

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

---

**SCHEDULE TO**  
Tender Offer Statement Under Section 14(d)(1) or 13(e)(1)  
of the Securities Exchange Act of 1934  
(Amendment No. 4)

---

**SPARK THERAPEUTICS, INC.**  
(Name of Subject Company)  
**022019 MERGER SUBSIDIARY, INC.**  
(Offeror)  
A Wholly Owned Subsidiary of  
**ROCHE HOLDINGS, INC.**  
(Parent of Offeror)  
(Names of Filing Persons—Offeror)  
Common Stock, Par Value \$0.001 Per Share  
(Title of Class of Securities)

---

84652J103  
(Cusip Number of Class of Securities)  
Dr. Sean A. Johnston  
Roche Holdings, Inc.  
1 DNA Way, MS #24,  
South San Francisco, CA 94080  
Telephone: (650) 225-1000  
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications on Behalf of Filing Persons)

*Copies to:*  
Marc O. Williams, Esq.  
Brian Wolfe, Esq.  
Davis Polk & Wardwell LLP  
450 Lexington Avenue  
New York, New York 10017  
Telephone: (212) 450-4000

---

**CALCULATION OF FILING FEE**

Transaction Valuation*	Amount of Filing Fee**
<b>\$4,805,265,563.50</b>	<b>\$582,398.19</b>

\* Estimated solely for purposes of calculating the filing fee pursuant to Rule 0-11(d) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Transaction Value was calculated by adding (i) the product of (A) 38,053,350 outstanding shares ("Shares") of common stock of Spark Therapeutics, Inc., of which 8,750 were restricted shares and (B) \$114.50 (the "Offer Price"); (ii) the product of (A) 4,157,775 Shares subject to issuance pursuant to Spark Stock Options granted and outstanding under the Spark Equity Incentive Plans and (B) \$71.74, which is the difference between the \$114.50 per share tender offer price and \$42.76, the average weighted exercise price of such options (all of which are "in-the-money"); (iii) the product of (A) outstanding restricted stock units in respect of 1,287,829 Shares subject to such restricted stock units (with any applicable performance conditions deemed to be achieved at maximum performance) and (B) the Offer

---

Price; and (iv) the product of (A) 21,151 Shares which are estimated to be subject to outstanding purchase rights under the 2015 Employee Stock Purchase Plan (assuming that the closing price per Share as reported on the NASDAQ Global Select Market on the last day of the offering period in effect under the 2015 Employee Stock Purchase Plan on May 31, 2019 was equal to the Offer Price) and (B) the Offer Price.

The foregoing figures have been provided by Spark Therapeutics, Inc. to the Offeror and Parent of Offeror and are as of February 28, 2019, the most recent practicable date.

\*\* The amount of the filing fee was calculated in accordance with Rule 0-11 of the Securities Exchange Act, by multiplying the Transaction Valuation by 0.0001212.

Check box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid:	<u>\$582,398.19</u>	Filing Party:	<u>Roche Holdings, Inc.</u>
Form or Registration No.:	<u>Schedule TO</u>	Date Filed:	<u>March 7, 2019</u>

Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- third-party tender offer subject to Rule 14d-1.
- issuer tender offer subject to Rule 13e-4.
- going-private transaction subject to Rule 13e-3.
- amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer.

---

---

This Amendment No. 4 to the Tender Offer Statement on Schedule TO amends and supplements the Schedule TO filed with the Securities and Exchange Commission on March 7, 2019 (as it may be amended and supplemented from time to time, the "**Schedule TO**") and relates to the offer by 022019 Merger Subsidiary, Inc., a Delaware corporation and a wholly owned subsidiary of Roche Holdings, Inc., a Delaware corporation, to purchase all outstanding shares of common stock, par value \$0.001 per share of Spark Therapeutics, Inc., a Delaware corporation, at \$114.50 per Share, net to the seller in cash, without interest and less applicable withholding taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase, dated March 7, 2019, and in the related Letter of Transmittal, copies of which are incorporated by reference to Exhibits (a)(1)(i) and (a)(1)(ii), respectively, of the Schedule TO (which, together with any amendments or supplements thereto, collectively constitute the "**Offer**").

