

Spark Therapeutics, Inc.
Form SC 13D/A
October 21, 2015

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13D

(RULE 13d-101)

**INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(a)
AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(a)**

(Amendment No. 1)*

Spark Therapeutics, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

84652J103

(CUSIP Number)

Nathalie Auber

Sofinnova Ventures, Inc.

3000 Sand Hill Road, Bldg 4, Suite 250

Menlo Park, CA 94025

(650) 681-8420

(Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

COPY TO:

Linda Daley, Esq.

c/o Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP

1200 Seaport Blvd., Redwood City, CA 94063

(650) 463-5243

October 7, 2015

(Date of Event Which Requires Filing of This Statement)

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 "

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 240.13d-7 for other parties to whom copies are to be sent.

*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.

This 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 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Sofinnova Venture Partners VIII, L.P. ("SVP VIII")
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)
 3 SEC USE ONLY
 4 SOURCE OF FUNDS
 WC
 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)
 6 CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
 NUMBER OF SOLE VOTING POWER
 SHARES 7 1,589,032 shares, except that Sofinnova Management VIII, L.L.C. ("SM VIII"), the general partner
 BENEFICIALLY 7 of SVP VIII, may be deemed to have sole voting power, and Dr. Michael F. Powell ("Powell"), Dr.
 James I. Healy ("Healy"), Dr. Anand Mehra ("Mehra"), and Dr. Srinivas Akkaraju ("Akkaraju") the
 OWNED BY 8 SHARED VOTING POWER
 EACH 8 See response to row 7.
 REPORTING 9 SOLE DISPOSITIVE POWER
 PERSON 9 1,589,032 shares, except that SM VIII, the general partner of SVP VIII, may be deemed to have
 WITH 9 sole dispositive power and Powell, Healy, Mehra and Akkaraju, the managing members of SM
 10 SHARED DISPOSITIVE POWER
 10 See response to row 9.
 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,589,032
 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES
 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 5%
 14 TYPE OF REPORTING PERSON PN

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1 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Sofinnova Management VIII, L.L.C. ("SM VIII")
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)
 3 SEC USE ONLY
 4 SOURCE OF FUNDS
 AF
 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)
 6 CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
 NUMBER OF SOLE VOTING POWER
 7 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SHARES SVP VIII, may be deemed to have sole voting power, and Powell, Healy, Mehra and Akkaraju, the
 managing members of SM VIII, may be deemed to have shared power to vote these shares.
 BENEFICIALLY SHARED VOTING POWER
 8 See response to row 7.
 OWNED BY SOLE DISPOSITIVE POWER
 EACH 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 9 SVP VIII, may be deemed to have sole dispositive power, and Powell, Healy, Mehra and Akkaraju,
 REPORTING the managing members of SM VIII, may be deemed to have shared dispositive power over these
 shares.
 PERSON SHARED DISPOSITIVE POWER
 10 See response to row 9.
 WITH
 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,589,032
 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES
 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 N.5%
 14 TYPE OF REPORTING PERSON OO

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1 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Dr. Srinivas Akkaraju ("Akkaraju")
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)
 3 SEC USE ONLY
 4 SOURCE OF FUNDS
 AF
 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)
 6 CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen
 NUMBER OF 7 SOLE VOTING POWER
 -0-
 SHARES SHARED VOTING POWER
 8 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 BENEFICIALLY SVP VIII, may be deemed to have sole voting power, and Akkaraju, a managing member of SM
 VIII, may be deemed to have shared voting power to vote these shares.
 OWNED BY 9 SOLE DISPOSITIVE POWER
 EACH -0-
 REPORTING SHARED DISPOSITIVE POWER
 PERSON 10 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SVP VIII, may be deemed to have sole dispositive power, and Akkaraju, a managing member of
 SM VIII, may be deemed to have shared power to dispose of these shares.
 WITH
 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,589,032
 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES
 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 N.5%
 14 TYPE OF REPORTING PERSON IN

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1 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Dr. Michael F. Powell ("Powell")
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)
 3 SEC USE ONLY
 4 SOURCE OF FUNDS
 AF
 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)
 6 CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen
 NUMBER OF 7 SOLE VOTING POWER
 -0-
 SHARES SHARED VOTING POWER
 8 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 BENEFICIALLY SVP VIII, may be deemed to have sole voting power, and Powell, a managing member of SM VIII,
 may be deemed to have shared voting power to vote these shares.
 OWNED BY 9 SOLE DISPOSITIVE POWER
 EACH -0-
 REPORTING SHARED DISPOSITIVE POWER
 PERSON 10 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SVP VIII, may be deemed to have sole dispositive power, and Powell, a managing member of SM
 VIII, may be deemed to have shared power to dispose of these shares.
 WITH
 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,589,032
 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES
 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 N.5%
 14 TYPE OF REPORTING PERSON IN

