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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. 4)**

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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 30, 2018**

(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 491,927*
	8. Shared Voting Power 0
	9. Sole Dispositive Power 491,927*
	10. Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 491,927*
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) 7.8**%
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; (iv) a warrant to acquire 13,120 shares of common stock acquired in connection with amendment and restatement of a senior secured promissory note; and (v) 144,238 shares of common stock issued which represents payment for interest accrued on the Second Amended & Restated Senior Promissory Note through July 14, 2018.

\*\* Such percentage was calculated based upon an aggregate of 6,342,430 Issuer shares of common stock outstanding, consisting of (i) 6,211,277 Issuer shares of common stock outstanding as of August 1, 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 491,927*
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 491,927*
	10.	Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 491,927*	
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) 7.8**%	
14.	Type of Reporting Person (See Instructions) CO	

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 491,927*
	8.	Shared Voting Power 0
	9.	Sole Dispositive Power 491,927*
	10.	Shared Dispositive Power 0
11.	Aggregate amount beneficially owned by each reporting person 491,927*	
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) 7.8**%	
14.	Type of Reporting Person (See Instructions) CO	

### **Introductory Note**

This Amendment No. 4 (this "Amendment No. 4") 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 and Amendment No. 3 filed on February 8, 2018 (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. 4 is being filed to report: (i) the issuance of 144,238 shares of the Company's Common Stock issued to the Reporting Persons which represents payment for interest accrued on the Second Amended & Restated Senior Promissory Note through July 14, 2018.

### **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 491,927 shares of Common Stock of which 131,153 of the 491,927 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 7.8% 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 360,774 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:

On June 11, 2018, OpGen, Inc. (the "Company" or "OpGen") executed an Allonge (the "Allonge") to its Second Amended and Restated Senior Secured Promissory Note, dated June 28, 2017, with a principal amount of \$1,000,000 (the "Note") issued to Merck Global Health Innovation Fund, LLC ("MGHIF"). The Allonge modified the Note to (1) provide that accrued and unpaid interest of \$285,512.22 due as of July 14, 2018, the original maturity date, will be paid through the issuance of shares of OpGen's common stock in a private placement transaction; and (2) revision and extension of the maturity date for payment of the Note to six semi-annual payments of \$166,666.67 plus accrued and unpaid interest beginning on January 2, 2019 and ending on July 1, 2021 (the "Final Maturity Date"). The number of shares of common stock issued was determined after July 14, 2018 based on the 30-day average volume-weighted closing price of OpGen's common stock, and issued on July 30, 2018. The interest rate remains at 10%, subject to increase to 15% upon an event of default. The Note is secured by all of the assets, including intellectual property, of the Company.

The foregoing is subject to and qualified by the terms and conditions contained in the Allonge, dated June 11, 2018, to the Second Amended and Restated Senior Secured Promissory Note, dated June 28, 2017, with a principal amount of \$1,000,000 issued by OpGen, Inc. to Merck Global Health Innovation Fund, LLC, a copy of which is incorporated by reference to the Schedule 13D as Exhibit 10.

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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. Allonge, dated June 11, 2018, to the Second Amended and Restated Senior Secured Promissory Note, dated June 28, 2017, with a principal amount of \$1,000,000 issued by OpGen, Inc. to Merck Global Health Innovation Fund, LLC (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed by OpGen, Inc. with the Securities and Exchange Commission on June 11, 2018).



**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 9<sup>th</sup> day of August, 2018.

**MERCK GLOBAL HEALTH INNOVATION FUND,  
LLC**

By: /s/ Jon Filderman

Name: Jon Filderman

Title: Secretary

**MERCK SHARP & DOHME CORP.**

By: /s/ Faye C. Brown

Name: Faye C. Brown

Title: Assistant Secretary

**MERCK & CO., INC.**

By: /s/ Faye C. Brown

Name: Faye C. Brown

Title: Senior Assistant Secretary

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## EXHIBIT INDEX

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

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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**

<u>Name</u>	<u>Principal Occupation</u>	<u>Business Address</u>	<u>Citizenship</u>
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
Timothy Dillane	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Juanita Lee	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Salvatore Lombardo	Vice President, Tax	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Mark E. McDonough	Senior Vice President and Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Faye C. Brown	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
Michael G. Schwartz	Assistant Treasurer	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
William J. Taranto	Manager / President	One Merck Drive, Whitehouse Station, NJ 08889	USA
Donna Daidone-Yahara	Assistant Vice President, Finance	2000 Galloping Hill Road Kenilworth, NJ 07033	USA

**MERCK SHARP & DOHME CORP.**

**EXECUTIVE OFFICERS AND DIRECTORS**

<b><u>Name</u></b>	<b><u>Principal Occupation</u></b>	<b><u>Business Address</u></b>	<b><u>Citizenship</u></b>
Timothy Dillane	Assistant Treasurer	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
Salvatore Lombardo	Assistant Secretary, Tax	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
Faye C. Brown	Assistant Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Geralyn Ritter	Secretary	2000 Galloping Hill Road Kenilworth, NJ 07033	USA
Michael G. Schwartz	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. Summeytown Pike North Wales, PA 19454	USA
Mirian M. Graddick-Weir	Executive Vice President, Human Resources, 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
Timothy Dillane	Assistant Treasurer, 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
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
Michael G. Schwartz	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
Jennifer Zachary	Executive Vice President and General Counsel, Merck & Co., Inc.	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
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
Inge G. Thulin	Executive Chairman, 3M Company	3M Corporate Headquarters 3M Center St. Paul, MN 55144-1000	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