**Item 12. Exhibits.**

Item 12 of the Schedule TO and the Exhibit Index is hereby amended and supplemented by adding the following Exhibit to the List of Exhibits:

<u>Exhibit No.</u>	<u>Description</u>
(a)(5)(xv)*	Withdrawal and Refiling Q&A dated April 3, 2019.

\* Filed herewith

---

**SIGNATURES**

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

Date: April 3, 2019

022019 MERGER SUBSIDIARY, INC.

By: /s/ Bruce Resnick  
Name: Bruce Resnick  
Title: President

ROCHE HOLDINGS, INC.

By: /s/ Bruce Resnick  
Name: Bruce Resnick  
Title: Vice President

---

## EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
(a)(1)(i)	Offer to Purchase, dated as of March 7, 2019.
(a)(1)(ii)	Letter of Transmittal (including Guidelines for Certification of Taxpayer Identification Number on IRS Form W-9).
(a)(1)(iii)	Notice of Guaranteed Delivery.
(a)(1)(iv)	Letter to Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees.
(a)(1)(v)	Letter to Clients for use by Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees.
(a)(1)(vi)	Summary Advertisement as published in the <i>Wall Street Journal</i> on March 7, 2019.
(a)(5)(i)	Media Release issued by Spark Therapeutics, Inc. dated February 25, 2019 (incorporated by reference to Exhibit 99.1 of the Spark Therapeutics, Inc. Current Report on Form 8-K (File No. 001-36819) filed with the Commission on February 25, 2019).
(a)(5)(ii)	Email sent to Spark Therapeutics, Inc. employees from Jeffrey Marrazzo, CEO of Spark Therapeutics, Inc., dated February 25, 2019 (incorporated by reference to the Spark Therapeutics, Inc. Solicitation/Recommendation Statement on Form 14D-9 (File No. 005-88577) filed with the Commission on February 25, 2019).
(a)(5)(iii)	Spark Therapeutics, Inc. Current Report on Form 8-K dated February 25, 2019 (incorporated by reference to the Spark Therapeutics, Inc. Current Report on Form 8-K (File No. 001-36819) filed with the Commission on February 25, 2019).
(a)(5)(iv)	Social media post by Spark Therapeutics, Inc. on www.twitter.com (incorporated by reference to the Company's Solicitation/Recommendation Statement on Schedule 14D-9 filed on February 25, 2019).
(a)(5)(v)	Social media post by Jeffrey D. Marrazzo, the Company's Chief Executive Officer, on www.twitter.com (incorporated by reference to the Company's Solicitation/Recommendation Statement on Schedule 14D-9 filed on February 25, 2019).
(a)(5)(vi)	Q&A provided to employees of Spark Therapeutics, Inc. on February 25, 2019 (incorporated by reference to the Company's Solicitation/Recommendation Statement on Schedule 14D-9 filed on February 25, 2019).
(a)(5)(vii)	Media Release issued by Roche Holdings, Inc. dated February 25, 2019 (incorporated by reference to Exhibit 99.1 of the first Roche Holdings, Inc. Pre-Commencement Communication on Schedule TO filed with the Commission on February 25, 2019).
(a)(5)(viii)	Key Messages and Q&A dated February 25, 2019 (incorporated by reference to Exhibit 99.2 of the first Roche Holdings, Inc. Pre-Commencement Communication on Schedule TO filed with the Commission on February 25, 2019).
(a)(5)(ix)	Roche Press Release announcing the commencement of the Offer, dated as of March 7, 2019.
(a)(5)(x)	Complaint filed as of March 7, 2019 (Wang v. Spark Therapeutics, Inc., et al., Case No. 1:19-cv-00479).
(a)(5)(xi)	Complaint filed as of March 11, 2019 (Kent v. Spark Therapeutics, Inc., et al., Case No. 1:19-cv-00485).