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1 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Dr. James I. Healy (“Healy”)
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)
 3 SEC USE ONLY
 4 SOURCE OF FUNDS
 AF
 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)
 6 CITIZENSHIP OR PLACE OF ORGANIZATION
 U.S. Citizen
 NUMBER OF 7 SOLE VOTING POWER
 -0-
 SHARES SHARED VOTING POWER
 8 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 BENEFICIALLY 8 SVP VIII, may be deemed to have sole voting power, and Healy, a managing member of SM VIII,
 may be deemed to have shared voting power to vote these shares.
 OWNED BY 9 SOLE DISPOSITIVE POWER
 EACH 9 -0-
 REPORTING SHARED DISPOSITIVE POWER
 PERSON 10 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SVP VIII, may be deemed to have sole dispositive power, and Healy, a managing member of SM
 VIII, may be deemed to have shared power to dispose of these shares.
 WITH
 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,589,032
 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES
 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 N.5%
 14 TYPE OF REPORTING PERSON IN

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1 NAME OF REPORTING PERSON
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)
 Dr. Anand Mehra ("Mehra")

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS
 AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM
 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION
 U.S. Citizen

NUMBER OF 7 SOLE VOTING POWER
 -0-

SHARES SHARED VOTING POWER

8 BENEFICIALLY 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SVP VIII, may be deemed to have sole voting power, and Mehra, a managing member of SM VIII
 and director of the Issuer, may be deemed to have shared voting power to vote these shares.

OWNED BY 9 SOLE DISPOSITIVE POWER
 EACH 13,951 shares that are subject to a stock option exercisable by Mehra within 60 days of the date of
 this filing.

REPORTING 10 SHARED DISPOSITIVE POWER
 PERSON 1,589,032 shares, all of which are owned directly by SVP VIII. SM VIII, the general partner of
 SVP VIII, may be deemed to have sole dispositive power, and Mehra, a managing member of SM
 WITH VIII and director of the Issuer, may be deemed to have shared power to dispose of these shares.

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
 REPORTING PERSON 1,602,983

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 11
 EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 5%

14 TYPE OF REPORTING PERSON IN

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Statement on Schedule 13D

This Amendment No. 1 (“Amendment No. 1”) amends and restates the Statement on Schedule 13D initially filed on February 9, 2015 (“Original Schedule 13D”) on behalf of Sofinnova Venture Partners VIII, L.P., a Delaware limited partnership (“SVP VIII”), Sofinnova Management VIII, L.L.C., a Delaware limited liability company (“SM VIII”), Dr. Srinivas Akkaraju (“Akkaraju”), Dr. Michael F. Powell (“Powell”), Dr. James I. Healy (“Healy”), and Dr. Anand Mehra (“Mehra” and collectively with SVP VIII, SM VIII, Akkaraju, Powell, and Healy, the “Reporting Persons”), relating to the beneficial ownership of Common Stock, \$0.001 par value per share (“Common Stock”), of Spark Therapeutics, Inc., a Delaware corporation (“Issuer”). This Amendment No. 1 is being filed to reflect the disposition of Common Stock by SVP VIII and to reflect the entry into a plan to sell shares of Common Stock compliant with Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

ITEM 1. SECURITY AND ISSUER.

- (a) The class of equity securities to which this statement relates is the Common Stock of the Issuer.

- (b) The Issuer’s principal executive offices are located at 3737 Market Street Suite 1300, Philadelphia, PA 19014.

ITEM 2. IDENTITY AND BACKGROUND.

- (a) The persons and entities filing this Schedule 13D are SVP VIII, SM VIII, Akkaraju, Powell, Healy, and Mehra. SM VIII, the general partner of SVP VIII, may be deemed to have sole power to vote and sole power to dispose of shares of the Issuer directly owned by SVP VIII.

- (b) The address of the principal place of business for each of the Reporting Persons is c/o Sofinnova Ventures, 3000 Sand Hill Road, Bldg 4, Suite 250, Menlo Park, California 94025.

(c) The principal occupation of each of the Reporting Persons is the venture capital investment business. The principal business of SVP VIII is to make investments in private and public companies, and the principal business of SM VIII is to serve as the general partner of SVP VIII. Akkaraju, Powell, Healy and Mehra are the managing members of SM VIII. Mehra is a director of the Issuer.

