of this firm's name therein and in the Prospectus under the caption "Legal Matters." In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act and the rules and regulations promulgated thereunder.

Sincerely yours,

/s/ Ballard Spahr LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-3 and related Prospectus, of our report dated March 30, 2023, with respect to the consolidated financial statements of OpGen, Inc. as of December 31, 2022 and 2021, and for the years then ended, which report is included in the Annual Report on Form 10-K of OpGen, Inc. for the year ended December 31, 2022, filed with the Securities and Exchange Commission. Our audit report includes an explanatory paragraph relating to OpGen, Inc.'s ability to continue as a going concern.

We also consent to the reference to our firm under the caption "Experts."

/s/ CohnReznick LLP

Tysons, Virginia
November 13, 2023

Calculation of Filing Fee Tables

FORM S-1
(Form Type)**OPGEN, INC.**

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Common Stock underlying Inducement Warrants	457(c)	10,892,728	\$0.5345(1)	\$0.00014760	\$859.35
Total Offering Amounts:						\$859.35
Total Fees Previously Paid:						-
Total Fee Offsets:						-
Net Fee Due:						\$859.35

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act, based upon the average of the high and low sales price of our common stock as reported on the Nasdaq Capital Market on November 10, 2023.