Exhibit No.	Description
(a)(5)(xii)	Complaint filed as of March 18, 2019 (Newman v. Spark Therapeutics, Inc., et al., Case No. 1:19-cv-00528).
(a)(5)(xiii)	Complaint filed as of March 20, 2019 (Gomez v. Spark Therapeutics, Inc., et al., Case No. 1:19-cv-02487).
(a)(5)(xiv)	Media Release issued by Roche Holdings, Inc., dated April 3, 2019.
(a)(5)(xv)*	Withdrawal and Refiling Q&A dated April 3, 2019.
(b)	Not applicable.
(c)	Not applicable.
(d)(1)	Agreement and Plan of Merger, dated as of February 22, 2019, by and among Spark Therapeutics, Inc., Roche Holdings, Inc. and 022019 Merger Subsidiary, Inc. (incorporated by reference to Exhibit 2.1 of the Spark Therapeutics, Inc. Current Report on Form 8-K (File No. 001-36819) filed with the Commission on February 25, 2019).
(d)(2)	Confidentiality Agreement, dated as of October 9, 2018, between Roche Holdings, Inc. and Spark Therapeutics, Inc.
(e)	Not applicable.
(f)	Section 262 of the Delaware General Corporation Law (included as Schedule II to the Offer to Purchase previously filed as Exhibit (a)(1) (i)).
(g)	Not applicable.
(h)	Not applicable.

---

\* Filed herewith

---

## Withdrawal and Refiling

### REGARDING WITHDRAWAL AND REFILE NOTIFICATION

**1. What is the purpose of the FTC (Federal Trade Commission) withdraw and refile notification?**

This was done in agreement with Spark and the relevant FTC stakeholders in order to provide more time for the FTC to complete their review.

**2. Is there a problem with the on-going FTC review?**

As a matter of policy, we do not comment on ongoing FTC reviews.

**3. What is the Federal Trade Commission's (FTC) role in general?**

The FTC is a bipartisan federal agency with a dual mission to protect consumers and promote competition. The FTC typically monitors business practices and reviews potential mergers to ensure that the market works according to consumer preferences.

(source: www.ftc.gov)

**4. Can you give more details about the FTC review?**

No. As a matter of policy, we do not comment on ongoing FTC reviews.

**5. Are the FTC concerns mainly around haemophilia?**

As a matter of policy, we do not comment on ongoing FTC reviews.

**6. Is the transaction at risk?**

Both Roche and Spark were aware that FTC review and clearance would be required for the transaction. This step in the process allows the FTC more time to complete its review.

**7. Is this related to the recent lawsuit filed on behalf of Spark shareholders?**

As a matter of policy, we cannot comment on legal matters.

**8. Does this change the previously stated estimate of Q2 deal closing?**

There is no change in assumptions. We expect it will be completed according to our guidance in the first half of 2019.

**9. Are there concerns about shareholder support?**

There needs to be more than 50 percent of the shares tendered, but we believe our offer to be full and fair and it has been unanimously recommended by the board of Spark.

### **CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

SOME OF THE STATEMENTS CONTAINED IN THIS DOCUMENT ARE FORWARD-LOOKING STATEMENTS, INCLUDING STATEMENTS REGARDING, AMONG OTHER THINGS, THE EXPECTED CONSUMMATION OF THE TRANSACTION, WHICH INVOLVES A NUMBER OF RISKS AND UNCERTAINTIES, INCLUDING THE SATISFACTION OF CLOSING CONDITIONS FOR THE TRANSACTION, INCLUDING REGULATORY APPROVAL, THE TENDER OF A MAJORITY OF THE OUTSTANDING SHARES OF COMMON STOCK OF SPARK THERAPEUTICS, THE POSSIBILITY THAT THE TRANSACTION WILL NOT BE COMPLETED, AND OTHER RISKS AND UNCERTAINTIES DISCUSSED IN SPARK THERAPEUTICS' PUBLIC FILINGS WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION (THE "SEC"), INCLUDING THE "RISK FACTORS" SECTIONS OF SPARK THERAPEUTICS' ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2018, AND IN ANY SUBSEQUENT PERIODIC REPORTS ON FORM 10-Q AND FORM 8-K, AS WELL AS THE TENDER OFFER DOCUMENTS FILED BY ROCHE AND ITS ACQUISITION SUBSIDIARY AND THE SOLICITATION/RECOMMENDATION FILED BY SPARK THERAPEUTICS. THESE STATEMENTS ARE BASED ON CURRENT EXPECTATIONS, ASSUMPTIONS, ESTIMATES AND PROJECTIONS, AND INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE RESULTS, LEVELS OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS TO BE MATERIALLY DIFFERENT FROM ANY FUTURE STATEMENTS. THESE STATEMENTS ARE GENERALLY IDENTIFIED BY WORDS OR PHRASES SUCH AS "BELIEVE", "ANTICIPATE", "EXPECT", "INTEND", "PLAN", "WILL", "MAY", "SHOULD", "ESTIMATE", "PREDICT",