(d) During the last five years, none of the Reporting Persons has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) SVP VIII is a Delaware limited partnership. SM VIII is a Delaware limited liability company. Akkaraju, Powell, Healy, and Mehra are U.S. citizens.

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ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

On May 23, 2014, SVP VIII entered into a Series B investment agreement pursuant to which SVP VIII acquired from the Issuer an aggregate 1,863,354 shares of Series B preferred shares for a purchase price of \$8.05 per share, or \$15,000,000 in the aggregate. The Series B preferred shares accrued stock dividends payable in additional Series B preferred shares at a rate of 8% per annum from November 23, 2014. The aggregate amount of stock dividends that accrued through the closing of the Issuer's initial public offering of Common Stock ("Offering") was 30,222 shares of Common Stock.

On August 11, 2014, Mehra was granted a stock option from the Issuer to purchase 37,203 shares of Common Stock at an exercise price of \$3.45 per share. Such option will vest over four years, with 25% of the shares underlying the option vesting on May 24, 2015, and the remainder vesting quarterly thereafter. Such option will expire on August 11, 2024.

In connection with the Offering, the Series B preferred shares, including Series B preferred shares issued as accrued stock dividends, automatically converted on a one-for-one basis into 1,893,576 shares of Common Stock.

In connection with the Offering, SVP VIII purchased 225,000 shares of Common Stock at \$23.00 per share, or \$5,175,000 in the aggregate. Such purchase occurred pursuant to and on the terms set forth in the Issuer's Prospectus filed pursuant to Rule 424(b)(4) on January 30, 2015 with the Securities and Exchange Commission (the "Prospectus").

The Issuer effected a 5:1 reverse stock split on January 16, 2015. Accordingly, unless otherwise noted above, all disclosed numbers and nominal value of shares are adjusted for such stock split.

On October 7, 2015, SVP VIII disposed of 251,912 shares of Common Stock in open market sales for an average price of \$46.11 per share or \$11,616,795.92 in the aggregate.

On October 8, 2015, SVP VIII disposed of 277,632 shares of Common Stock in open market sales for an average price of \$44.99 per share or \$12,491,107.89 in the aggregate.

The source of the funds for all purchases and acquisitions by the Reporting Persons was from working capital.

No part of the purchase price was borrowed by any Reporting Person for the purpose of acquiring any securities discussed in this Item 3.

ITEM 4. PURPOSE OF TRANSACTION.

The Reporting Persons hold their securities of the Issuer for investment purposes. Depending on the factors discussed herein, the Reporting Persons may, from time to time, acquire additional Common Stock and/or retain and/or sell all or a portion of the Common Stock held by the Reporting Persons in the open market or in privately negotiated transactions, and/or may distribute the Common Stock held by the Reporting Persons to their respective members or limited partners. Any actions the Reporting Persons might undertake will be dependent upon the Reporting Persons' review of numerous factors, including, among other things, the price levels of the Common Stock, general market and economic conditions, ongoing evaluation of the Issuer's business, financial condition, operations and prospects; the relative attractiveness of alternative business and investment opportunities, and other future developments.

SVP VIII entered into a sales plan that complies with Rule 10b5-1 under the Exchange Act with J.P. Morgan Securities LLC on October 8, 2015 (the "Rule 10b5-1 Plan"), incorporated herein as Exhibit F. Pursuant to the Rule 10b5-1 Plan, up to a certain number of shares of Common Stock may be sold by SVP VIII over a set period of time, provided that the terms and conditions of the Rule 10b5-1 Plan are met.

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Except as set forth above, the Reporting Persons have no other plans or intentions which would result in or relate to any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

(a,b) Regarding aggregate beneficial ownership, see Row 11 of the cover page of each Reporting Person. Regarding percentage beneficial ownership, see Row 13 of the cover page of each Reporting Person. Regarding sole power to vote shares, see Row 7 of the cover page of each Reporting Person. Regarding shared power to vote shares, see Row 8 of the cover page of each Reporting Person. Regarding sole power to dispose of shares, see Row 9 of the cover page of each Reporting Person. Regarding shared power to dispose of shares, see Row 10 of the cover page of each Reporting Person. The percentage listed in Row 13 for each Reporting Person was calculated based upon 24,560,044 Common Stock outstanding as of July 31, 2015.

(c) Except as set forth in Item 3 above, the Reporting Persons have not effected any transaction in the Common Stock of the Issuer during the past 60 days.

