

OMB APPROVAL	
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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* SIGAL ELLIOT (Last) (First) (Middle) C/O SPARK THERAPEUTICS, INC., 3737 MARKET STREET, SUITE 1300 (Street) PHILADELPHIA PA 19104 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 01/29/2015	3. Issuer Name and Ticker or Trading Symbol Spark Therapeutics, Inc. [ONCE]	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned			
1. Title of Security (Instr. 4)	2. Amount of Securities Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	6,214 ⁽¹⁾	D	

**Table II - Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares ^M			
Stock Option (right to buy)	(2)	06/10/2024	Common Stock	25,786	\$ 3.45	D	
Stock Option (right to buy)	(3)	08/11/2024	Common Stock	17,203	\$ 3.45	D	
Series B Preferred Stock	(5)(6)	(5)(6)	Common Stock	31,056	\$ (5) (6)	I	See footnote ⁽⁴⁾

Explanation of Responses:

1. These restricted shares were granted on February 25, 2014 and vest over four years, with 25% of the shares vesting on February 5, 2015, and the remainder vesting quarterly thereafter.
2. This option was granted on June 10, 2014 and vests over four years, with 25% of the shares underlying the option vesting on February 5, 2015, and the remainder vesting quarterly thereafter.
3. This option was granted on August 11, 2014 and vests over four years, with 25% of the shares underlying the option vesting on May 24, 2015, and the remainder vesting quarterly thereafter.
4. These shares are held by Sigal Family Investments LLC. Elliott Sigal, a member of the issuer's board of directors, is a manager of Sigal Family Investments LLC and may be deemed to have voting and investment power over the shares held by Sigal Family Investments LLC. Dr. Sigal disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein.
5. Consists of shares of Series B Preferred Stock issued on May 23, 2014, that are currently convertible into 31,056 shares of Common Stock. Shares of Series B Preferred Stock accrue stock dividends payable in additional shares of Series B Preferred Stock at a rate of 8% per annum from November 23, 2014. Shares of Series B Preferred Stock, including shares of Series B Preferred Stock issued as accrued stock dividends, are immediately convertible into shares of Common Stock upon issuance, will be automatically converted into shares of Common Stock immediately upon the closing of the issuer's initial public offering pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, and have no expiration date. The aggregate amount of stock dividends that will have accrued through February 4, 2015, the expected closing date of the initial public offering, is 503 shares of Common Stock. (Continued in Footnote 6.)
6. The above Common Stock share equivalent numbers are rounded down to the nearest whole share number.

Remarks:

Exhibit Index:

24.1 Power of Attorney

/s/ Joseph La Barge, as
Attorney in Fact for Elliott 01/29/2015
Sigal

** Signature of Reporting Date
Person

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

LIMITED POWER OF ATTORNEY FOR SECTION 16 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and appoints each of Joseph W. La Barge and Stephen W. Webster, signing singly and each acting individually, as the undersigned's true and lawful attorney in fact with full power and authority as hereinafter described to:

(1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Spark Therapeutics, Inc. (the "Company"), Forms 3, 4, and 5 (including any amendments thereto) in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder (the "Exchange Act");

(2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to prepare, complete and execute any such Form 3, 4, or 5, prepare, complete and execute any amendment or amendments thereto, and timely deliver and file such form with the United States Securities and Exchange Commission (the "SEC") and any stock exchange or similar authority, including without limitation the filing of a Form ID or any other application materials to enable the undersigned to gain or maintain access to the Electronic Data Gathering, Analysis and Retrieval system of the SEC;

(3) seek or obtain, as the undersigned's representative and on the undersigned's behalf, information regarding transactions in the Company's securities from any third party, including brokers, employee benefit plan administrators and trustees, and the undersigned hereby authorizes any such person to release any such information to such attorney in fact and approves and ratifies any such release of information; and

(4) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney in fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney in fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney in fact may approve in such attorney in fact's discretion.

The undersigned hereby grants to each such attorney in fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney in fact, or such attorney in fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys in fact, in serving in such capacity at the request of the undersigned, are not assuming nor relieving, nor is the Company assuming nor relieving, any of the undersigned's responsibilities to comply with Section 16 of the Exchange Act. The undersigned acknowledges that neither the Company nor the foregoing attorneys in fact assume (i) any liability for the undersigned's responsibility to comply with the requirement of the Exchange Act, (ii) any liability of the undersigned for any failure to comply with such requirements, or (iii) any obligation or liability of the undersigned for profit disgorgement under Section 16(b) of the Exchange Act.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys in fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 29th day of January, 2015.

/s/ Elliott Sigal

Signature

Elliott Sigal, M.D., Ph.D.

Print Name

