

April 3, 2015

*By Electronic Filing*

United States Securities and Exchange Commission  
100 F Street N.E.  
Washington D.C. 20549  
Attn: John Reynolds

Re: OpGen, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed March 20, 2015  
File No. 333-202478

We are providing this supplemental response letter on behalf of OpGen, Inc. (the "Company") with respect to the Staff's comment letter dated March 31, 2015, and our conversation with the Staff on April 2, 2015, regarding the above referenced Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-202478), filed on March 20, 2015 (the "Form S-1/A1"). In this supplemental response letter we are describing, and including in the relevant response, the proposed changes that will be made to Amendment No. 2 to the Registration Statement ("Amendment No. 2"). For your convenience, the Staff's comments that are the subject of this supplemental response have been reproduced below, followed by the Company's response.

The Offering, page 7

2. We note the new disclosure on pages 7 and 90 of your Form S-1/A1 that states "each of such existing stockholders who are holders of our outstanding secured demand notes may elect to exchange such demand notes for shares of common stock in this offering." We further note the disclosure on page 7 that states "our estimated proceeds from this offering may be reduced by up to \$1.5 million to the extent that holders of our outstanding secured demand notes currently outstanding elect to exchange such notes for shares of common stock in this offering." Please further explain to us and revise to disclose the significant terms of the outstanding demand notes, including the exchange feature and exchange ratio. To the extent it is probable that the demand notes will be exchanged for common stock in the offering, also tell us how you considered including pro forma financial information for the change in capitalization resulting from the exchange.

RESPONSE: We confirm that we will further revise the referenced disclosure in Amendment No. 2 to clarify the exchange rate for the secured demand notes that may be tendered by the holders as partial or full payment for shares purchased in the initial public offering, as set forth below.

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"We estimate that we will receive net proceeds from this offering of approximately \$ million, or approximately \$ million if the underwriters exercise their option to purchase additional shares in full, at an assumed public offering price of \$ per share, after deducting the underwriting discount, commissions and estimated offering expenses. See "Underwriting" for additional information. **Our receipt of cash proceeds from this offering may be reduced by up to \$1.5 million to the extent that the holders of our currently outstanding secured demand notes elect to tender such notes as full or partial payment for shares of common stock purchased in this offering. If a holder does tender a secured demand note as full or partial payment for shares of common stock in the offering, each \$1.00 of principal or interest so tendered will equal \$1.00 of purchase price at the initial public offering price; there is no discount provided against the initial public offering price.** We expect to use the net proceeds from this offering to fund increased sales and marketing activities for our Acuitas MDRO test products and Lighthouse MDRO Management System, research and development activities to complete the development of our Lighthouse MDRO Management System and future product development, for general and administrative expenses and for working capital purposes. See "Use of Proceeds" for additional information."

“JVen Capital, LLC, entities affiliated with Versant Ventures, Harris & Harris Group, Inc., entities affiliated with CHL Medical Partners and entities affiliated with Mason Wells, each of which are existing stockholders, have indicated an interest in purchasing up to an aggregate of \_\_\_\_\_ shares of our common stock in this offering at the initial public offering price. Because these indications of interest are not binding agreements or commitments to purchase, these existing stockholders may elect not to purchase shares in this offering or the underwriters may elect not to sell any shares in this offering to such stockholders. **Each of such existing stockholders who are holders of currently outstanding secured demand notes may elect to tender the principal or interest on such demand notes, on a dollar-for-dollar basis, as full or partial payment for shares of common stock purchased in this offering. As noted above, no discount is provided against the initial public offering price.** The underwriters will receive a reduced underwriting discount of 5%, or \$ \_\_\_\_\_ per share, in connection with shares of our common stock purchased by any existing stockholders in this offering. Any shares purchased by such stockholders will be subject to lock-up restrictions described in the section entitled “Shares Eligible for Future Sale.””

We advise the Staff that we will file the form of secured demand note as an exhibit to the Amendment No. 2.

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Notes to Financial Statements, page F-7

Note 6 — Redeemable Convertible Preferred Stock, page F-16

5. We note in your response to comment 6 that the initial effective conversion price was significantly in excess of the fair value of the Company’s common stock as determined by an independent valuation as of both April 1, 2014 (Series A Preferred Stock) and December 1, 2014 (2014 Convertible Notes). Please tell us the fair value of the Company’s common stock on each date. Also tell us the fair value of the Company’s common stock upon issuance of the 2015 Convertible Notes and tell us whether this was determined by the Company or an independent valuation.

RESPONSE: We supplementally advise the Staff that the Company is still in the process of determining the appropriate accounting treatment for the 2015 convertible notes, including whether a beneficial conversion feature exists with respect to the 2015 convertible notes and the fair value of the Company’s common stock upon issuances of the 2015 convertible notes. As we advised the Staff, the Company is in the process of obtaining a third party valuation to assist in its determination. As we described, considerations that played an important role in the determination of the terms of the 2015 convertible notes in February 2015, included the need of the Company to raise capital to support its ongoing operations, and the risks to the investors of providing additional capital to the Company given the uncertainty at the time as to whether initial public offering process or other financing strategies would be successful. The Company negotiated the terms of the 2015 convertible notes with the investors, leading to the establishment of the terms of such notes, including the conversion terms and rate and the issuance of the stock purchase warrants. As disclosed in the prospectus, if the Company had not been able to secure such bridge funding it would have been forced to significantly curtail its operations and may have been faced with the need to wind down its operations.