(d) Under certain circumstances set forth in the limited partnership agreement of SVP VIII, the general partner and limited partners of SVP VIII may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the Issuer owned by such entity of which they are a partner.

(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

Pursuant to a Lock-Up Agreement entered into with J.P. Morgan Securities LLC and Credit Suisse Securities (USA) LLC in connection with the Offering, the Reporting Persons are subject to a Lock-Up Period (as defined in the Lock-Up Agreement) continuing and including the date 180 days after the date of the Prospectus, during which the Reporting Persons have agreed, subject to limited exceptions, not to offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or

otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Common Stock. The Lock-Up Agreement is more fully described in the Prospectus, and the form of Lock-Up Agreement is incorporated herein by reference to Exhibit D to the Underwriting Agreement filed on January 20, 2015 as Exhibit 1.1 to Amendment No. 1 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318).

The Reporting Persons are party to an Investors' Rights Agreement among the Issuer, the Reporting Persons and other shareholders. Subject to the terms of the Investors' Rights Agreement, holders of Common Stock having registration rights can demand that the Issuer file a registration statement or request that their shares be covered by a registration statement that the Issuer is otherwise filing. The Investors' Rights Agreement dated as of May 23, 2014 described in Item 6, was filed on December 30, 2014 as Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318), and is incorporated herein by reference.

On August 11, 2014, Mehra was granted a stock option from the Issuer to purchase 37,203 shares of Common Stock at an exercise price of \$3.45 per share. Such option will vest over four years, with 25% of the shares underlying the option vesting on May 24, 2015, and the remainder vesting quarterly thereafter. Such option will expire on August 11, 2024.

Mehra, in his capacity as a director of the Issuer, along with the other directors of the Issuer, entered into an Indemnification Agreement with the Issuer, as more fully described in the Prospectus and incorporated herein by reference to Exhibit 10.26 to Amendment No. 1 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318).

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SVP VIII entered into a sales plan that complies with Rule 10b5-1 under the Exchange Act with J.P. Morgan Securities LLC on October 8, 2015 (the “Rule 10b5-1 Plan”), incorporated herein as Exhibit F. Pursuant to the Rule 10b5-1 Plan, up to a certain number of shares of Common Stock may be sold by SVP VIII over a set period of time, provided that the terms and conditions of the Rule 10b5-1 Plan are met.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

EXHIBIT
A Agreement of Joint Filing.

EXHIBIT
B Power of Attorney

EXHIBIT
C Form of Lock-Up Agreement entered into by and among the Issuer, the underwriters and certain others, and is incorporated herein by reference to Exhibit D to the Underwriting Agreement filed on January 20, 2015 as Exhibit 1.1 to Amendment No. 1 to the Issuer’s Registration Statement on Form S-1 (File No. 333-201318).

EXHIBIT
D Form of Indemnification Agreement for Directors and Officers described in Item 6, filed on January 20, 2015 as Exhibit 10.26 to Amendment No. 1 to the Issuer’s Registration Statement on Form S-1 (File No. 333-201318), and is incorporated herein by reference.

EXHIBIT
E Investors’ Rights Agreement dated as of May 23, 2014 described in Item 6, was filed on December 30, 2014 as Exhibit 4.2 to the Issuer’s Registration Statement on Form S-1 (File No. 333-201318), and is incorporated herein by reference.

EXHIBIT
F¹ Rule 10b5-1 Sales Plan between SVP VIII and J.P. Morgan Securities LLC, dated October 8, 2015

¹ Certain information in this exhibit has been omitted and filed separately with the Securities and Exchange Commission, and confidential treatment has been requested with respect to such omitted portions.

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SIGNATURES

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

Date: October 20, 2015

SOFINNOVA VENTURE PARTNERS VIII, L.P., a Delaware Limited Partnership
By: SOFINNOVA MANAGEMENT VIII, L.L.C., a Delaware Limited Liability Company

Its: General Partner
By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

SOFINNOVA MANAGEMENT VIII, L.L.C., a Delaware Limited Liability Company

By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

DR. SRINIVAS AKKARAJU
DR. JAMES I. HEALY
DR. MICHAEL F. POWELL
DR. ANAND MEHRA

By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

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EXHIBIT INDEX

Exhibit Description

- A Agreement of Joint Filing.
- B Power of Attorney.
- C Form of Lock-Up Agreement entered into by and among the Issuer, the underwriters and certain others, and is incorporated herein by reference to Exhibit D to the Underwriting Agreement filed on January 20, 2015 as Exhibit 1.1 to Amendment No. 1 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318).
- D Form of Indemnification Agreement described in Item 6, filed on January 20, 2015 as Exhibit 10.26 to Amendment No. 1 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318), and is incorporated herein by reference.
- E Investors' Rights Agreement dated as of May 23, 2014 described in Item 6, was filed on December 30, 2014 as Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 (File No. 333-201318), and is incorporated herein by reference.
- F¹ Rule 10b5-1 Sales Plan between SVP VIII and J.P. Morgan Securities LLC, dated October 8, 2015

¹ Certain information in this exhibit has been omitted and filed separately with the Securities and Exchange Commission, and confidential treatment has been requested with respect to such omitted portions.

