

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>High Katherine A</u> (Last) (First) (Middle) C/O SPARK THERAPEUTICS, INC. 3737 MARKET STREET, SUITE 1300 (Street) PHILADELPHIA PA 19104 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Spark Therapeutics, Inc. [ONCE]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) See Remarks
	3. Date of Earliest Transaction (Month/Day/Year) 03/21/2019	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	03/21/2019		M		73,249	A	\$3.45	287,717	D	
Common Stock	03/21/2019		F		31,653	D	\$113.25	256,064	D	
Common Stock	03/21/2019		M		5,840	A	\$68.45	261,904	D	
Common Stock	03/21/2019		M		3	A	\$40.44	261,907	D	
Common Stock	03/21/2019		M		64,160	A	\$68.45	326,067	D	
Common Stock	03/21/2019		F		49,561	D	\$113.255	276,506	D	
Common Stock	03/21/2019		M		21,247	A	\$40.44	297,753	D	
Common Stock	03/21/2019		F		25,993	D	\$113.26	271,760	D	
Common Stock	03/21/2019		M		15,750	A	\$56.17	287,510	D	
Common Stock	03/21/2019		F		11,184	D	\$113.26	276,326	D	
Common Stock	03/21/2019		M		7,875	A	\$50.55	284,201	D	
Common Stock	03/21/2019		F		5,367	D	\$113.26	278,834	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (right to buy)	\$3.45	03/21/2019		M			73,249	(1)	07/02/2024	Common Stock	73,249	\$0.00	0	D	
Stock Option (right to buy)	\$68.45	03/21/2019		M			5,840	(2)	03/15/2025	Common Stock	5,840	\$0.00	64,160	D	

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option (right to buy)	\$40.44	03/21/2019		M			3	(3)	01/04/2026	Common Stock	3	\$0.00	54,997	D	
Stock Option (right to buy)	\$68.45	03/21/2019		M		64,160		(2)	03/15/2025	Common Stock	64,160	\$0.00	0	D	
Stock Option (right to buy)	\$40.44	03/21/2019		M		41,247		(3)	01/04/2026	Common Stock	41,247	\$0.00	13,750	D	
Stock Option (right to buy)	\$56.17	03/21/2019		M		15,750		(4)	01/17/2027	Common Stock	15,750	\$0.00	15,750	D	
Stock Option (right to buy)	\$50.55	03/21/2019		M		7,875		(5)	01/17/2028	Common Stock	7,875	\$0.00	23,625	D	

Explanation of Responses:

- 25% vested on May 24, 2015, and the remainder vested in equal quarterly installments over the following three years.
- 25% vested March 16, 2016 and the remainder vested in equal quarterly installments over the following three years.
- 25% vested January 5, 2017 and the remainder vests in equal quarterly installments over the following three years.
- 25% vested January 18, 2018 and the remainder vests in equal quarterly installments over the following three years.
- 25% vested January 18, 2019 and the remainder vests in equal annual installments over the following three years.

Remarks:

President and Head of Research and Development

/s/ Joseph W. La Barge,
attorney-in-fact for Katherine A. High 03/25/2019

** Signature of Reporting Person Date

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 4 (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.