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**SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

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**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 3)**

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**OPGEN, INC.**

(Name of Issuer)

**Common Stock, \$0.01 par value**  
(Title of Class of Securities)

**68373L208**  
(CUSIP Number)

**William Taranto, President**  
**Merck Global Health Innovation Fund, LLC**  
**One Merck Drive**  
**Whitehouse Station, NJ 08889**  
**908-423-6551**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

**July 18, 2017**  
(Date of Event which Requires Filing of this Statement)

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If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1.	Names of Reporting Persons. Merck Global Health Innovation Fund, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of shares beneficially owned by each reporting person with	7.	Sole Voting Power 347,689*
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 347,689*
	10.	Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 347,689*	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 6.6**%	
14.	Type of Reporting Person (See Instructions) OO	

\* Includes (i) 59,159 shares owned previously owned; (ii) 48,000 shares of common stock and warrants to acquire 36,000 shares of common stock acquired at the First Closing pursuant to that certain Amended and Restated Securities Purchase Agreement dated May 18, 2016 (the "A&R Purchase Agreement") which occurred on May 19, 2016; (iii) 109,377 shares of common stock and warrants to acquire 82,033 shares of common stock acquired at a Second Closing which occurred on June 27, 2016; and (iv) a warrant to acquire 13,120 shares of common stock acquired in connection with amendment and restatement of a senior secured promissory note.

\*\* Such percentage was calculated based upon an aggregate of 5,237,594 Issuer shares of common stock outstanding, consisting of (i) 5,106,441 Issuer shares of common stock outstanding as of February 2, 2018; and (ii) 131,153 shares of common stock able to be acquired by the Reporting Person upon exercise of warrants or stock options.

1.	Names of Reporting Persons. Merck Sharp & Dohme Corp.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization New Jersey	
Number of shares beneficially owned by each reporting person with	7.	Sole Voting Power 347,689*
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 347,689*
	10.	Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 347,689*	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
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\*\* Such percentage was calculated based upon an aggregate of 5,237,594 Issuer shares of common stock outstanding, consisting of (i) 5,106,441 Issuer shares of common stock outstanding as of February 2, 2018; and (ii) 131,153 shares of common stock able to be acquired by the Reporting Person upon exercise of warrants or stock options.

1.	Names of Reporting Persons. Merck & Co., Inc.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization New Jersey	
Number of shares beneficially owned by each reporting person with	7.	Sole Voting Power 347,689*
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 347,689*
	10.	Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 347,689*	
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14.	Type of Reporting Person (See Instructions) CO	

\* Includes (i) 59,159 shares owned previously owned; (ii) 48,000 shares of common stock and warrants to acquire 36,000 shares of common stock acquired at the First Closing pursuant to that certain Amended and Restated Securities Purchase Agreement dated May 18, 2016 (the "A&R Purchase Agreement") which occurred on May 19, 2016; (iii) 109,377 shares of common stock and warrants to acquire 82,033 shares of common stock acquired at a Second Closing which occurred on June 27, 2016; and (iv) a warrant to acquire 13,120 shares of common stock acquired in connection with amendment and restatement of a senior secured promissory note.

\*\* Such percentage was calculated based upon an aggregate of 5,237,594 Issuer shares of common stock outstanding, consisting of (i) 5,106,441 Issuer shares of common stock outstanding as of February 2, 2018; and (ii) 131,153 shares of common stock able to be acquired by the Reporting Person upon exercise of warrants or stock options.

## Introductory Note

This Amendment No. 3 (this “Amendment No. 3”) amends the statement on Schedule 13D filed on July 23, 2015, amended by Amendment No. 1 filed on May 31, 2016, amended by Amendment No. 2 filed on June 29, 2016 (the “Schedule 13D”), with respect to shares of common stock, par value \$0.01 per share (the “Common Stock”) of OpGen, Inc., a Delaware corporation (the “Issuer” or the “Company”). This Amendment No. 3 is being filed to report: (i) the consummation of the Amendment and Restatement of MGHIF’s \$1.0 million Promissory Note and the receipt of a warrant to purchase 13,120 shares of Common Stock from the Company in connection therewith; and (ii) the decrease in beneficial ownership of the Reporting Persons due to issuances and sales of additional shares of Common Stock by the Company (commencing with a public offering on July 18, 2017) resulting in an increase in the aggregate number of Company shares outstanding since the Reporting Person’s filing of its prior Amendment No. 2.