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exhibit A

Agreement of Joint Filing

The undersigned hereby agree that a single Schedule 13D (or any amendment thereto) relating to the Common Stock of Spark Therapeutics, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13D.

Date: February 9, 2015

SOFINNOVA VENTURE PARTNERS VIII, L.P., a Delaware Limited Partnership
By: SOFINNOVA MANAGEMENT VIII, L.L.C., a Delaware Limited Liability Company
Its: General Partner

By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

SOFINNOVA MANAGEMENT VIII, L.L.C., a Delaware Limited Liability Company

By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

DR. SRINIVAS AKKARAJU
DR. JAMES I. HEALY
DR. MICHAEL F. POWELL
DR. ANAND MEHRA

By: /s/ Nathalie Auber
Nathalie Auber
Attorney-in-Fact

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exhibit B

Power of Attorney

Nathalie Auber has signed this Schedule 13D as Attorney-In-Fact. Note that copies of the applicable Power of Attorney are already on file with the appropriate agencies.

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exhibit F

SVP VIII Rule 10b5-1 Plan

Sales Plan

Sales Plan, adopted October 8, 2015 (the “Sales Plan”), between Sofinnova Venture Partners VIII, L.P. (“Seller”) and J.P. Morgan Securities LLC (“JPMS”). The purpose of this Sales Plan is to achieve the investment objectives of broader diversification of investments, while reducing the risk of over concentration in a particular investment.

RECITALS

WHEREAS, the Seller desires to establish this Sales Plan to sell common shares (the “Stock”) of Spark Therapeutics, Inc. (“the “Issuer”); and

WHEREAS, the Seller desires to sell a total of [***]¹ shares of Stock (the “Total Plan Shares”), and

WHEREAS, the Seller desires to engage JPMS to effect sales of shares of Stock in accordance with the Sales Plan;

NOW, THEREFORE, the Seller and JPMS hereby agree as follows:

A. IMPLEMENTATION OF THE SALES PLAN

1. JPMS shall effect sales (each a “Sale”) of shares of Stock only on days on which the NASDAQ Global Select Market (the “Exchange”) is open and the Stock trades regular way on the Exchange, pursuant to the specific instructions specified on Schedule A.

2. Seller acknowledges and agrees that JPMS will handle the above order on a best efforts basis. In the event any limit prices of orders are away from the prevailing market prices at any time, there can be no assurance that such orders will be executed in whole or in part. Seller agrees that all orders may be partially executed and will not be treated as an all or none order. JPMS may effect sales of Stock which may coincide with sales of Stock by other accounts held with JPMS including, but not limited to, sales made pursuant to other sales plans with JPMS. In such instances, JPMS will make allocations in a manner believed by JPMS to be equitable to each client. JPMS may aggregate sales of Stock under the Sales Plan with sales of the Stock by other JPMS accounts.

3. Seller agrees to deposit [***]² shares of Stock into the JPMorgan Chase Bank, N.A. Asset Custody Account or JPMS Margin Brokerage Account (“Account”). JPMS reserves the right to suspend or cancel this Sales Plan prior to the first Sale if the shares of Stock have not been deposited into an Account for any reason. JPMS shall withdraw Stock from the Seller’s Account in order to effect Sales of Stock under this Sales Plan. If on any day that Sales are to be made under this Sales Plan the number of shares of Stock in the Seller’s Account is less than the number of shares to be sold on such day, then JPMS shall notify Seller promptly of such deficiency, and Seller agrees to promptly deposit into the Account the number of shares of Stock necessary to eliminate such deficiency.

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4. Seller agrees not to remove or transfer shares of Stock out of the Account, in any manner that would cause an alteration of, or deviation from, the terms of this Sales Plan.

 5. To the extent that any Stock remains in the Seller's Account upon termination of this Sales Plan, JPMS agrees to return any such Stock for which JPMS had restrictions removed for the purpose of this Sales Plan promptly to the Issuer's transfer agent for relegending to the extent that such Stock would then be subject to transfer restrictions in the hands of the Seller.