The Company will revise its “Liquidity and Capital Resources” disclosure of the 2015 convertible notes in Amendment No. 2, in addition to the revised disclosure in Note 15 of the Notes to the Financial Statements as described in the April 2 response letter, as follows:

In February and March 2015, the Company issued to existing investors \$1.5 million principal amount of convertible notes, or 2015 convertible notes, which are convertible, at the election of each holder, into shares of Series A Preferred Stock at a conversion rate of 1.25 shares of Series A Preferred Stock for each \$1.00 of principal or interest converted, if no public offering has occurred at the time of conversion, or into shares of common stock, at a conversion rate of one share of common stock for each \$1.00 of principal or interest converted, if the public offering contemplated by this prospectus has occurred prior to such conversion. The 2015 convertible note holders were also issued an aggregate of 225,011 warrants, exercisable for shares of common stock at 110% of the initial public offering price

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and exercisable only if the offering contemplated by this prospectus is consummated. **The Company is in the process of determining the appropriate accounting treatment for the 2015 convertible notes, including whether a beneficial conversion feature exists with respect to the 2015 convertible notes, the classification of the stock purchase warrants as equity or a liability and the fair value of the common stock issuable under such 2015 convertible notes and stock purchase warrants. The final determination could have a significant impact on the accounting for the 2015 convertible notes.** Please see the “Description of Indebtedness” beginning on page 104 of this prospectus for additional information

[Note 8 — Shares and Share-Based Compensation, page F-20](#)

[Stock Options, page F-20](#)

10. Given the Company’s relevant facts and circumstances, please tell us how you considered ASC 718-10-55-83 in your determination of the grant date under ASC 718. In this regard, it appears that the award recipients may have had a sufficient basis to understand both the compensatory and equity relationship established by the award during the period from October 23, 2014 to February 5, 2015 when the exercise price was being finalized.

RESPONSE: In response to a Staff question, the Company computed the stock option expense as if the stock options to acquire an aggregate of 826,000 shares had been granted for accounting purposes in the fourth quarter of 2014. This amount was determined using the Black-Scholes option pricing model, including an exercise price of \$0.61 per share, the fair value of common stock at grant date of \$0.61 per share, an expected term of 6.25 years (based on the simplified method), estimated volatility of 60% and a risk-free rate of 1.74%. Based on this computation, the Company would have recognized an additional \$28,000 of compensation expense in the year ended December 31, 2014 related to these awards. The Company supplementally advises the Staff that such charge would not be material from a financial statement perspective.

With respect to its ongoing analysis of the calculation of the share-based compensation for the 826,000 stock options with an accounting grant date of February 5, 2015, the Company advises the Staff that the calculation of such expense is dependent upon the fair value of the Company’s common stock on February 5, 2015, which fair value has not yet been determined. Some of the factors the Company is considering in making a fair value determination include the factors described in the supplemental letter to the Staff dated March 30, 2014, including the ongoing capital requirements of the Company, funding of such capital requirements through bridge financing from existing investors, the fluid nature of the uncertainties inherent in the Company’s pursuit of various financing activities, including their respective probabilities of success at that time, as well as the progress made in the

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initial public offering process in late January 2015 through mid-February 2015, which include the engagement of the underwriter and the initial “test the waters” activities.

The Company is also considering the valuation conducted by the underwriter in March 2015 to assist in the determination of the price range for such offering, which was based upon comparable publicly traded multiples identified by the underwriter, recently completed mergers and acquisitions identified by the underwriter, and a discounted cash flow analysis based on management’s five year forecast at that time. Management’s five year forecast includes assumptions, based on the advances made in the Company’s commercialization efforts, the increased interest in the healthcare market in products such as the Company’s Acuitas MDRO products, completion of a successful initial public offering, and the consideration that the Company would be able to implement its commercialization strategy and substantially grow its MDRO test business as described in the Registration Statement. The Company refers to the supplemental letter for additional information regarding the support for the March 25, 2015 valuation.

The Company has engaged a valuation consultant to assist it in the assessment and valuation of the 2015 convertible notes as discussed above, and, to the extent possible, also intends to use data points from such valuation report to assist with this analysis.

Based on such initial assessment activities, and although not finally determined, the Company believes that the share-based compensation charge for the stock options is likely to be significant, although it is not currently able to quantify such significance. Because the Company believes such share-based compensation charge is likely to be significant, it will revise its disclosure in “Liquidity and Capital Resources” in Amendment No. 2 to provide the following disclosure:

“The Company is also in the process of determining the share-based compensation expense for the first quarter of 2015 related to stock options to purchase an aggregate of 826,000 shares of its common stock. Considerations inherent in making such determination include the fair value of the common stock issuable upon the exercise of such stock options. The Company believes the share-based compensation expense related to such stock option is likely to be significant, although it is not currently able to estimate the aggregate expense to be reported as part of its first quarter financial statements. Some of the fair value factors being analyzed by the Company include the ongoing capital requirements of the Company during the first quarter 2015, its receipt of bridge financing from existing investors during such period, including the 2015 convertible notes and the demand notes, and its obligations thereunder, the progress and uncertainties during the quarter related to the Company’s pursuit of its initial public offering as contemplated by this prospectus, and the market demand and potential for success of such initial public offering.”

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In addition, the Company will supplement the disclosure regarding these stock option awards by adding the following sentence to the end of the last paragraph regarding stock options under Note 8 – Shares and Share-Based Compensation: “Depending on the fair value of the Company’s common stock as of the February 2015 grant date and the resultant fair value of the options, stock-based compensation expenses related to these awards, which will be recognized over the vesting period, may be significant.”

C. Eric Winzer, the CFO of the Company (240-813-1273) or Mary Mullany at Ballard Spahr LLP (215-864-8631) are available to answer questions you may have about our responses.

Very truly yours,

Mary J. Mullany

MJM/seh

cc: Evan Jones  
C. Eric Winzer  
John Archfield  
Brian McAllister  
James Lopez  
Hillary Daniels

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