## Item 3. Source and Amount of Funds or Other Consideration.

Item 3 is amended and restated in its entirety as follows:

No borrowed funds were used in the purchase.

## Item 4. Purpose of Transaction.

Item 4 is amended and restated in its entirety as follows:

The information set forth under Items 3 and 6 is hereby incorporated by reference.

All of the securities of the Issuer acquired as described in Item 6 were acquired for investment purposes. The Reporting Persons intend to review on a continuing basis the investment in the Issuer. Based on such review, the Reporting Persons may acquire, or cause to be disposed, such securities at any time or formulate other purposes, plans or proposals regarding the Issuer or any of its securities, to the extent deemed advisable in light of general investment and trading policies of the Reporting Persons, the Issuer’s business, financial condition and operating results, general market and industry conditions or other factors.

Dr. David Rubin, an employee of Merck, continues to serve on the board of directors of the Issuer. Except as otherwise described in this Schedule 13D, or pursuant to the transactions contemplated by the Purchase Agreement, none of the Reporting Persons nor, to the best knowledge of the Reporting Persons, any of the persons listed on Schedule A to this Schedule 13D, currently has any plans or proposals that would result in:

- (a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the Board;
- (e) Any material change in the present capitalization or dividend policy of the Issuer;
- (f) Any other material change in the Issuer’s business or corporate structure including but not limited to, if the Issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;

- (g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;
- (h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or
- (j) Any action similar to any of those enumerated above.

However, as part of the ongoing evaluation of this investment and investment alternatives, the Reporting Persons may consider such matters and, subject to applicable law, may formulate a plan with respect to such matters, and, from time to time, may hold discussions with or make formal proposals to management or the Board of the Issuer, other stockholders of the Issuer or other third parties regarding such matters.

#### **Item 5. Interest in Securities of the Issuer.**

Item 5 is amended and restated in its entirety as follows:

- (a) The Reporting Persons may be deemed to beneficially own 347,689 shares of Common Stock of which 181,153 of the 347,689 shares of Common Stock represent shares that MGHIF has the right to acquire from the Issuer pursuant to Warrants. The Common Stock voting rights represent 6.6% of the total number of shares of common stock treated as outstanding for purposes of such vote. The ownership percentages set forth in this Schedule 13D, is based on information provided by the Issuer. As a result of their direct and indirect ownership of MGHIF, each of MSD and Merck may be deemed to share the Common Stock voting rights held in the name of the Purchaser.
- (b) Each of the Reporting Persons has the power to vote or direct the vote of the 215,536 votes that may be cast in actions taken by common stockholders as a result of the shares of Common Stock held in the name of the MGHIF. None of the Reporting Persons has sole or shared power to direct the disposition of any shares of Common Stock.
- (c) To the best knowledge of the Reporting Persons, none of the Reporting Persons nor the individuals named in Schedule A to this Schedule 13D has effected a transaction in shares of the Issuer during the past 60 days.
- (d) Other than the Reporting Persons, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of the Reporting Persons' securities.
- (e) Not applicable.

#### **Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.**

Item 6 is hereby amended by inserting the following paragraphs at the end thereof:

The Company entered into a bridge note financing on May 31, 2017. As a condition to the issuance of bridge financing notes by the Company and the Company receiving the financing evidenced thereby, on June 6, 2017, as amended on June 28, 2017, the Company issued the amended and restated Promissory Note to MGHIF. The Promissory Note was originally issued pursuant to the Common Stock and Note Purchase Agreement, dated as of July 14, 2015, among the Company and the Reporting Person. The amended and restated promissory note extended the maturity date of the Promissory Note from July 14, 2017 to July 14, 2018. In return for MGHIF's consent to such extension, the Company increased the interest rate of the Promissory Note as amended to 10% per annum and issued warrants to purchase 13,120 shares of common stock to MGHIF. The warrants are immediately exercisable, at an exercise price of \$19.50 and have a five-year term.