 6. JPMS will deduct its reasonable and customary commissions from the proceeds of Sales of Stock under this Sales Plan, together with any other expenses incurred by JPMS in connection with such sales.

 7. The Total Plan Shares, the shares to be sold on a particular day, and the limit prices, shall be adjusted automatically on a proportionate basis to take into account any stock split, reverse stock split or stock dividend with respect to the Stock or any change in capitalization with respect to the Issuer that occurs during the term of this Sales Plan.

 8. Subject to Paragraph F.5, this Sales Plan shall become effective on [***]³ ("Effective Date"), and shall terminate on the earlier of (a) the close of business on [***]⁴; (b) the date on which the Total Plan Shares have been sold; (c) the date this Sales Plan is terminated pursuant to Section E; (d) the date on which the unit of JPMS responsible for executing Sales of Stock pursuant to this Sales Plan receives notice or otherwise becomes aware of (i) the closing of a tender or exchange offer with respect to the Stock or of a merger, acquisition, reorganization, recapitalization or comparable transaction affecting the securities of the Issuer as a result of which the Stock is to be exchanged or converted into shares of another company or for other consideration; (ii) the dissolution or winding up of the Seller; or (iii) the commencement or impending commencement of any proceedings in respect of or triggered by Seller's bankruptcy or insolvency. Notwithstanding the above, this Sales Plan shall not be considered effective, but instead shall be considered null and void, if at least one of the accounts referenced in A.3 above has not been established in the name of Seller and open for the receipt of Stock by the Effective Date. Seller understands that such an account cannot be opened until JPMS and its affiliates have performed customer due diligence and customer identification in accordance with internal policies and procedures and relevant federal laws including, but not limited to, the Bank Secrecy Act as amended by the USA PATRIOT Act and the regulations promulgated thereunder. Seller understands that there may be significant time delays during this process and that an account may not be open for the receipt of Stock by the Effective Date.
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9. Seller acknowledges and agrees that it does not have authority, influence or control over any Sales of Stock effected by JPMS pursuant to this Sales Plan, and will not attempt to exercise any authority, influence or control over such Sales. JPMS agrees not to seek advice from Seller with respect to the manner in which it effects Sales under this Sales Plan. JPMS shall execute the trades in such a way as to attempt to minimize the negative price impact on the market and to attempt to maximize the prices obtained for the shares sold. JPMS may use its discretion in how to work the order to attempt to achieve the best execution above the minimum price per share, but at no time will the Seller communicate to JPMS any instructions on how to execute the order.

10. Seller will be notified of all transactions pursuant to customary trade confirmations that are provided in the normal course of business.

11. Seller understands that JPMS may not be able to effect a Sale due to a market disruption or a legal, regulatory or contractual restriction applicable to JPMS, an insufficient number of shares of Stock being in the Account, JPMS having received written confirmation from the Issuer that the Issuer has not complied with the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") that are a condition to complying with Rule 144 or 145 under the Securities Act of 1933 (the "Securities Act"), or a pending Sale under this Sales Plan causing Seller to exceed any applicable volume limitations of Rule 144 or 145 under the Securities Act. If any Sale cannot be executed as required by Paragraph A.1 due to: (a) Issuer not complying with the reporting requirements of Section 13 or 15(d) of the Exchange Act that are a condition to complying with Rule 144 or 145 under the Securities Act, JPMS will carry over any unsold shares to be sold in whole or in increments pursuant to the terms of Schedule A as and when the Issuer has provided written confirmation to JPMS that the Issuer is currently compliant with such reporting requirements; (b) the applicable volume limitations of Rule 144 or 145 under the Securities Act, then JPMS will recalculate the volume limitations on a weekly basis and carry over any unsold shares to be sold in whole or in increments pursuant to the terms of Schedule A as and when the volume limitations permit; or (c) a market disruption, a legal, regulatory or contractual restriction applicable to JPMS or any other such event, such Sale shall be cancelled and shall not be effected pursuant to this Sales Plan, and, notwithstanding any language to the contrary herein, there shall be no carryover associated with such cancelled Sale other than as set forth in Schedule A.

12. It is the intent of the parties that this Sales Plan comply with the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act and this Sales Plan shall be interpreted to comply with the requirements of Rule 10b5-1(c).

13. In the event that it is necessary for JPMS to borrow or purchase shares of Stock in order to complete any Sale on behalf of Seller pursuant to this sales Plan, Seller authorizes JPMS to borrow or purchase such shares and agrees to be responsible for any expense or loss which JPMS may sustain relating to such borrowing or purchase, including any expense or loss JPMS may sustain as a result of its inability to borrow or purchase shares of Stock to complete its delivery obligation.