---

“POTENTIAL”, “CONTINUE” OR THE NEGATIVE OF SUCH TERMS OR OTHER SIMILAR EXPRESSIONS. IF UNDERLYING ASSUMPTIONS PROVE INACCURATE OR UNKNOWN RISKS OR UNCERTAINTIES MATERIALIZE, ACTUAL RESULTS AND THE TIMING OF EVENTS MAY DIFFER MATERIALLY FROM THE RESULTS AND/OR TIMING DISCUSSED IN THE FORWARD-LOOKING STATEMENTS, AND YOU SHOULD NOT PLACE UNDUE RELIANCE ON THESE STATEMENTS. ROCHE AND SPARK THERAPEUTICS DISCLAIM ANY INTENT OR OBLIGATION TO UPDATE ANY FORWARD-LOOKING STATEMENTS AS A RESULT OF DEVELOPMENTS OCCURRING AFTER THE PERIOD COVERED BY THIS REPORT OR OTHERWISE.

#### **ADDITIONAL INFORMATION AND WHERE TO FIND IT**

THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE AN OFFER TO PURCHASE OR A SOLICITATION OF AN OFFER TO SELL ANY SHARES OF THE COMMON STOCK OF SPARK THERAPEUTICS. THE TENDER OFFER IS ONLY BEING MADE PURSUANT TO AN OFFER TO PURCHASE AND RELATED MATERIALS. ROCHE AND ITS ACQUISITION SUBSIDIARY FILED A TENDER OFFER STATEMENT ON SCHEDULE TO WITH THE SEC ON MARCH 7, 2019, AND SPARK THERAPEUTICS FILED A SOLICITATION/RECOMMENDATION STATEMENT ON SCHEDULE 14D-9 WITH RESPECT TO THE OFFER WITH THE SEC ON MARCH 7, 2019, IN EACH CASE AS AMENDED FROM TIME TO TIME. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THESE MATERIALS (INCLUDING AN OFFER TO PURCHASE, A RELATED LETTER OF TRANSMITTAL AND CERTAIN OTHER TENDER OFFER DOCUMENTS), AS THEY MAY BE AMENDED FROM TIME TO TIME, CAREFULLY BEFORE ANY DECISION IS MADE WITH RESPECT TO THE TENDER OFFER SINCE THEY CONTAIN IMPORTANT INFORMATION, INCLUDING THE TERMS AND CONDITIONS OF THE OFFER. THE OFFER TO PURCHASE, SOLICITATION/RECOMMENDATION STATEMENT AND RELATED MATERIALS HAVE BEEN FILED WITH THE SEC, AND INVESTORS AND SECURITY HOLDERS MAY OBTAIN A FREE COPY OF THESE MATERIALS AND OTHER DOCUMENTS FILED BY ROCHE AND SPARK THERAPEUTICS WITH THE SEC AT THE WEBSITE MAINTAINED BY THE SEC AT WWW.SEC.GOV. INVESTORS AND SECURITY HOLDERS MAY ALSO OBTAIN FREE COPIES OF THE SOLICITATION/RECOMMENDATION STATEMENT AND OTHER DOCUMENTS FILED WITH THE SEC BY SPARK THERAPEUTICS AT WWW.SPARKTX.COM.

---