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The foregoing is subject to and qualified by the terms and conditions contained in the Amended and Restated Promissory Note and the Warrant to Purchase Common Stock, copies of which are incorporated by reference to the Schedule 13D as Exhibit 10 and Exhibit 11, respectively.

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**Item 7. Material to be Filed as Exhibits.**

Item 7 is hereby amended and supplemented by inserting the following at the end thereof:

10. Second Amended and Restated Senior Secured Promissory Note issued by OpGen, Inc. to Merck Global Health Innovation Fund, LLC on June 28, 2017 (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K/A filed by OpGen, Inc. with the Securities and Exchange Commission on June 28, 2017).
11. Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K/A filed by OpGen, Inc. with the Securities and Exchange Commission on June 28, 2017).



**Signatures**

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Dated this 8<sup>th</sup> day of February, 2018.

**MERCK GLOBAL HEALTH  
INNOVATION FUND, LLC**

By: /s/ William J. Taranto\*  
Name: William J. Taranto  
Title: President

**MERCK SHARP & DOHME CORP.**

By: /s/ Katie E. Fedosz  
Name: Katie E. Fedosz  
Title: Assistant Secretary

**MERCK & CO., INC.**

By: /s/ Katie E. Fedosz  
Name: Katie E. Fedosz  
Title: Assistant Secretary

\*By: /s/ Katie E. Fedosz  
As Attorney-in-Fact

\* Ms. Katie E. Fedosz is signing as Attorney-in-Fact pursuant to powers of attorney dated July 23, 2015 granted by each Reporting Person, copies of which are filed as exhibits to the Original Schedule 13D filed on July 23, 2015 and incorporated herein by reference.

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## EXHIBIT INDEX

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11. Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K/A filed by OpGen, Inc. with the Securities and Exchange Commission on June 28, 2017).

The name, present principal occupation or employment, and the name, principal business and address of any corporation or other organization in which such employment is conducted, of each of the executive officers and directors of each of the Reporting Persons is set forth below.

**MERCK GLOBAL HEALTH INNOVATION FUND, LLC**

**EXECUTIVE OFFICERS AND DIRECTORS**

<b>Name</b>	<b>Principal Occupation</b>	<b>Business Address</b>	<b>Citizenship</b>
Arthur Ceconi, Jr.	Vice President, Tax	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Donna Daidone-Yahara	Assistant Vice President, Finance	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Robert Davis	Manager / Vice President	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Katie Fedosz	Assistant Secretary	2000 Galloping Hill Road Kenilworth NJ, 07033	USA
Jon Filderman	Manager/ Secretary	2000 Galloping Hill Road Kenilworth NJ, 07033	USA
Julie Gerberding	Manager	2000 Galloping Hill Road Kenilworth NJ, 07033	USA
Michael Klobuchar	Manager	2000 Galloping Hill Road Kenilworth NJ, 07033	USA
Juanita Lee	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark E. McDonough	Senior Vice President and Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Kathleen McGrath Nicastro	Assistant Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Joseph Miletich	Manager	126 E. Lincoln Avenue Rahway, NJ 07065	USA
Joseph Promo	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Adam Schechter	Manager	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark Simon	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
William J. Taranto	Manager / President	One Merck Drive, Whitehouse Station, NJ 08889	USA

**MERCK SHARP & DOHME CORP.****EXECUTIVE OFFICERS AND DIRECTORS**

<b>Name</b>	<b>Principal Occupation</b>	<b>Business Address</b>	<b>Citizenship</b>
Arthur Ceconi, Jr.	Assistant Secretary, Tax	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Katie Fedosz	Assistant Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Jon Filderman	Director	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Rita Karachun	Director / President	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Juanita Lee	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark E. McDonough	Director / Senior Vice President and Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Jerome Mychalowych	Vice President, Tax	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Kathleen McGrath Nicastro	Assistant Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Joseph Promo	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Geralyn Ritter	Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark Simon	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA

**MERCK & CO., INC.****OFFICERS**

<b>Name</b>	<b>Principal Occupation</b>	<b>Business Address</b>	<b>Citizenship</b>
Kenneth C. Frazier	Chairman, President and Chief Executive Officer / Director, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Sanat Chattopadhyay	Executive Vice President and President, Merck Manufacturing Division (“MMD”), Merck & Co., Inc.	One Merck Drive, Whitehouse Station, NJ 08889-0100	USA
Robert Davis	Executive Vice President, Chief Financial Officer and Global Services, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Richard R. DeLuca, Jr.	Executive Vice President and President, Merck Animal Health	Giralda Farms 2 Madison, NJ 07940	USA
Faye C. Brown	Senior Assistant Secretary, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Julie Gerberding	Executive Vice President and Chief Patient Officer, for Strategic Communications, Global Public Policy and Population Health, Merck & Co., Inc.	351 N. Sumneytown Pike North Wales, PA 19454	USA
Miriam M. Graddick-Weir	Executive Vice President, Human Resources, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Michael J. Holston	Executive Vice President and General Counsel, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Rita Karachun	Senior Vice President Finance – Global Controller, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Juanita Lee	Assistant Treasurer, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark McDonough	Senior Vice President and Treasurer, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Roger Perlmutter	Executive Vice President and President, Merck Research Laboratories	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Joseph Promo	Assistant Treasurer, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Geralyn Ritter	Senior Vice President, Corporate Secretary and Assistant General Counsel, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	
Adam H. Schechter	Executive Vice President and President, Global Human Health, Merck & Co., Inc.	600 Corporate Drive, Lebanon, NJ 08833	USA
Mark Simon	Assistant Treasurer, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Ashley B. Watson	Senior Vice President and Chief Ethics and Compliance Officer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA

**MERCK & CO., INC.****DIRECTORS**

Kenneth C. Frazier	Chairman, President and Chief Executive Officer, Merck & Co., Inc.	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Leslie A. Brun	Chairman and Chief Executive Officer, Sarr Group, LLC	435 Devon Park Drive, 700 Building, Wayne, PA 19087	USA
Thomas R. Cech	Investigator, Howard Hughes Medical Institute and Faculty, University of Colorado.	University of Colorado, University of Colorado at Boulder 3415 Colorado Avenue, JSCBB Boulder, CO 80309-0215	USA
Thomas H. Glocer	Retired Chief Executive Officer, Thomson Reuters Corporation	6 East 43 <sup>rd</sup> Street, 25 <sup>th</sup> Floor New York, NY 10022	USA
Pamela J. Craig	Former Chief Financial Officer, Accenture, plc	c/o Merck & Co., Inc. 2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Rochelle B. Lazarus	Chairman Emeritus, Ogilvy & Mather	636 11th Avenue, New York, NY 10036-2010	USA
John H. Noseworthy, M.D.	President and Chief Executive Officer, Mayo Clinic	Mayo Clinic 200 First Street SW Rochester, MN 55905	USA
Carlos E. Represas	Retired Chairman, Nestlé Group Mexico	Paseo de la Palmas #765 - 503 Col. Lomas de Chapultepec, Del. Miguel Hidalgo 11000 Mexico, D.F.	Mexico & Spain
Paul B. Rothman, M.D.	Dean of Medical Faculty and Vice President for Medicine, The Johns Hopkins University, and CEO John Hopkins Medicine	733 N. Broadway, Suite 100 Baltimore, MD 21205-2196	USA
Patricia F. Russo	Chairman, Hewlett Packard Enterprise Company	Hewlett Packard Enterprise 300 Hanover Street – Mailstop 1050 Palo Alto, CA 94304	USA
Craig B. Thompson	President and Chief Executive Officer of Memorial Sloan-Kettering Cancer Center	Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Room M110 New York, NY 10065	USA
Wendell P. Weeks	President, Chairman and Chief Executive Officer, Corning Incorporated	1 Riverfront Plaza, Corning, NY 14831-0001	USA
Peter C. Wendell	Managing Director, Sierra Ventures	1400 Fashion Island Blvd. Suite 1010 San Mateo, CA 94404	USA