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B. RULES 144 AND 145

The following three paragraphs shall only apply to Sellers who are subject to Rules 144 and 145.

1. JPMS agrees to conduct all sales in accordance with the manner of sale requirement of Rule 144 or 145 under the Securities Act, and in no event shall JPMS effect any such sale if such sale would exceed the then applicable volume limitation under Rule 144, assuming JPMS's sales under this Sales Plan and those notified to JPMS pursuant to Paragraph B.3 are the only sales subject to that limitation. JPMS will be responsible for completing and filing on behalf of the Seller the required Form 144s that Seller shall execute and provide, as requested by JPMS. Seller understands and agrees that JPMS shall make one Form 144 filing at the start of each three-month period with the initial filing made on the date on which the first order to sell Stock is placed hereunder.

2. Each such Form 144 shall state in the "Remarks" section that the sales thereunder are being made pursuant to a previously adopted plan intended to comply with Rule 10b5-1(c), shall include the date the Seller adopted this Sales Plan and shall indicate that the representation regarding the Seller's knowledge of material information speaks as of the adoption date of this Sales Plan.

3. Seller agrees not to take any action that would cause the sales not to comply with Rule 144 or 145, and Seller agrees not to cause any person or entity with which Seller would be required to aggregate sales of Stock pursuant to paragraph (a)(2) or (e) of Rule 144 to take any action that would cause the sales not to comply with Rules 144 or 145. Seller will provide notice of any such transactions during the three months preceding the date hereof and may not enter into any other selling program or transaction without the prior consent of JPMS.

C. REPRESENTATIONS AND AGREEMENTS OF SELLER

1. Seller represents and warrants that as of the time of execution of, and entering into, this Sales Plan: (a) to the best of Seller's knowledge there is no blackout period (as defined in 17 C.F.R. Section 245.100(b), a "Blackout Period") in effect for Issuer, (b) the Seller is not aware of material, nonpublic information with respect to the Issuer or any securities of the Issuer (including the Stock) or of the actual or approximate beginning or ending dates of a Blackout Period for Issuer, and (c) the Seller is entering into this Sales Plan in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b5-1 under the Exchange Act or other applicable securities laws.

2. At the time of Seller's execution of this Sales Plan, Seller has not entered into or altered a corresponding or hedging transaction with respect to the Total Plan Shares. Seller agrees not to enter into any such transaction while this Sales Plan remains in effect.

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3. Seller agrees to make all filings, if any, required under and monitor its own compliance with Sections 13(d), 13(g) and 16 of the Exchange Act.

4. Except as provided in Paragraph B.1, Seller acknowledges and agrees that JPMS has no duty to determine whether Seller has violated Rules 144 or 145 under the Securities Act, or Sections 13(d), 13(g) or 16 of the Exchange Act or the rules adopted by the SEC thereunder. Seller understands that this Plan in no way alters its obligations and responsibilities under Section 16, including those prohibitions against short swing profits.

5. Seller understands that there may be specific state law restrictions or limitations applicable to this Sales Plan. Seller acknowledges and agrees that JPMS has not provided Seller with any tax, accounting or legal advice. Seller understands that it should seek the advice of counsel regarding this Sales Plan and the various securities and tax law issues related thereto.

6. Seller agrees to notify JPMS immediately in the event of trading restrictions being imposed as the result of any lock up event restricting sales by affiliates, such as a stock offering or tender offer.

7. Seller represents and warrants that it is able to sell shares of Stock, as contemplated by this Sales Plan, in accordance with the Issuer's insider trading policies and Seller has obtained the acknowledgement of the Issuer to enter into this Sales Plan. Seller further represents and warrants that the Stock is not subject to any liens, security interests or other impediments to transfer (except for limitations imposed by Rules 144 or 145, if applicable).

D. INDEMNIFICATION AND LIMITATION ON LIABILITY

1. Seller agrees to indemnify and hold harmless JPMS and its directors, officers, employees and affiliates from and against all claims, losses, damages and liabilities (including without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) arising out of or attributable to JPMS's actions taken or not taken in compliance with this Sales Plan or arising out of or attributable to any breach by Seller of this Sales Plan (including Seller's representations and warranties hereunder) or any violation by Seller of applicable laws or regulations. This indemnification shall survive termination of this Sales Plan. Notwithstanding the foregoing, Seller shall have no indemnification obligation to the extent any claims, losses, damages or liabilities are due to the gross negligence, recklessness or willful misconduct of JPMS or any other indemnified person.

2. Notwithstanding any other provision hereof, JPMS shall not be liable to Seller for: (a) special, indirect, punitive, exemplary or consequential damages, or incidental losses or damages of any kind, even if advised of the possibility of such losses or damages or if such losses or damages could have been reasonably foreseen; or (b) any failure to perform or to cease performance or any delay in performance that results from a cause or circumstance that is beyond its reasonable control, including but not limited to failure of electronic or mechanical equipment, strikes, failure of common carrier or utility systems, severe weather, market disruptions or other causes commonly known as “acts of God”.

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E. SUSPENSION, TERMINATION AND AMENDMENT

1. This Sales Plan may be terminated by Seller at any time upon three business days' prior written notice. Any such suspension or termination shall be made in good faith and not as a part of a plan or scheme to evade the prohibitions of Rule 10b5-1 or other applicable securities laws. JPMS will require certain representations from Seller and acknowledgement of Issuer as a condition to such suspension or termination.

2. This Sales Plan shall be suspended, or at JPMS's option, terminated, if JPMS receives notice, whether pursuant to Paragraph C.6 or otherwise, of the occurrence of any legal, contractual or regulatory restriction applicable to Seller or its affiliates, including without limitation, any restriction related to a merger or acquisition, or a stock offering requiring an affiliate lock-up, that would prohibit sales pursuant to this Sales Plan.

3. Seller may amend or modify this Sales Plan only upon the written consent of JPMS. Any such amendment or modification shall be made in good faith and not as a part of a plan or scheme to evade the prohibitions of Rule 10b5-1 or other applicable securities laws. Seller agrees that it will not amend or modify this Sales Plan at any time: (a) that a Blackout Period is in effect for Issuer or (b) that it is aware of any material non-public information about the Issuer and/or the Stock or of the actual or approximate beginning or ending dates of a Blackout Period for Issuer. JPMS will require certain representations from Seller and acknowledgement of Issuer as a condition to such amendment or modification.

F. GENERAL

1. This Sales Plan shall be governed by and construed in accordance with the laws of the State of New York without reference to choice of law principles and may be modified or amended only by a writing signed by the parties hereto and acknowledged by the Issuer.

2. This Sales Plan shall be subject to all terms and conditions governing the Seller's Account, including the General Terms for Accounts and Services, the Asset Account Agreement and the JPMS Brokerage Agreement, including such provisions dealing with binding arbitration and waiving the right to litigate. This Sales Plan, together with the terms and conditions referenced in the preceding sentence, as well as any amendments or modifications made pursuant to this Sales Plan and those terms and conditions, represent the complete agreement between the parties on these subjects.

3. All notices to JPMS under this Sales Plan shall be given to JPMS by facsimile at (212) 464-1118 or by certified mail at J.P. Morgan Securities LLC., 270 Park Avenue, 5th Floor, New York, NY 10017, Attn: Richelle Mackiewicz.

4. Seller's rights and obligations under this Sales Plan may not be assigned or delegated without the written permission of JPMS.

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5. This Sales Plan shall not be effective until executed by Seller and JPMS, and acknowledged by Issuer. This Sales Plan may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto were upon the same instrument.

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Signature(s):

Sofinnova Venture Partners VIII, L.P.

By: Sofinnova Management VIII, L.L.C.

Its: General Partner

By: _____, 2015

Name:

Title:

J.P. Morgan Securities LLC

By: _____, 2015

Name: Richelle Mackiewicz

Title: Managing Director

Acknowledged:

Spark Therapeutics, Inc.

By: _____, 2015

Name:

Title:

Address:

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Schedule A

Issuer: Spark Therapeutics, Inc.

Ticker: ONCE

Seller: Sofinnova Venture Partners VIII, L.P.

Beginning on the Effective Date or on the following trading day if the Exchange is not open on such day, JPMS will place order(s) to sell Stock as set forth below. The orders will be treated as limit orders not held, good until executed or the expiration or termination of the Sales Plan.

| Order # | Trading Periods | # of Shares to Sell each Trading Period | Limit Price |
|---------|---------------------|--|-----------------------|
| 1 | [***] ⁵ | [***] ⁶ | \$[***] ⁷ |
| 2 | [***] ⁸ | [***] ⁹ | \$[***] ¹⁰ |
| 3 | [***] ¹¹ | [***] ¹² | \$[***] ¹³ |
| | Total Plan Shares | [***] ¹⁴ | |

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